

**TDMS No.** 20011 - 05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

1-Bromopropane

**CAS Number:** 106-94-5

**Date Report Requested:** 07/09/2008

**Time Report Requested:** 10:20:06

**First Dose M/F:** 07/14/03 / 07/14/03

**Lab:** BNW

**C Number:** C20011  
**Lock Date:** 06/15/2006  
**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

- 96011-05 -- Cumene (INHALATION AIR)
- 88004-05 -- Divinylbenzene (INHALATION AIR)
- 97006-01 -- Methyl isobutyl ketone (INHALATION AIR)
- 88006-03 -- alpha-Methylstyrene (INHALATION AIR)
- 97008-05 -- Propargyl alcohol (INHALATION AIR)
- 96001-05 -- Stoddard solvent (type IIC) (INHALATION AIR)

### 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)
- 92012-05 -- 2-Methylimidazole (ORAL FEED)
- 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)
- 96001-05 -- Stoddard solvent (type IIC) (INHALATION AIR)

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**HISTORICAL CONTROL STUDIES  
From October 2007 Report**

- 96019-05 -- Water disinfection byproducts (Bromochloroacetic acid) (ORAL WATER)
- 96018-03 -- Water disinfection byproducts (Bromodichloromethane) (ORAL WATER)
- 96017-05 -- Water disinfection byproducts (Dibromoacetic acid) (ORAL WATER)
- 96015-05 -- Water disinfection byproducts (Dibromoacetonitrile) (ORAL WATER)
- 96010-03 -- Water disinfection byproducts (Sodium chlorate) (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  
Testes  
Thymus  
Thyroid Gland  
Urinary Bladder

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Species/Strain: RATS/F 344

**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

**SUMMARY OF STATISTICALLY SIGNIFICANT (P<=.05) RESULTS IN THE ANALYSIS OF 1-Bromopropane**

**MALE RATS**

**Organ**

Clitoral/Preputial Gland  
Islets, Pancreatic

Skin

Thyroid Gland: C-Cell

Thyroid Gland: Follicular Cell

All Organs

**FEMALE RATS**

**Organ**

Adrenal Cortex  
Adrenal Medulla  
Clitoral/Preputial Gland

Intestine Large: Colon/Rectum

Mammary Gland

**Morphology**

Carcinoma or Adenoma  
Adenoma  
Carcinoma or Adenoma  
Basal Cell Carcinoma, Basal Cell Adenoma, Basosquamous Tumor (benign, malignant or NOS), or Trichoepithelioma  
Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma  
Fibroma  
Fibroma, Fibrosarcoma, Sarcoma, Myxoma, Myxosarcoma, or Fibrous Histiocytoma  
Keratoacanthoma  
Squamous Cell Papilloma, Papilloma, Squamous Cell Carcinoma or Keratoacanthoma  
Squamous Cell Papilloma, Papilloma, or Keratoacanthoma  
Carcinoma  
Carcinoma or Adenoma  
Adenoma  
Carcinoma or Adenoma  
Leukemia: Lymphocytic, Monocytic, Mononuclear, or Undifferentiated  
Mesothelioma: Benign, Malignant, NOS  
Mesothelioma: Malignant

**Morphology**

Adenoma  
Pheochromocytoma: Benign, Complex, Malignant, NOS  
Adenoma  
Carcinoma or Adenoma  
Adenoma  
Fibroma, Fibroadenoma, Carcinoma, or Adenoma

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**P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS**

1-Bromopropane

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**First Dose M/F:** 07/14/03 / 07/14/03

**Lab:** BNW

**SUMMARY OF STATISTICALLY SIGNIFICANT ( $P \leq .05$ ) RESULTS IN THE ANALYSIS OF 1-Bromopropane**

Skin

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

All Organs

Benign Tumors  
Malignant and Benign Tumors

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Adrenal Cortex  
Adenoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	1/41.67	0/40.69	1/37.74	0/35.8
POLY-3 PERCENT (g)	2.4%	0%	2.7%	0%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	668	---	729 (T)	---
HC TUMORS SAME RTE	0/299 (0%)			
HC TUMORS ALL RTES	6/1197 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.427N	P=0.505N	P=0.739	P=0.530N
POLY 1.5	P=0.418N	P=0.503N	P=0.748	P=0.517N
POLY 6	P=0.441N	P=0.505N	P=0.725	P=0.547N
COCH-ARM / FISHERS	P=0.405N	P=0.500N	P=0.753N	P=0.500N
MAX-ISO-POLY-3	P=0.314N	P=0.164N	P=0.472	P=0.195N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Adrenal Medulla  
Pheochromocytoma Benign**

**TUMOR RATES**

OVERALL (a)	10/50 (20%)	9/50 (18%)	7/50 (14%)	8/50 (16%)
POLY-3 RATE (b)	10/41.8	9/41.56	7/38.76	8/37.06
POLY-3 PERCENT (g)	23.9%	21.7%	18.1%	21.6%
TERMINAL (d)	8/23 (35%)	7/26 (27%)	3/18 (17%)	3/13 (23%)
FIRST INCIDENCE	660	585	618	453
HC TUMORS SAME RTE	48/299 (16%)			
HC TUMORS ALL RTES	181/1196 (15%)			

**STATISTICAL TESTS**

POLY 3	P=0.432N	P=0.506N	P=0.354N	P=0.509N
POLY 1.5	P=0.386N	P=0.507N	P=0.330N	P=0.461N
POLY 6	P=0.496N	P=0.493N	P=0.383N	P=0.572N
COCH-ARM / FISHERS	P=0.328N	P=0.500N	P=0.298N	P=0.398N
MAX-ISO-POLY-3	P=0.533N	P=0.400N	P=0.266N	P=0.405N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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**Adrenal Medulla  
Pheochromocytoma: Benign, Complex, Malignant, NOS**

**TUMOR RATES**

OVERALL (a)	11/50 (22%)	10/50 (20%)	8/50 (16%)	10/50 (20%)
POLY-3 RATE (b)	11/42.6	10/41.56	8/38.76	10/37.43
POLY-3 PERCENT (g)	25.8%	24.1%	20.6%	26.7%
TERMINAL (d)	8/23 (35%)	8/26 (31%)	4/18 (22%)	4/13 (31%)
FIRST INCIDENCE	429	585	618	453
HC TUMORS SAME RTE	54/299 (18%)			
HC TUMORS ALL RTES	209/1196 (18%)			

**STATISTICAL TESTS**

POLY 3	P=0.525	P=0.526N	P=0.385N	P=0.566
POLY 1.5	P=0.515N	P=0.520N	P=0.352N	P=0.581N
POLY 6	P=0.454	P=0.521N	P=0.424N	P=0.501
COCH-ARM / FISHERS	P=0.440N	P=0.500N	P=0.306N	P=0.500N
MAX-ISO-POLY-3	P=0.594	P=0.424N	P=0.297N	P=0.465
HISTCONT SAME RTE	P=0.403	P=0.433	P=1.000	P=0.326
HISTCONT ALL RTES	P=0.244	P=0.359	P=0.587	P=0.253

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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**Clitoral/Preputial Gland  
Adenoma**

**TUMOR RATES**

OVERALL (a)	4/50 (8%)	1/50 (2%)	1/49 (2%)	1/50 (2%)
POLY-3 RATE (b)	4/41.67	1/40.76	1/37.34	1/36.12
POLY-3 PERCENT (g)	9.6%	2.5%	2.7%	2.8%
TERMINAL (d)	3/23 (13%)	0/26 (0%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	669	711	688	642
HC TUMORS SAME RTE	3/297 (1%)			
HC TUMORS ALL RTES	43/1193 (4%)			

**STATISTICAL TESTS**

POLY 3	P=0.152N	P=0.184N	P=0.212N	P=0.224N
POLY 1.5	P=0.145N	P=0.183N	P=0.200N	P=0.204N
POLY 6	P=0.164N	P=0.182N	P=0.228N	P=0.251N
COCH-ARM / FISHERS	P=0.136N	P=0.181N	P=0.187N	P=0.181N
MAX-ISO-POLY-3	P=0.133N	P=0.089N	P=0.114N	P=0.127N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Clitoral/Preputial Gland  
Carcinoma**

**TUMOR RATES**

OVERALL (a)	2/50 (4%)	2/50 (4%)	3/49 (6%)	0/50 (0%)
POLY-3 RATE (b)	2/41.7	2/40.95	3/38.08	0/35.8
POLY-3 PERCENT (g)	4.8%	4.9%	7.9%	0%
TERMINAL (d)	1/23 (4%)	1/26 (4%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	660	660	575	---
HC TUMORS SAME RTE	3/297 (1%)			
HC TUMORS ALL RTES	16/1193 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.257N	P=0.688	P=0.458	P=0.272N
POLY 1.5	P=0.232N	P=0.689	P=0.472	P=0.257N
POLY 6	P=0.294N	P=0.691	P=0.442	P=0.294N
COCH-ARM / FISHERS	P=0.200N	P=0.691N	P=0.490	P=0.247N
MAX-ISO-POLY-3	P=0.207N	P=0.492	P=0.294	P=0.109N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Clitoral/Preputial Gland  
Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	6/50 (12%)	3/50 (6%)	4/49 (8%)	1/50 (2%)
POLY-3 RATE (b)	6/41.93	3/41.02	4/38.24	1/36.12
POLY-3 PERCENT (g)	14.3%	7.3%	10.5%	2.8%
TERMINAL (d)	4/23 (17%)	1/26 (4%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	660	660	575	642
HC TUMORS SAME RTE	6/297 (2%)			
HC TUMORS ALL RTES	57/1193 (5%)			

**STATISTICAL TESTS**

POLY 3	P=0.080N	P=0.251N	P=0.428N	P=0.082N
POLY 1.5	P=0.069N	P=0.249N	P=0.409N	P=0.070N
POLY 6	P=0.098N	P=0.248N	P=0.451N	P=0.100N
COCH-ARM / FISHERS	P=0.056N	P=0.243N	P=0.383N	P=0.056N
MAX-ISO-POLY-3	P=0.076N	P=0.155N	P=0.308N	P=0.047N*
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Intestine Large: Colon/Rectum  
Adenoma**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	0/41.44	0/40.69	2/37.74	1/35.98
POLY-3 PERCENT (g)	0%	0%	5.3%	2.8%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	2/18 (11%)	0/13 (0%)
FIRST INCIDENCE	---	---	729 (T)	682
HC TUMORS SAME RTE	0/299 (0%)			
HC TUMORS ALL RTES	2/1199 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.197	(e)	P=0.216	P=0.472
POLY 1.5	P=0.217	(e)	P=0.225	P=0.484
POLY 6	P=0.174	(e)	P=0.205	P=0.457
COCH-ARM / FISHERS	P=0.246	(e)	P=0.247	P=0.500
MAX-ISO-POLY-3	P=0.180	(e)	P=0.075	P=0.158
HISTCONT SAME RTE	P=0.065	(e)	P=0.031*	P=0.036*
HISTCONT ALL RTES	P=0.005**	(e)	P=0.002**	P=0.025*

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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**Islets, Pancreatic  
Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	5/50 (10%)	4/50 (8%)	5/50 (10%)
POLY-3 RATE (b)	0/41.44	5/40.93	4/38.3	5/35.93
POLY-3 PERCENT (g)	0%	12.2%	10.4%	13.9%
TERMINAL (d)	0/23 (0%)	4/26 (15%)	1/18 (6%)	4/13 (31%)
FIRST INCIDENCE	---	666	608	697
HC TUMORS SAME RTE	19/299 (6%)			
HC TUMORS ALL RTES	73/1194 (6%)			

**STATISTICAL TESTS**

POLY 3	P=0.043*	P=0.029*	P=0.050*	P=0.019*
POLY 1.5	P=0.056	P=0.029*	P=0.054	P=0.024*
POLY 6	P=0.030*	P=0.029*	P=0.045*	P=0.015*
COCH-ARM / FISHERS	P=0.080	P=0.028*	P=0.059	P=0.028*
MAX-ISO-POLY-3	P=0.034*	P=0.009**	P=0.018*	P=0.009**
HISTCONT SAME RTE	P=0.040*	P=0.010**	P=0.020*	P=0.009**
HISTCONT ALL RTES	P=0.038*	P=0.009**	P=0.019*	P=0.009**

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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**Islets, Pancreatic  
Carcinoma**

**TUMOR RATES**

OVERALL (a)	3/50 (6%)	7/50 (14%)	5/50 (10%)	3/50 (6%)
POLY-3 RATE (b)	3/41.61	7/41.08	5/38.47	3/35.96
POLY-3 PERCENT (g)	7.2%	17%	13%	8.3%
TERMINAL (d)	2/23 (9%)	3/26 (12%)	3/18 (17%)	2/13 (15%)
FIRST INCIDENCE	686	687	578	687
HC TUMORS SAME RTE	14/299 (5%)			
HC TUMORS ALL RTES	27/1194 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.516N	P=0.149	P=0.312	P=0.594
POLY 1.5	P=0.467N	P=0.151	P=0.331	P=0.623
POLY 6	P=0.539	P=0.151	P=0.289	P=0.555
COCH-ARM / FISHERS	P=0.401N	P=0.159	P=0.357	P=0.661N
MAX-ISO-POLY-3	P=0.372	P=0.085	P=0.204	P=0.430
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Islets, Pancreatic  
Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	3/50 (6%)	10/50 (20%)	9/50 (18%)	8/50 (16%)
POLY-3 RATE (b)	3/41.61	10/41.32	9/39.03	8/36.09
POLY-3 PERCENT (g)	7.2%	24.2%	23.1%	22.2%
TERMINAL (d)	2/23 (9%)	5/26 (19%)	4/18 (22%)	6/13 (46%)
FIRST INCIDENCE	686	666	578	687
HC TUMORS SAME RTE	33/299 (11%)			
HC TUMORS ALL RTES	100/1194 (8%)			

**STATISTICAL TESTS**

POLY 3	P=0.093	P=0.031*	P=0.043*	P=0.057
POLY 1.5	P=0.129	P=0.032*	P=0.050*	P=0.073
POLY 6	P=0.057	P=0.031*	P=0.036*	P=0.040*
COCH-ARM / FISHERS	P=0.192	P=0.036*	P=0.061	P=0.100
MAX-ISO-POLY-3	P=0.071	P=0.015*	P=0.024*	P=0.036*
HISTCONT SAME RTE	P=0.083	P=0.016*	P=0.026*	P=0.041*
HISTCONT ALL RTES	P=0.005**	P=0.015*	P=0.025*	P=0.039*



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 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
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 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Liver  
 Hepatocellular Carcinoma**

**TUMOR RATES**

OVERALL (a)	2/50 (4%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/41.61	1/40.69	0/37.74	0/35.8
POLY-3 PERCENT (g)	4.8%	2.5%	0%	0%
TERMINAL (d)	1/23 (4%)	1/26 (4%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	686	729 (T)	---	---
HC TUMORS SAME RTE	1/299 (0%)			
HC TUMORS ALL RTES	2/1199 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.107N	P=0.508N	P=0.259N	P=0.272N
POLY 1.5	P=0.104N	P=0.506N	P=0.249N	P=0.257N
POLY 6	P=0.112N	P=0.508N	P=0.272N	P=0.293N
COCH-ARM / FISHERS	P=0.101N	P=0.500N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.123N	P=0.289N	P=0.097N	P=0.108N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Lung  
Alveolar/Bronchiolar Adenoma**

**TUMOR RATES**

OVERALL (a)	2/50 (4%)	4/50 (8%)	1/50 (2%)	5/50 (10%)
POLY-3 RATE (b)	2/41.44	4/40.99	1/37.74	5/36.47
POLY-3 PERCENT (g)	4.8%	9.8%	2.7%	13.7%
TERMINAL (d)	2/23 (9%)	3/26 (12%)	1/18 (6%)	3/13 (23%)
FIRST INCIDENCE	729 (T)	648	729 (T)	575
HC TUMORS SAME RTE	3/299 (1%)			
HC TUMORS ALL RTES	31/1199 (3%)			

**STATISTICAL TESTS**

POLY 3	P=0.162	P=0.331	P=0.533N	P=0.165
POLY 1.5	P=0.182	P=0.332	P=0.518N	P=0.186
POLY 6	P=0.139	P=0.336	P=0.551N	P=0.141
COCH-ARM / FISHERS	P=0.210	P=0.339	P=0.500N	P=0.218
MAX-ISO-POLY-3	P=0.131	P=0.196	P=0.315N	P=0.098
HISTCONT SAME RTE	P=0.020*	P=0.040*	P=0.386	P=0.039*
HISTCONT ALL RTES	P=0.012*	P=0.081	P=1.000	P=0.031*

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Lung  
Alveolar/Bronchiolar Carcinoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	1/41.44	1/40.69	2/37.76	1/35.91
POLY-3 PERCENT (g)	2.4%	2.5%	5.3%	2.8%
TERMINAL (d)	1/23 (4%)	1/26 (4%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	729 (T)	729 (T)	725	702
HC TUMORS SAME RTE	3/299 (1%)			
HC TUMORS ALL RTES	15/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.524	P=0.757	P=0.467	P=0.728
POLY 1.5	P=0.552	P=0.758	P=0.482	P=0.742
POLY 6	P=0.486	P=0.759	P=0.449	P=0.710
COCH-ARM / FISHERS	P=0.591	P=0.753N	P=0.500	P=0.753N
MAX-ISO-POLY-3	P=0.555	P=0.494	P=0.262	P=0.461
HISTCONT SAME RTE	P=0.198	P=0.307	P=0.082	P=0.282
HISTCONT ALL RTES	P=0.225	P=0.436	P=0.110	P=0.405

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Lung  
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma**

**TUMOR RATES**

OVERALL (a)	3/50 (6%)	5/50 (10%)	3/50 (6%)	6/50 (12%)
POLY-3 RATE (b)	3/41.44	5/40.99	3/37.76	6/36.58
POLY-3 PERCENT (g)	7.2%	12.2%	8%	16.4%
TERMINAL (d)	3/23 (13%)	4/26 (15%)	2/18 (11%)	3/13 (23%)
FIRST INCIDENCE	729 (T)	648	725	575
HC TUMORS SAME RTE	6/299 (2%)			
HC TUMORS ALL RTES	46/1199 (4%)			

**STATISTICAL TESTS**

POLY 3	P=0.169	P=0.349	P=0.620	P=0.181
POLY 1.5	P=0.195	P=0.350	P=0.638	P=0.205
POLY 6	P=0.139	P=0.354	P=0.595	P=0.153
COCH-ARM / FISHERS	P=0.233	P=0.357	P=0.661N	P=0.243
MAX-ISO-POLY-3	P=0.176	P=0.225	P=0.454	P=0.115
HISTCONT SAME RTE	P=0.013*	P=0.053	P=0.145	P=0.047*
HISTCONT ALL RTES	P=0.005**	P=0.078	P=0.314	P=0.032*

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Mammary Gland Carcinoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/41.44	0/40.69	0/37.74	0/35.8
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	5/299 (2%)			
HC TUMORS ALL RTES	8/1199 (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)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Mammary Gland Fibroadenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	2/50 (4%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	2/42.05	2/40.69	1/37.9	1/36.03
POLY-3 PERCENT (g)	4.8%	4.9%	2.6%	2.8%
TERMINAL (d)	1/23 (4%)	2/26 (8%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	534	729 (T)	688	670
HC TUMORS SAME RTE	8/299 (3%)			
HC TUMORS ALL RTES	43/1199 (4%)			

**STATISTICAL TESTS**

POLY 3	P=0.382N	P=0.683	P=0.536N	P=0.554N
POLY 1.5	P=0.363N	P=0.686	P=0.521N	P=0.531N
POLY 6	P=0.408N	P=0.682	P=0.556N	P=0.582N
COCH-ARM / FISHERS	P=0.337N	P=0.691N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.520N	P=0.486	P=0.319N	P=0.337N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Mammary Gland Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	2/50 (4%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	2/42.05	2/40.69	1/37.9	1/36.03
POLY-3 PERCENT (g)	4.8%	4.9%	2.6%	2.8%
TERMINAL (d)	1/23 (4%)	2/26 (8%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	534	729 (T)	688	670
HC TUMORS SAME RTE	14/299 (5%)			
HC TUMORS ALL RTES	55/1199 (5%)			

**STATISTICAL TESTS**

POLY 3	P=0.382N	P=0.683	P=0.536N	P=0.554N
POLY 1.5	P=0.363N	P=0.686	P=0.521N	P=0.531N
POLY 6	P=0.408N	P=0.682	P=0.556N	P=0.582N
COCH-ARM / FISHERS	P=0.337N	P=0.691N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.520N	P=0.486	P=0.319N	P=0.337N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva)  
Squamous Cell Carcinoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	1/41.67	0/40.69	1/37.74	2/36.28
POLY-3 PERCENT (g)	2.4%	0%	2.7%	5.5%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	669	---	729 (T)	642
HC TUMORS SAME RTE	1/299 (0%)			
HC TUMORS ALL RTES	3/1199 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.217	P=0.505N	P=0.739	P=0.452
POLY 1.5	P=0.230	P=0.503N	P=0.748	P=0.472
POLY 6	P=0.201	P=0.505N	P=0.725	P=0.427
COCH-ARM / FISHERS	P=0.247	P=0.500N	P=0.753N	P=0.500
MAX-ISO-POLY-3	P=0.213	P=0.164N	P=0.472	P=0.255
HISTCONT SAME RTE	P=0.031*	(e)	P=0.161	P=0.059
HISTCONT ALL RTES	P<0.001**	(e)	P=0.066	P=0.006**



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva)  
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma**

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	1/41.67	0/40.69	1/37.74	2/36.28
POLY-3 PERCENT (g)	2.4%	0%	2.7%	5.5%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	669	---	729 (T)	642
HC TUMORS SAME RTE	2/299 (1%)			
HC TUMORS ALL RTES	8/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.217	P=0.505N	P=0.739	P=0.452
POLY 1.5	P=0.230	P=0.503N	P=0.748	P=0.472
POLY 6	P=0.201	P=0.505N	P=0.725	P=0.427
COCH-ARM / FISHERS	P=0.247	P=0.500N	P=0.753N	P=0.500
MAX-ISO-POLY-3	P=0.213	P=0.164N	P=0.472	P=0.255
HISTCONT SAME RTE	P=0.055	(e)	P=0.228	P=0.074
HISTCONT ALL RTES	P=0.009**	(e)	P=0.185	P=0.021*

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Oral Mucosa Squamous Cell Carcinoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	1/41.67	0/40.69	1/37.74	2/36.28
POLY-3 PERCENT (g)	2.4%	0%	2.7%	5.5%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	669	---	729 (T)	642
HC TUMORS SAME RTE	1/299 (0%)			
HC TUMORS ALL RTES	3/1199 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.217	P=0.505N	P=0.739	P=0.452
POLY 1.5	P=0.230	P=0.503N	P=0.748	P=0.472
POLY 6	P=0.201	P=0.505N	P=0.725	P=0.427
COCH-ARM / FISHERS	P=0.247	P=0.500N	P=0.753N	P=0.500
MAX-ISO-POLY-3	P=0.213	P=0.164N	P=0.472	P=0.255
HISTCONT SAME RTE	P=0.031*	(e)	P=0.161	P=0.059
HISTCONT ALL RTES	P<0.001**	(e)	P=0.066	P=0.006**

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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

**TUMOR RATES**

OVERALL (a)	37/50 (74%)	36/50 (72%)	33/50 (66%)	31/49 (63%)
POLY-3 RATE (b)	37/46.37	36/47.35	33/44.94	31/43.49
POLY-3 PERCENT (g)	79.8%	76%	73.4%	71.3%
TERMINAL (d)	19/23 (83%)	20/26 (77%)	12/18 (67%)	9/13 (69%)
FIRST INCIDENCE	534	505	514	394
HC TUMORS SAME RTE	215/298 (72%)			
HC TUMORS ALL RTES	541/1192 (45%)			

**STATISTICAL TESTS**

POLY 3	P=0.189N	P=0.421N	P=0.307N	P=0.226N
POLY 1.5	P=0.151N	P=0.464N	P=0.287N	P=0.197N
POLY 6	P=0.264N	P=0.356N	P=0.318N	P=0.284N
COCH-ARM / FISHERS	P=0.122N	P=0.500N	P=0.257N	P=0.175N
MAX-ISO-POLY-3	P=0.270N	P=0.323N	P=0.225N	P=0.160N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

---

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

**TUMOR RATES**

OVERALL (a)	37/50 (74%)	36/50 (72%)	33/50 (66%)	31/49 (63%)
POLY-3 RATE (b)	37/46.37	36/47.35	33/44.94	31/43.49
POLY-3 PERCENT (g)	79.8%	76%	73.4%	71.3%
TERMINAL (d)	19/23 (83%)	20/26 (77%)	12/18 (67%)	9/13 (69%)
FIRST INCIDENCE	534	505	514	394
HC TUMORS SAME RTE	216/298 (73%)			
HC TUMORS ALL RTES	547/1192 (46%)			

**STATISTICAL TESTS**

POLY 3	P=0.189N	P=0.421N	P=0.307N	P=0.226N
POLY 1.5	P=0.151N	P=0.464N	P=0.287N	P=0.197N
POLY 6	P=0.264N	P=0.356N	P=0.318N	P=0.284N
COCH-ARM / FISHERS	P=0.122N	P=0.500N	P=0.257N	P=0.175N
MAX-ISO-POLY-3	P=0.270N	P=0.323N	P=0.225N	P=0.160N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin</b>				
<b>Basal Cell Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	0/41.44	1/41.17	2/38.4	1/35.8
POLY-3 PERCENT (g)	0%	2.4%	5.2%	2.8%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	0/18 (0%)	1/13 (8%)
FIRST INCIDENCE	---	585	618	729 (T)
HC TUMORS SAME RTE	3/299 (1%)			
HC TUMORS ALL RTES	12/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.297	P=0.499	P=0.220	P=0.471
POLY 1.5	P=0.326	P=0.498	P=0.227	P=0.483
POLY 6	P=0.261	P=0.501	P=0.212	P=0.455
COCH-ARM / FISHERS	P=0.366	P=0.500	P=0.247	P=0.500
MAX-ISO-POLY-3	P=0.242	P=0.158	P=0.075	P=0.158
HISTCONT SAME RTE	P=0.226	P=0.198	P=0.090	P=0.198
HISTCONT ALL RTES	P=0.116	P=0.188	P=0.067	P=0.188

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin</b>				
<b>Basal Cell Carcinoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	2/50 (4%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	0/41.44	2/40.69	1/37.87	2/35.96
POLY-3 PERCENT (g)	0%	4.9%	2.6%	5.6%
TERMINAL (d)	0/23 (0%)	2/26 (8%)	0/18 (0%)	1/13 (8%)
FIRST INCIDENCE	---	729 (T)	697	687
HC TUMORS SAME RTE	0/299 (0%)			
HC TUMORS ALL RTES	6/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.198	P=0.233	P=0.482	P=0.206
POLY 1.5	P=0.217	P=0.234	P=0.490	P=0.219
POLY 6	P=0.174	P=0.233	P=0.472	P=0.191
COCH-ARM / FISHERS	P=0.245	P=0.247	P=0.500	P=0.247
MAX-ISO-POLY-3	P=0.158	P=0.075	P=0.158	P=0.075
HISTCONT SAME RTE	P=0.024*	P=0.026*	P=0.032*	P=0.034*
HISTCONT ALL RTES	P=0.004**	P=0.022*	P=0.176	P=0.023*

TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	3/50 (6%)	3/50 (6%)	3/50 (6%)
POLY-3 RATE (b)	0/41.44	3/41.17	3/38.52	3/35.96
POLY-3 PERCENT (g)	0%	7.3%	7.8%	8.3%
TERMINAL (d)	0/23 (0%)	2/26 (8%)	0/18 (0%)	2/13 (15%)
FIRST INCIDENCE	---	585	618	687
HC TUMORS SAME RTE	4/299 (1%)			
HC TUMORS ALL RTES	25/1199 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.111	P=0.117	P=0.105	P=0.094
POLY 1.5	P=0.132	P=0.117	P=0.111	P=0.104
POLY 6	P=0.088	P=0.118	P=0.099	P=0.083
COCH-ARM / FISHERS	P=0.164	P=0.121	P=0.121	P=0.121
MAX-ISO-POLY-3	P=0.112	P=0.037*	P=0.037*	P=0.037*
HISTCONT SAME RTE	P=0.029*	P=0.042*	P=0.042*	P=0.041*
HISTCONT ALL RTES	P=0.010**	P=0.040*	P=0.040*	P=0.039*

TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin</b>				
<b>Basal or Sq. Cell Carcinoma, Carcinoma, Basosq. Tumor (M or B), Basal Cell Adenoma, Adenoma, Papilloma, Sq Papilloma, Keratoacanthoma, Trichoepithelioma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	1/50 (2%)	7/50 (14%)	9/50 (18%)	10/50 (20%)
POLY-3 RATE (b)	1/41.67	7/41.24	9/39.79	10/37.51
POLY-3 PERCENT (g)	2.4%	17%	22.6%	26.7%
TERMINAL (d)	0/23 (0%)	5/26 (19%)	2/18 (11%)	4/13 (31%)
FIRST INCIDENCE	669	585	488	562
HC TUMORS SAME RTE	15/299 (5%)			
HC TUMORS ALL RTES	112/1199 (9%)			

**STATISTICAL TESTS**

POLY 3	P=0.003**	P=0.028*	P=0.006**	P=0.002**
POLY 1.5	P=0.005**	P=0.028*	P=0.007**	P=0.002**
POLY 6	P=0.002**	P=0.028*	P=0.005**	P<0.001**
COCH-ARM / FISHERS	P=0.010**	P=0.030*	P=0.008**	P=0.004**
MAX-ISO-POLY-3	P=0.004**	P=0.011*	P=0.002**	P<0.001**
HISTCONT SAME RTE	P=0.004**	P=0.012*	P=0.002**	P<0.001**
HISTCONT ALL RTES	P=0.004**	P=0.011*	P=0.002**	P<0.001**



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin Fibroma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	3/50 (6%)	5/50 (10%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	3/42	5/41.56	1/37.89	0/35.8
POLY-3 PERCENT (g)	7.1%	12%	2.6%	0%
TERMINAL (d)	1/23 (4%)	2/26 (8%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	646	560	690	---
HC TUMORS SAME RTE	21/299 (7%)			
HC TUMORS ALL RTES	121/1199 (10%)			

**STATISTICAL TESTS**

POLY 3	P=0.053N	P=0.349	P=0.342N	P=0.149N
POLY 1.5	P=0.045N*	P=0.351	P=0.326N	P=0.136N
POLY 6	P=0.067N	P=0.353	P=0.365N	P=0.170N
COCH-ARM / FISHERS	P=0.037N*	P=0.357	P=0.309N	P=0.121N
MAX-ISO-POLY-3	P=0.072N	P=0.226	P=0.191N	P=0.065N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	3/50 (6%)	5/50 (10%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	3/42	5/41.56	2/38.3	0/35.8
POLY-3 PERCENT (g)	7.1%	12%	5.2%	0%
TERMINAL (d)	1/23 (4%)	2/26 (8%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	646	560	614	---
HC TUMORS SAME RTE	26/299 (9%)			
HC TUMORS ALL RTES	146/1199 (12%)			

**STATISTICAL TESTS**

POLY 3	P=0.075N	P=0.349	P=0.542N	P=0.149N
POLY 1.5	P=0.063N	P=0.351	P=0.524N	P=0.136N
POLY 6	P=0.095N	P=0.353	P=0.566N	P=0.170N
COCH-ARM / FISHERS	P=0.050N*	P=0.357	P=0.500N	P=0.121N
MAX-ISO-POLY-3	P=0.086N	P=0.226	P=0.367N	P=0.065N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Skin  
Keratoacanthoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	3/50 (6%)	6/50 (12%)	6/50 (12%)
POLY-3 RATE (b)	0/41.44	3/40.69	6/39.01	6/37.09
POLY-3 PERCENT (g)	0%	7.4%	15.4%	16.2%
TERMINAL (d)	0/23 (0%)	3/26 (12%)	2/18 (11%)	2/13 (15%)
FIRST INCIDENCE	---	729 (T)	488	562
HC TUMORS SAME RTE	9/299 (3%)			
HC TUMORS ALL RTES	71/1199 (6%)			

**STATISTICAL TESTS**

POLY 3	P=0.008**	P=0.115	P=0.012*	P=0.010**
POLY 1.5	P=0.010**	P=0.116	P=0.013*	P=0.012*
POLY 6	P=0.005**	P=0.115	P=0.010**	P=0.008**
COCH-ARM / FISHERS	P=0.016*	P=0.121	P=0.013*	P=0.013*
MAX-ISO-POLY-3	P=0.012*	P=0.037*	P=0.004**	P=0.004**
HISTCONT SAME RTE	P=0.013*	P=0.042*	P=0.004**	P=0.004**
HISTCONT ALL RTES	P=0.012*	P=0.040*	P=0.004**	P=0.004**

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin</b>				
<b>Lipoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	2/41.54	0/40.69	1/37.86	1/36.05
POLY-3 PERCENT (g)	4.8%	0%	2.6%	2.8%
TERMINAL (d)	1/23 (4%)	0/26 (0%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	703	---	699	663
HC TUMORS SAME RTE	6/299 (2%)			
HC TUMORS ALL RTES	11/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.521N	P=0.241N	P=0.532N	P=0.549N
POLY 1.5	P=0.512N	P=0.240N	P=0.518N	P=0.529N
POLY 6	P=0.535N	P=0.240N	P=0.551N	P=0.576N
COCH-ARM / FISHERS	P=0.500N	P=0.247N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.348N	P=0.080N	P=0.315N	P=0.333N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin</b>				
<b>Squamous Cell Carcinoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	1/50 (2%)	1/50 (2%)	0/50 (0%)	2/50 (4%)
POLY-3 RATE (b)	1/41.67	1/40.76	0/37.74	2/36.06
POLY-3 PERCENT (g)	2.4%	2.5%	0%	5.6%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	0/18 (0%)	1/13 (8%)
FIRST INCIDENCE	669	711	---	659
HC TUMORS SAME RTE	0/299 (0%)			
HC TUMORS ALL RTES	4/1199 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.333	P=0.756	P=0.520N	P=0.450
POLY 1.5	P=0.347	P=0.757	P=0.511N	P=0.471
POLY 6	P=0.313	P=0.757	P=0.531N	P=0.422
COCH-ARM / FISHERS	P=0.366	P=0.753N	P=0.500N	P=0.500
MAX-ISO-POLY-3	P=0.255	P=0.493	P=0.182N	P=0.253
HISTCONT SAME RTE	P=0.037*	P=0.086	(e)	P=0.043*
HISTCONT ALL RTES	P=0.006**	P=0.096	(e)	P=0.009**

TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Skin**  
 Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	3/50 (6%)	1/50 (2%)	4/50 (8%)
POLY-3 RATE (b)	1/41.67	3/40.76	1/37.87	4/36.23
POLY-3 PERCENT (g)	2.4%	7.4%	2.6%	11%
TERMINAL (d)	0/23 (0%)	2/26 (8%)	0/18 (0%)	2/13 (15%)
FIRST INCIDENCE	669	711	697	659
HC TUMORS SAME RTE	0/299 (0%)			
HC TUMORS ALL RTES	9/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.124	P=0.297	P=0.739	P=0.138
POLY 1.5	P=0.140	P=0.299	P=0.749	P=0.154
POLY 6	P=0.105	P=0.296	P=0.727	P=0.118
COCH-ARM / FISHERS	P=0.164	P=0.309	P=0.753N	P=0.181
MAX-ISO-POLY-3	P=0.099	P=0.150	P=0.473	P=0.072
HISTCONT SAME RTE	P=0.012*	P=0.026*	P=0.091	P=0.030*
HISTCONT ALL RTES	P<0.001**	P=0.007**	P=0.249	P=0.003**

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	4/50 (8%)	6/50 (12%)	8/50 (16%)
POLY-3 RATE (b)	1/41.67	4/40.76	6/39.01	8/37.35
POLY-3 PERCENT (g)	2.4%	9.8%	15.4%	21.4%
TERMINAL (d)	0/23 (0%)	3/26 (12%)	2/18 (11%)	3/13 (23%)
FIRST INCIDENCE	669	711	488	562
HC TUMORS SAME RTE	11/299 (4%)			
HC TUMORS ALL RTES	91/1199 (8%)			

**STATISTICAL TESTS**

POLY 3	P=0.006**	P=0.171	P=0.044*	P=0.009**
POLY 1.5	P=0.008**	P=0.173	P=0.049*	P=0.011*
POLY 6	P=0.004**	P=0.170	P=0.038*	P=0.006**
COCH-ARM / FISHERS	P=0.012*	P=0.181	P=0.056	P=0.015*
MAX-ISO-POLY-3	P=0.008**	P=0.081	P=0.021*	P=0.004**
HISTCONT SAME RTE	P=0.009**	P=0.097	P=0.023*	P=0.005**
HISTCONT ALL RTES	P=0.009**	P=0.092	P=0.021*	P=0.004**

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	3/50 (6%)	6/50 (12%)	6/50 (12%)
POLY-3 RATE (b)	0/41.44	3/40.69	6/39.01	6/37.09
POLY-3 PERCENT (g)	0%	7.4%	15.4%	16.2%
TERMINAL (d)	0/23 (0%)	3/26 (12%)	2/18 (11%)	2/13 (15%)
FIRST INCIDENCE	---	729 (T)	488	562
HC TUMORS SAME RTE	11/299 (4%)			
HC TUMORS ALL RTES	87/1199 (7%)			

**STATISTICAL TESTS**

POLY 3	P=0.008**	P=0.115	P=0.012*	P=0.010**
POLY 1.5	P=0.010**	P=0.116	P=0.013*	P=0.012*
POLY 6	P=0.005**	P=0.115	P=0.010**	P=0.008**
COCH-ARM / FISHERS	P=0.016*	P=0.121	P=0.013*	P=0.013*
MAX-ISO-POLY-3	P=0.012*	P=0.037*	P=0.004**	P=0.004**
HISTCONT SAME RTE	P=0.013*	P=0.042*	P=0.004**	P=0.004**
HISTCONT ALL RTES	P=0.012*	P=0.040*	P=0.004**	P=0.004**



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin: Sebaceous Gland Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	0/41.44	0/40.69	2/38.61	1/36.03
POLY-3 PERCENT (g)	0%	0%	5.2%	2.8%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	---	---	534	670
HC TUMORS SAME RTE	6/299 (2%)			
HC TUMORS ALL RTES	8/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.197	(e)	P=0.221	P=0.472
POLY 1.5	P=0.217	(e)	P=0.228	P=0.484
POLY 6	P=0.172	(e)	P=0.213	P=0.457
COCH-ARM / FISHERS	P=0.246	(e)	P=0.247	P=0.500
MAX-ISO-POLY-3	P=0.184	(e)	P=0.075	P=0.158
HISTCONT SAME RTE	P=0.222	(e)	P=0.090	P=0.198
HISTCONT ALL RTES	P=0.129	(e)	P=0.057	P=0.188

TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Skin: Sebaceous Gland  
 Carcinoma or Adenoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	0/41.44	1/40.69	2/38.61	1/36.03
POLY-3 PERCENT (g)	0%	2.5%	5.2%	2.8%
TERMINAL (d)	0/23 (0%)	1/26 (4%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	---	729 (T)	534	670
HC TUMORS SAME RTE	6/299 (2%)			
HC TUMORS ALL RTES	9/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.301	P=0.496	P=0.221	P=0.472
POLY 1.5	P=0.328	P=0.497	P=0.228	P=0.484
POLY 6	P=0.267	P=0.497	P=0.213	P=0.457
COCH-ARM / FISHERS	P=0.366	P=0.500	P=0.247	P=0.500
MAX-ISO-POLY-3	P=0.242	P=0.158	P=0.075	P=0.158
HISTCONT SAME RTE	P=0.291	P=0.198	P=0.090	P=0.198
HISTCONT ALL RTES	P=0.089	P=0.188	P=0.064	P=0.188

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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**Testes  
Adenoma**

**TUMOR RATES**

OVERALL (a)	34/50 (68%)	38/50 (76%)	32/50 (64%)	29/50 (58%)
POLY-3 RATE (b)	34/46	38/45.95	32/42.19	29/42.24
POLY-3 PERCENT (g)	73.9%	82.7%	75.9%	68.7%
TERMINAL (d)	17/23 (74%)	22/26 (85%)	18/18 (100%)	8/13 (62%)
FIRST INCIDENCE	501	528	520	500
HC TUMORS SAME RTE	228/299 (76%)			
HC TUMORS ALL RTES	1035/1199 (86%)			

**STATISTICAL TESTS**

POLY 3	P=0.198N	P=0.204	P=0.516	P=0.371N
POLY 1.5	P=0.139N	P=0.216	P=0.562N	P=0.299N
POLY 6	P=0.284N	P=0.201	P=0.332	P=0.448N
COCH-ARM / FISHERS	P=0.082N	P=0.252	P=0.417N	P=0.204N
MAX-ISO-POLY-3	P=0.215N	P=0.135	P=0.410	P=0.289N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Thyroid Gland: C-Cell  
Adenoma**

**TUMOR RATES**

OVERALL (a)	5/50 (10%)	4/50 (8%)	3/50 (6%)	3/49 (6%)
POLY-3 RATE (b)	5/42	4/41.36	3/38.99	3/35.5
POLY-3 PERCENT (g)	11.9%	9.7%	7.7%	8.5%
TERMINAL (d)	2/23 (9%)	3/26 (12%)	1/18 (6%)	2/13 (15%)
FIRST INCIDENCE	660	505	488	710
HC TUMORS SAME RTE	20/298 (7%)			
HC TUMORS ALL RTES	151/1185 (13%)			

**STATISTICAL TESTS**

POLY 3	P=0.356N	P=0.510N	P=0.397N	P=0.451N
POLY 1.5	P=0.326N	P=0.507N	P=0.379N	P=0.415N
POLY 6	P=0.399N	P=0.510N	P=0.423N	P=0.502N
COCH-ARM / FISHERS	P=0.287N	P=0.500N	P=0.357N	P=0.369N
MAX-ISO-POLY-3	P=0.478N	P=0.371N	P=0.271N	P=0.322N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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**Thyroid Gland: C-Cell Carcinoma**

**TUMOR RATES**

OVERALL (a)	4/50 (8%)	3/50 (6%)	2/50 (4%)	0/49 (0%)
POLY-3 RATE (b)	4/41.44	3/40.85	2/38.3	0/35.42
POLY-3 PERCENT (g)	9.7%	7.3%	5.2%	0%
TERMINAL (d)	4/23 (17%)	2/26 (8%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	729 (T)	687	554	---
HC TUMORS SAME RTE	9/298 (3%)			
HC TUMORS ALL RTES	38/1185 (3%)			

**STATISTICAL TESTS**

POLY 3	P=0.051N	P=0.508N	P=0.373N	P=0.082N
POLY 1.5	P=0.045N*	P=0.507N	P=0.358N	P=0.073N
POLY 6	P=0.060N	P=0.503N	P=0.393N	P=0.094N
COCH-ARM / FISHERS	P=0.038N*	P=0.500N	P=0.339N	P=0.061N
MAX-ISO-POLY-3	P=0.072N	P=0.354N	P=0.236N	P=0.037N*
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

---

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

**TUMOR RATES**

OVERALL (a)	9/50 (18%)	7/50 (14%)	5/50 (10%)	3/49 (6%)
POLY-3 RATE (b)	9/42	7/41.52	5/39.55	3/35.5
POLY-3 PERCENT (g)	21.4%	16.9%	12.6%	8.5%
TERMINAL (d)	6/23 (26%)	5/26 (19%)	2/18 (11%)	2/13 (15%)
FIRST INCIDENCE	660	505	488	710
HC TUMORS SAME RTE	28/298 (9%)			
HC TUMORS ALL RTES	188/1185 (16%)			

**STATISTICAL TESTS**

POLY 3	P=0.066N	P=0.400N	P=0.223N	P=0.102N
POLY 1.5	P=0.054N	P=0.400N	P=0.210N	P=0.084N
POLY 6	P=0.086N	P=0.395N	P=0.242N	P=0.131N
COCH-ARM / FISHERS	P=0.042N*	P=0.393N	P=0.194N	P=0.065N
MAX-ISO-POLY-3	P=0.103N	P=0.298N	P=0.151N	P=0.070N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Thyroid Gland: Follicular Cell Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	2/49 (4%)
POLY-3 RATE (b)	0/41.44	0/40.69	0/37.74	2/35.59
POLY-3 PERCENT (g)	0%	0%	0%	5.6%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	0/18 (0%)	1/13 (8%)
FIRST INCIDENCE	---	---	---	687
HC TUMORS SAME RTE	2/298 (1%)			
HC TUMORS ALL RTES	15/1185 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.039*	(e)	(e)	P=0.204
POLY 1.5	P=0.041*	(e)	(e)	P=0.216
POLY 6	P=0.036*	(e)	(e)	P=0.190
COCH-ARM / FISHERS	P=0.045*	(e)	(e)	P=0.242
MAX-ISO-POLY-3	P=0.031*	(e)	(e)	P=0.074
HISTCONT SAME RTE	P=0.036*	(e)	(e)	P=0.078
HISTCONT ALL RTES	P=0.035*	(e)	(e)	P=0.084

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Thyroid Gland: Follicular Cell Carcinoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	2/50 (4%)	2/50 (4%)	1/49 (2%)
POLY-3 RATE (b)	0/41.44	2/40.69	2/38.21	1/35.42
POLY-3 PERCENT (g)	0%	4.9%	5.2%	2.8%
TERMINAL (d)	0/23 (0%)	2/26 (8%)	1/18 (6%)	1/13 (8%)
FIRST INCIDENCE	---	729 (T)	590	729 (T)
HC TUMORS SAME RTE	4/298 (1%)			
HC TUMORS ALL RTES	12/1185 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.388	P=0.233	P=0.219	P=0.469
POLY 1.5	P=0.419	P=0.234	P=0.227	P=0.480
POLY 6	P=0.346	P=0.233	P=0.209	P=0.454
COCH-ARM / FISHERS	P=0.462	P=0.247	P=0.247	P=0.495
MAX-ISO-POLY-3	P=0.255	P=0.075	P=0.075	P=0.157
HISTCONT SAME RTE	P=0.306	P=0.091	P=0.090	P=0.196
HISTCONT ALL RTES	P=0.104	P=0.086	P=0.085	P=0.186



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

---

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

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	2/50 (4%)	2/50 (4%)	3/49 (6%)
POLY-3 RATE (b)	0/41.44	2/40.69	2/38.21	3/35.59
POLY-3 PERCENT (g)	0%	4.9%	5.2%	8.4%
TERMINAL (d)	0/23 (0%)	2/26 (8%)	1/18 (6%)	2/13 (15%)
FIRST INCIDENCE	---	729 (T)	590	687
HC TUMORS SAME RTE	6/298 (2%)			
HC TUMORS ALL RTES	27/1185 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.075	P=0.233	P=0.219	P=0.093
POLY 1.5	P=0.086	P=0.234	P=0.227	P=0.102
POLY 6	P=0.062	P=0.233	P=0.209	P=0.082
COCH-ARM / FISHERS	P=0.104	P=0.247	P=0.247	P=0.117
MAX-ISO-POLY-3	P=0.076	P=0.075	P=0.075	P=0.036*
HISTCONT SAME RTE	P=0.045*	P=0.091	P=0.090	P=0.041*
HISTCONT ALL RTES	P=0.035*	P=0.086	P=0.085	P=0.038*

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TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**Zymbal's Gland  
 Carcinoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	2/50 (4%)	1/50 (2%)
POLY-3 RATE (b)	0/41.44	1/40.69	2/38.44	1/36.42
POLY-3 PERCENT (g)	0%	2.5%	5.2%	2.8%
TERMINAL (d)	0/23 (0%)	1/26 (4%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	---	729 (T)	488	527
HC TUMORS SAME RTE	2/299 (1%)			
HC TUMORS ALL RTES	10/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.306	P=0.496	P=0.220	P=0.474
POLY 1.5	P=0.331	P=0.497	P=0.228	P=0.485
POLY 6	P=0.275	P=0.497	P=0.211	P=0.460
COCH-ARM / FISHERS	P=0.366	P=0.500	P=0.247	P=0.500
MAX-ISO-POLY-3	P=0.239	P=0.158	P=0.075	P=0.158
HISTCONT SAME RTE	P=0.155	P=0.198	P=0.075	P=0.198
HISTCONT ALL RTES	P=0.125	P=0.188	P=0.082	P=0.188

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Zymbal's Gland Carcinoma or Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	2/50 (4%)	2/50 (4%)
POLY-3 RATE (b)	0/41.44	1/40.69	2/38.44	2/37.1
POLY-3 PERCENT (g)	0%	2.5%	5.2%	5.4%
TERMINAL (d)	0/23 (0%)	1/26 (4%)	1/18 (6%)	0/13 (0%)
FIRST INCIDENCE	---	729 (T)	488	500
HC TUMORS SAME RTE	2/299 (1%)			
HC TUMORS ALL RTES	11/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.129	P=0.496	P=0.220	P=0.213
POLY 1.5	P=0.142	P=0.497	P=0.228	P=0.223
POLY 6	P=0.114	P=0.497	P=0.211	P=0.200
COCH-ARM / FISHERS	P=0.160	P=0.500	P=0.247	P=0.247
MAX-ISO-POLY-3	P=0.158	P=0.158	P=0.075	P=0.075
HISTCONT SAME RTE	P=0.033*	P=0.198	P=0.075	P=0.077
HISTCONT ALL RTES	P=0.016*	P=0.188	P=0.085	P=0.085

TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**All Organs  
 Histiocytic Sarcoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	0/41.44	0/40.69	1/37.86	2/36.45
POLY-3 PERCENT (g)	0%	0%	2.6%	5.5%
TERMINAL (d)	0/23 (0%)	0/26 (0%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	---	---	698	562
HC TUMORS SAME RTE	2/299 (1%)			
HC TUMORS ALL RTES	8/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.057	(e)	P=0.482	P=0.209
POLY 1.5	P=0.062	(e)	P=0.490	P=0.220
POLY 6	P=0.051	(e)	P=0.472	P=0.195
COCH-ARM / FISHERS	P=0.070	(e)	P=0.500	P=0.247
MAX-ISO-POLY-3	P=0.077	(e)	P=0.158	P=0.075
HISTCONT SAME RTE	P=0.059	(e)	P=0.198	P=0.078
HISTCONT ALL RTES	P=0.018*	(e)	P=0.188	P=0.032*

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

---

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

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TUMOR RATES	#	#	#	#
OVERALL (a)	29/50 (58%)	22/50 (44%)	16/50 (32%)	24/50 (48%)
POLY-3 RATE (b)	29/46.29	22/44.17	16/39.88	24/40.08
POLY-3 PERCENT (g)	62.7%	49.8%	40.1%	59.9%
TERMINAL (d)	13/23 (57%)	10/26 (39%)	8/18 (44%)	9/13 (69%)
FIRST INCIDENCE	501	540	578	527
HC TUMORS SAME RTE	145/299 (49%)			
HC TUMORS ALL RTES	465/1199 (39%)			

**STATISTICAL TESTS**

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POLY 3	P=0.429N	P=0.147N	P=0.024N*	P=0.483N
POLY 1.5	P=0.325N	P=0.134N	P=0.013N*	P=0.357N
POLY 6	P=0.513	P=0.163N	P=0.054N	P=0.555
COCH-ARM / FISHERS	P=0.214N	P=0.115N	P=0.008N**	P=0.212N
MAX-ISO-POLY-3	P=0.196N	P=0.107N	P=0.020N*	P=0.397N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	2/50 (4%)	2/50 (4%)	4/50 (8%)
POLY-3 RATE (b)	0/41.44	2/40.69	2/38.36	4/37.07
POLY-3 PERCENT (g)	0%	4.9%	5.2%	10.8%
TERMINAL (d)	0/23 (0%)	2/26 (8%)	0/18 (0%)	1/13 (8%)
FIRST INCIDENCE	---	729 (T)	536	394
HC TUMORS SAME RTE	7/299 (2%)			
HC TUMORS ALL RTES	35/1199 (3%)			

**STATISTICAL TESTS**

POLY 3	P=0.031*	P=0.233	P=0.220	P=0.046*
POLY 1.5	P=0.036*	P=0.234	P=0.227	P=0.052
POLY 6	P=0.025*	P=0.233	P=0.210	P=0.040*
COCH-ARM / FISHERS	P=0.044*	P=0.247	P=0.247	P=0.059
MAX-ISO-POLY-3	P=0.029*	P=0.075	P=0.075	P=0.018*
HISTCONT SAME RTE	P=0.034*	P=0.091	P=0.090	P=0.020*
HISTCONT ALL RTES	P=0.027*	P=0.086	P=0.085	P=0.019*

TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**All Organs  
 Mesothelioma: Malignant**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	2/50 (4%)	2/50 (4%)	4/50 (8%)
POLY-3 RATE (b)	0/41.44	2/40.69	2/38.36	4/37.07
POLY-3 PERCENT (g)	0%	4.9%	5.2%	10.8%
TERMINAL (d)	0/23 (0%)	2/26 (8%)	0/18 (0%)	1/13 (8%)
FIRST INCIDENCE	---	729 (T)	536	394
HC TUMORS SAME RTE	7/299 (2%)			
HC TUMORS ALL RTES	34/1199 (3%)			

**STATISTICAL TESTS**

POLY 3	P=0.031*	P=0.233	P=0.220	P=0.046*
POLY 1.5	P=0.036*	P=0.234	P=0.227	P=0.052
POLY 6	P=0.025*	P=0.233	P=0.210	P=0.040*
COCH-ARM / FISHERS	P=0.044*	P=0.247	P=0.247	P=0.059
MAX-ISO-POLY-3	P=0.029*	P=0.075	P=0.075	P=0.018*
HISTCONT SAME RTE	P=0.034*	P=0.091	P=0.090	P=0.020*
HISTCONT ALL RTES	P=0.028*	P=0.086	P=0.085	P=0.019*

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>All Organs</b>				
<b>Osteosarcoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/41.72	0/40.69	0/37.74	0/35.8
POLY-3 PERCENT (g)	4.8%	0%	0%	0%
TERMINAL (d)	1/23 (4%)	0/26 (0%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	653	---	---	---
HC TUMORS SAME RTE	4/299 (1%)			
HC TUMORS ALL RTES	11/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.110N	P=0.242N	P=0.260N	P=0.272N
POLY 1.5	P=0.111N	P=0.241N	P=0.250N	P=0.257N
POLY 6	P=0.110N	P=0.242N	P=0.274N	P=0.294N
COCH-ARM / FISHERS	P=0.115N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.064N	P=0.081N	P=0.097N	P=0.109N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>All Organs</b>				
<b>Osteosarcoma or Osteoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/41.72	0/40.69	0/37.74	0/35.8
POLY-3 PERCENT (g)	4.8%	0%	0%	0%
TERMINAL (d)	1/23 (4%)	0/26 (0%)	0/18 (0%)	0/13 (0%)
FIRST INCIDENCE	653	---	---	---
HC TUMORS SAME RTE	4/299 (1%)			
HC TUMORS ALL RTES	13/1199 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.110N	P=0.242N	P=0.260N	P=0.272N
POLY 1.5	P=0.111N	P=0.241N	P=0.250N	P=0.257N
POLY 6	P=0.110N	P=0.242N	P=0.274N	P=0.294N
COCH-ARM / FISHERS	P=0.115N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.064N	P=0.081N	P=0.097N	P=0.109N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**All Organs  
Benign Tumors**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	48/50 (96%)	49/50 (98%)	47/50 (94%)	48/50 (96%)
POLY-3 RATE (b)	48/49.21	49/49.08	47/48.08	48/49.04
POLY-3 PERCENT (g)	97.6%	99.8%	97.8%	97.9%
TERMINAL (d)	23/23 (100%)	26/26 (100%)	18/18 (100%)	13/13 (100%)
FIRST INCIDENCE	429	505	488	394
HC TUMORS SAME RTE	293/299 (98%)			
HC TUMORS ALL RTES	1166/1199 (97%)			

**STATISTICAL TESTS**

POLY 3	P=0.611N	P=0.444	P=0.794	P=0.760
POLY 1.5	P=0.547N	P=0.410	P=0.691N	P=0.717
POLY 6	P=0.728N	P=0.683	P=0.870	P=0.871
COCH-ARM / FISHERS	P=0.500N	P=0.500	P=0.500N	P=0.691N
MAX-ISO-POLY-3	P=0.501	P=0.098	P=0.464	P=0.442
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>All Organs</b>				
<b>Malignant Tumors</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	38/50 (76%)	33/50 (66%)	32/50 (64%)	32/50 (64%)
POLY-3 RATE (b)	38/47.87	33/45.5	32/43.53	32/42.96
POLY-3 PERCENT (g)	79.4%	72.5%	73.5%	74.5%
TERMINAL (d)	18/23 (78%)	19/26 (73%)	15/18 (83%)	11/13 (85%)
FIRST INCIDENCE	429	316	488	394
HC TUMORS SAME RTE	193/299 (65%)			
HC TUMORS ALL RTEs	686/1199 (57%)			

**STATISTICAL TESTS**

POLY 3	P=0.366N	P=0.287N	P=0.328N	P=0.373N
POLY 1.5	P=0.258N	P=0.239N	P=0.228N	P=0.255N
POLY 6	P=0.523N	P=0.365N	P=0.504N	P=0.536N
COCH-ARM / FISHERS	P=0.148N	P=0.189N	P=0.138N	P=0.138N
MAX-ISO-POLY-3	P=0.407N	P=0.213N	P=0.248N	P=0.287N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTEs	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Males			
	CONTROL	125 PPM	250 PPM	500 PPM

**All Organs  
Malignant and Benign Tumors**

TUMOR RATES	#	#	#	#
OVERALL (a)	50/50 (100%)	50/50 (100%)	48/50 (96%)	49/50 (98%)
POLY-3 RATE (b)	50/50	50/50	48/48.58	49/49.29
POLY-3 PERCENT (g)	100%	100%	98.8%	99.4%
TERMINAL (d)	23/23 (100%)	26/26 (100%)	18/18 (100%)	13/13 (100%)
FIRST INCIDENCE	429	316	488	394
HC TUMORS SAME RTE	299/299 (100%)			
HC TUMORS ALL RTES	1195/1199 (100%)			

**STATISTICAL TESTS**

POLY 3	P=0.592N	(e)	P=0.826N	P=0.992N
POLY 1.5	P=0.360N	(e)	P=0.463N	P=0.800N
POLY 6	P=0.997N	(e)	P=1.000N	P=1.000N
COCH-ARM / FISHERS	P=0.246N	(e)	P=0.247N	P=0.500N
MAX-ISO-POLY-3	P=0.189N	(e)	P=0.092N	P=0.161N
HISTCONT SAME RTE	(h)	(e)	(h)	(h)
HISTCONT ALL RTES	(h)	(e)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Adrenal Cortex  
Adenoma**

**TUMOR RATES**

OVERALL (a)	3/50 (6%)	3/50 (6%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	3/45.43	3/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	6.6%	6.9%	0%	0%
TERMINAL (d)	2/34 (6%)	3/33 (9%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	701	730 (T)	---	---
HC TUMORS SAME RTE	2/300 (1%)			
HC TUMORS ALL RTES	17/1098 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.042N*	P=0.645	P=0.131N	P=0.156N
POLY 1.5	P=0.039N*	P=0.652	P=0.126N	P=0.143N
POLY 6	P=0.046N*	P=0.638	P=0.138N	P=0.172N
COCH-ARM / FISHERS	P=0.034N*	P=0.661N	P=0.121N	P=0.121N
MAX-ISO-POLY-3	P=0.065N	P=0.481	P=0.048N*	P=0.071N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Adrenal Medulla  
Pheochromocytoma Benign**

**TUMOR RATES**

OVERALL (a)	2/50 (4%)	4/50 (8%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	2/45.31	4/43.93	1/42.9	0/37.64
POLY-3 PERCENT (g)	4.4%	9.1%	2.3%	0%
TERMINAL (d)	2/34 (6%)	3/33 (9%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	730 (T)	687	607	---
HC TUMORS SAME RTE	10/299 (3%)			
HC TUMORS ALL RTES	27/1091 (3%)			

**STATISTICAL TESTS**

POLY 3	P=0.118N	P=0.323	P=0.519N	P=0.281N
POLY 1.5	P=0.106N	P=0.329	P=0.511N	P=0.266N
POLY 6	P=0.131N	P=0.318	P=0.528N	P=0.297N
COCH-ARM / FISHERS	P=0.086N	P=0.339	P=0.500N	P=0.247N
MAX-ISO-POLY-3	P=0.130N	P=0.193	P=0.301N	P=0.117N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Adrenal Medulla  
Pheochromocytoma: Benign, Complex, Malignant, NOS**

**TUMOR RATES**

OVERALL (a)	3/50 (6%)	4/50 (8%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	3/45.52	4/43.93	1/42.9	0/37.64
POLY-3 PERCENT (g)	6.6%	9.1%	2.3%	0%
TERMINAL (d)	2/34 (6%)	3/33 (9%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	677	687	607	---
HC TUMORS SAME RTE	13/299 (4%)			
HC TUMORS ALL RTES	36/1091 (3%)			

**STATISTICAL TESTS**

POLY 3	P=0.062N	P=0.481	P=0.327N	P=0.156N
POLY 1.5	P=0.055N	P=0.488	P=0.318N	P=0.143N
POLY 6	P=0.071N	P=0.473	P=0.337N	P=0.172N
COCH-ARM / FISHERS	P=0.044N*	P=0.500	P=0.309N	P=0.121N
MAX-ISO-POLY-3	P=0.097N	P=0.332	P=0.176N	P=0.071N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Clitoral/Preputial Gland  
Adenoma**

**TUMOR RATES**

OVERALL (a)	3/49 (6%)	9/50 (18%)	3/49 (6%)	3/49 (6%)
POLY-3 RATE (b)	3/44.52	9/43.81	3/41.62	3/37.66
POLY-3 PERCENT (g)	6.7%	20.5%	7.2%	8%
TERMINAL (d)	2/33 (6%)	8/33 (24%)	3/30 (10%)	1/24 (4%)
FIRST INCIDENCE	677	719	730 (T)	627
HC TUMORS SAME RTE	5/299 (2%)			
HC TUMORS ALL RTES	104/1096 (10%)			

**STATISTICAL TESTS**

POLY 3	P=0.390N	P=0.054	P=0.631	P=0.583
POLY 1.5	P=0.355N	P=0.059	P=0.644	P=0.608
POLY 6	P=0.428N	P=0.050*	P=0.615	P=0.558
COCH-ARM / FISHERS	P=0.283N	P=0.065	P=0.661N	P=0.661N
MAX-ISO-POLY-3	P=0.338N	P=0.029*	P=0.466	P=0.421
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Clitoral/Preputial Gland  
Carcinoma**

**TUMOR RATES**

OVERALL (a)	1/49 (2%)	3/50 (6%)	2/49 (4%)	1/49 (2%)
POLY-3 RATE (b)	1/44.31	3/44.12	2/41.62	1/37.15
POLY-3 PERCENT (g)	2.3%	6.8%	4.8%	2.7%
TERMINAL (d)	1/33 (3%)	2/33 (6%)	2/30 (7%)	0/24 (0%)
FIRST INCIDENCE	730 (T)	632	730 (T)	724
HC TUMORS SAME RTE	5/299 (2%)			
HC TUMORS ALL RTES	29/1096 (3%)			

**STATISTICAL TESTS**

POLY 3	P=0.556N	P=0.303	P=0.478	P=0.720
POLY 1.5	P=0.531N	P=0.307	P=0.487	P=0.733
POLY 6	P=0.583N	P=0.301	P=0.468	P=0.706
COCH-ARM / FISHERS	P=0.477N	P=0.316	P=0.500	P=0.753N
MAX-ISO-POLY-3	P=0.476	P=0.154	P=0.268	P=0.453
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Clitoral/Preputial Gland  
Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	4/49 (8%)	12/50 (24%)	4/49 (8%)	4/49 (8%)
POLY-3 RATE (b)	4/44.52	12/44.16	4/41.62	4/37.68
POLY-3 PERCENT (g)	9%	27.2%	9.6%	10.6%
TERMINAL (d)	3/33 (9%)	10/33 (30%)	4/30 (13%)	1/24 (4%)
FIRST INCIDENCE	677	632	730 (T)	627
HC TUMORS SAME RTE	10/299 (3%)			
HC TUMORS ALL RTES	133/1096 (12%)			

**STATISTICAL TESTS**

POLY 3	P=0.353N	P=0.023*	P=0.606	P=0.549
POLY 1.5	P=0.312N	P=0.025*	P=0.621	P=0.578
POLY 6	P=0.396N	P=0.021*	P=0.587	P=0.520
COCH-ARM / FISHERS	P=0.234N	P=0.030*	P=0.643N	P=0.643N
MAX-ISO-POLY-3	P=0.274N	P=0.012*	P=0.461	P=0.408
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Intestine Large: Colon/Rectum  
 Adenoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	2/50 (4%)	5/50 (10%)
POLY-3 RATE (b)	0/45.31	1/43.77	2/42.9	5/37.68
POLY-3 PERCENT (g)	0%	2.3%	4.7%	13.3%
TERMINAL (d)	0/34 (0%)	1/33 (3%)	1/30 (3%)	4/24 (17%)
FIRST INCIDENCE	---	730 (T)	607	719
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	2/1100 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.004**	P=0.493	P=0.225	P=0.018*
POLY 1.5	P=0.005**	P=0.496	P=0.230	P=0.021*
POLY 6	P=0.003**	P=0.490	P=0.219	P=0.015*
COCH-ARM / FISHERS	P=0.007**	P=0.500	P=0.247	P=0.028*
MAX-ISO-POLY-3	P=0.006**	P=0.158	P=0.076	P=0.009**
HISTCONT SAME RTE	P=0.005**	P=0.023*	P=0.023*	P=0.009**
HISTCONT ALL RTES	P<0.001**	P=0.029*	P=0.002**	P<0.001**

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Islets, Pancreatic  
Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	2/50 (4%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	2/43.77	1/42.47	0/37.64
POLY-3 PERCENT (g)	0%	4.6%	2.4%	0%
TERMINAL (d)	0/34 (0%)	2/33 (6%)	1/30 (3%)	0/24 (0%)
FIRST INCIDENCE	---	730 (T)	730 (T)	---
HC TUMORS SAME RTE	7/299 (2%)			
HC TUMORS ALL RTES	21/1092 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.526N	P=0.229	P=0.487	(e)
POLY 1.5	P=0.504N	P=0.233	P=0.492	(e)
POLY 6	P=0.550N	P=0.226	P=0.481	(e)
COCH-ARM / FISHERS	P=0.461N	P=0.247	P=0.500	(e)
MAX-ISO-POLY-3	P=0.366	P=0.076	P=0.158	(e)
HISTCONT SAME RTE	(h)	(h)	(h)	(e)
HISTCONT ALL RTES	(h)	(h)	(h)	(e)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Islets, Pancreatic  
Carcinoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	1/50 (2%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	1/45.31	1/43.77	1/42.47	0/37.64
POLY-3 PERCENT (g)	2.2%	2.3%	2.4%	0%
TERMINAL (d)	1/34 (3%)	1/33 (3%)	1/30 (3%)	0/24 (0%)
FIRST INCIDENCE	730 (T)	730 (T)	730 (T)	---
HC TUMORS SAME RTE	1/299 (0%)			
HC TUMORS ALL RTES	4/1092 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.352N	P=0.753	P=0.746	P=0.537N
POLY 1.5	P=0.339N	P=0.756	P=0.752	P=0.525N
POLY 6	P=0.366N	P=0.750	P=0.739	P=0.550N
COCH-ARM / FISHERS	P=0.311N	P=0.753N	P=0.753N	P=0.500N
MAX-ISO-POLY-3	P=0.390N	P=0.489	P=0.481	P=0.203N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Islets, Pancreatic  
Carcinoma or Adenoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	3/50 (6%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	1/45.31	3/43.77	2/42.47	0/37.64
POLY-3 PERCENT (g)	2.2%	6.9%	4.7%	0%
TERMINAL (d)	1/34 (3%)	3/33 (9%)	2/30 (7%)	0/24 (0%)
FIRST INCIDENCE	730 (T)	730 (T)	730 (T)	---
HC TUMORS SAME RTE	8/299 (3%)			
HC TUMORS ALL RTES	25/1092 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.315N	P=0.293	P=0.477	P=0.537N
POLY 1.5	P=0.290N	P=0.298	P=0.487	P=0.525N
POLY 6	P=0.344N	P=0.287	P=0.466	P=0.550N
COCH-ARM / FISHERS	P=0.242N	P=0.309	P=0.500	P=0.500N
MAX-ISO-POLY-3	P=0.252N	P=0.149	P=0.268	P=0.203N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Liver  
Hepatocellular Carcinoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	1/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	2.2%	0%	0%	0%
TERMINAL (d)	1/34 (3%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	730 (T)	---	---	---
HC TUMORS SAME RTE	0/299 (0%)			
HC TUMORS ALL RTES	0/1099 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.285N	P=0.507N	P=0.513N	P=0.537N
POLY 1.5	P=0.292N	P=0.504N	P=0.508N	P=0.525N
POLY 6	P=0.278N	P=0.510N	P=0.519N	P=0.550N
COCH-ARM / FISHERS	P=0.306N	P=0.500N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.191N	P=0.167N	P=0.174N	P=0.203N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Lung  
Alveolar/Bronchiolar Adenoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	4/50 (8%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	1/45.31	4/44.11	1/42.47	2/38.05
POLY-3 PERCENT (g)	2.2%	9.1%	2.4%	5.3%
TERMINAL (d)	1/34 (3%)	3/33 (9%)	1/30 (3%)	0/24 (0%)
FIRST INCIDENCE	730 (T)	635	730 (T)	627
HC TUMORS SAME RTE	1/299 (0%)			
HC TUMORS ALL RTES	24/1099 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.509	P=0.170	P=0.746	P=0.440
POLY 1.5	P=0.537	P=0.174	P=0.752	P=0.458
POLY 6	P=0.479	P=0.167	P=0.739	P=0.420
COCH-ARM / FISHERS	P=0.596	P=0.181	P=0.753N	P=0.500
MAX-ISO-POLY-3	P=0.408	P=0.081	P=0.481	P=0.249
HISTCONT SAME RTE	P=0.126	P=0.022*	P=0.153	P=0.052
HISTCONT ALL RTES	P=0.382	P=0.093	P=0.609	P=0.308

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TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Lung  
 Alveolar/Bronchiolar Carcinoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	1/45.45	1/43.93	2/43.72	0/37.64
POLY-3 PERCENT (g)	2.2%	2.3%	4.6%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	694	687	417	---
HC TUMORS SAME RTE	2/299 (1%)			
HC TUMORS ALL RTES	6/1099 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.431N	P=0.753	P=0.486	P=0.537N
POLY 1.5	P=0.410N	P=0.756	P=0.492	P=0.525N
POLY 6	P=0.455N	P=0.750	P=0.479	P=0.551N
COCH-ARM / FISHERS	P=0.366N	P=0.753N	P=0.500	P=0.500N
MAX-ISO-POLY-3	P=0.340N	P=0.490	P=0.273	P=0.204N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**Lung  
Alveolar/Bronchiolar Carcinoma or Alveolar/Bronchiolar Adenoma**

**TUMOR RATES**

OVERALL (a)	2/50 (4%)	5/50 (10%)	3/50 (6%)	2/50 (4%)
POLY-3 RATE (b)	2/45.45	5/44.28	3/43.72	2/38.05
POLY-3 PERCENT (g)	4.4%	11.3%	6.9%	5.3%
TERMINAL (d)	1/34 (3%)	3/33 (9%)	1/30 (3%)	0/24 (0%)
FIRST INCIDENCE	694	635	417	627
HC TUMORS SAME RTE	3/299 (1%)			
HC TUMORS ALL RTES	29/1099 (3%)			

**STATISTICAL TESTS**

POLY 3	P=0.521N	P=0.205	P=0.482	P=0.628
POLY 1.5	P=0.489N	P=0.210	P=0.490	P=0.649
POLY 6	P=0.555N	P=0.202	P=0.472	P=0.605
COCH-ARM / FISHERS	P=0.420N	P=0.218	P=0.500	P=0.691N
MAX-ISO-POLY-3	P=0.457	P=0.114	P=0.311	P=0.432
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Mammary Gland Carcinoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	4/50 (8%)	3/50 (6%)	3/50 (6%)	1/50 (2%)
POLY-3 RATE (b)	4/46.25	3/44.28	3/42.65	1/37.64
POLY-3 PERCENT (g)	8.7%	6.8%	7%	2.7%
TERMINAL (d)	0/34 (0%)	2/33 (6%)	2/30 (7%)	1/24 (4%)
FIRST INCIDENCE	612	575	684	730 (T)
HC TUMORS SAME RTE	32/300 (11%)			
HC TUMORS ALL RTES	60/1100 (6%)			

**STATISTICAL TESTS**

POLY 3	P=0.196N	P=0.524N	P=0.544N	P=0.248N
POLY 1.5	P=0.175N	P=0.514N	P=0.526N	P=0.223N
POLY 6	P=0.223N	P=0.536N	P=0.568N	P=0.279N
COCH-ARM / FISHERS	P=0.135N	P=0.500N	P=0.500N	P=0.181N
MAX-ISO-POLY-3	P=0.260N	P=0.372N	P=0.392N	P=0.149N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Mammary Gland Fibroadenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	25/50 (50%)	20/50 (40%)	21/50 (42%)	16/50 (32%)
POLY-3 RATE (b)	25/46.51	20/46.73	21/43.35	16/38.75
POLY-3 PERCENT (g)	53.8%	42.8%	48.4%	41.3%
TERMINAL (d)	18/34 (53%)	12/33 (36%)	16/30 (53%)	11/24 (46%)
FIRST INCIDENCE	638	528	642	501
HC TUMORS SAME RTE	133/300 (44%)			
HC TUMORS ALL RTEs	574/1100 (52%)			

**STATISTICAL TESTS**

POLY 3	P=0.200N	P=0.194N	P=0.383N	P=0.172N
POLY 1.5	P=0.136N	P=0.202N	P=0.334N	P=0.118N
POLY 6	P=0.298N	P=0.182N	P=0.449N	P=0.254N
COCH-ARM / FISHERS	P=0.054N	P=0.211N	P=0.274N	P=0.052N
MAX-ISO-POLY-3	P=0.234N	P=0.142N	P=0.310N	P=0.141N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTEs	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Mammary Gland Fibroma, Fibroadenoma, Carcinoma, or Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	27/50 (54%)	20/50 (40%)	23/50 (46%)	16/50 (32%)
POLY-3 RATE (b)	27/47.27	20/46.73	23/43.35	16/38.75
POLY-3 PERCENT (g)	57.1%	42.8%	53.1%	41.3%
TERMINAL (d)	18/34 (53%)	12/33 (36%)	18/30 (60%)	11/24 (46%)
FIRST INCIDENCE	612	528	642	501
HC TUMORS SAME RTE	157/300 (52%)			
HC TUMORS ALL RTES	619/1100 (56%)			

**STATISTICAL TESTS**

POLY 3	P=0.149N	P=0.115N	P=0.428N	P=0.102N
POLY 1.5	P=0.090N	P=0.114N	P=0.357N	P=0.061N
POLY 6	P=0.251N	P=0.116N	P=0.528N	P=0.178N
COCH-ARM / FISHERS	P=0.030N*	P=0.115N	P=0.274N	P=0.021N*
MAX-ISO-POLY-3	P=0.142N	P=0.080N	P=0.351N	P=0.086N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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**Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva)  
Squamous Cell Carcinoma**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	4/1100 (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)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Oral Cavity (Oral Mucosa, Tongue, Pharynx, Tooth, Gingiva)  
Squamous Cell Carcinoma, Papilloma Squamous, or Papilloma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	10/1100 (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)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Oral Mucosa Squamous Cell Carcinoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	4/1100 (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. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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**Ovary  
 Granulosa-Theca Tumor Malignant**

**TUMOR RATES**

OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/45.65	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	4.4%	0%	0%	0%
TERMINAL (d)	1/34 (3%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	638	---	---	---
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	0/1098 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.106N	P=0.247N	P=0.253N	P=0.283N
POLY 1.5	P=0.109N	P=0.243N	P=0.247N	P=0.267N
POLY 6	P=0.103N	P=0.251N	P=0.262N	P=0.301N
COCH-ARM / FISHERS	P=0.115N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.074N	P=0.085N	P=0.092N	P=0.119N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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

**TUMOR RATES**

OVERALL (a)	35/50 (70%)	33/50 (66%)	28/50 (56%)	30/50 (60%)
POLY-3 RATE (b)	35/47.38	33/48.38	28/45.19	30/42.08
POLY-3 PERCENT (g)	73.9%	68.2%	62%	71.3%
TERMINAL (d)	25/34 (74%)	21/33 (64%)	20/30 (67%)	17/24 (71%)
FIRST INCIDENCE	633	433	534	450
HC TUMORS SAME RTE	188/298 (63%)			
HC TUMORS ALL RTES	613/1093 (56%)			

**STATISTICAL TESTS**

POLY 3	P=0.418N	P=0.347N	P=0.149N	P=0.485N
POLY 1.5	P=0.325N	P=0.371N	P=0.127N	P=0.391N
POLY 6	P=0.524N	P=0.328N	P=0.185N	P=0.589N
COCH-ARM / FISHERS	P=0.149N	P=0.415N	P=0.107N	P=0.201N
MAX-ISO-POLY-3	P=0.377N	P=0.269N	P=0.106N	P=0.392N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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

**TUMOR RATES**

OVERALL (a)	35/50 (70%)	34/50 (68%)	29/50 (58%)	30/50 (60%)
POLY-3 RATE (b)	35/47.38	34/48.38	29/45.24	30/42.08
POLY-3 PERCENT (g)	73.9%	70.3%	64.1%	71.3%
TERMINAL (d)	25/34 (74%)	22/33 (67%)	20/30 (67%)	17/24 (71%)
FIRST INCIDENCE	633	433	534	450
HC TUMORS SAME RTE	189/298 (63%)			
HC TUMORS ALL RTES	626/1093 (57%)			

**STATISTICAL TESTS**

POLY 3	P=0.404N	P=0.433N	P=0.206N	P=0.485N
POLY 1.5	P=0.310N	P=0.457N	P=0.178N	P=0.391N
POLY 6	P=0.514N	P=0.414N	P=0.251N	P=0.589N
COCH-ARM / FISHERS	P=0.137N	P=0.500N	P=0.149N	P=0.201N
MAX-ISO-POLY-3	P=0.427N	P=0.345N	P=0.151N	P=0.392N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin</b>				
<b>Basal Cell Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/45.31	1/43.77	0/42.47	1/37.64
POLY-3 PERCENT (g)	0%	2.3%	0%	2.7%
TERMINAL (d)	0/34 (0%)	1/33 (3%)	0/30 (0%)	1/24 (4%)
FIRST INCIDENCE	---	730 (T)	---	730 (T)
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	3/1100 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.357	P=0.493	(e)	P=0.463
POLY 1.5	P=0.373	P=0.496	(e)	P=0.475
POLY 6	P=0.340	P=0.490	(e)	P=0.450
COCH-ARM / FISHERS	P=0.405	P=0.500	(e)	P=0.500
MAX-ISO-POLY-3	P=0.255	P=0.158	(e)	P=0.158
HISTCONT SAME RTE	P=0.092	P=0.023*	(e)	P=0.032*
HISTCONT ALL RTES	P=0.096	P=0.057	(e)	P=0.056

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Skin  
Basal Cell Carcinoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	1/37.64
POLY-3 PERCENT (g)	0%	0%	0%	2.7%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	1/24 (4%)
FIRST INCIDENCE	---	---	---	730 (T)
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	3/1100 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.177	(e)	(e)	P=0.463
POLY 1.5	P=0.184	(e)	(e)	P=0.475
POLY 6	P=0.171	(e)	(e)	P=0.450
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)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	2/50 (4%)
POLY-3 RATE (b)	0/45.31	1/43.77	0/42.47	2/37.64
POLY-3 PERCENT (g)	0%	2.3%	0%	5.3%
TERMINAL (d)	0/34 (0%)	1/33 (3%)	0/30 (0%)	2/24 (8%)
FIRST INCIDENCE	---	730 (T)	---	730 (T)
HC TUMORS SAME RTE	1/300 (0%)			
HC TUMORS ALL RTES	12/1100 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.116	P=0.493	(e)	P=0.198
POLY 1.5	P=0.123	P=0.496	(e)	P=0.210
POLY 6	P=0.108	P=0.490	(e)	P=0.186
COCH-ARM / FISHERS	P=0.140	P=0.500	(e)	P=0.247
MAX-ISO-POLY-3	P=0.077	P=0.158	(e)	P=0.075
HISTCONT SAME RTE	P=0.066	P=0.125	(e)	P=0.053
HISTCONT ALL RTES	P=0.087	P=0.189	(e)	P=0.085

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**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)	1/50 (2%)	1/50 (2%)	1/50 (2%)	4/50 (8%)
POLY-3 RATE (b)	1/45.31	1/43.77	1/42.47	4/37.64
POLY-3 PERCENT (g)	2.2%	2.3%	2.4%	10.6%
TERMINAL (d)	1/34 (3%)	1/33 (3%)	1/30 (3%)	4/24 (17%)
FIRST INCIDENCE	730 (T)	730 (T)	730 (T)	730 (T)
HC TUMORS SAME RTE	2/300 (1%)			
HC TUMORS ALL RTES	24/1100 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.050*	P=0.753	P=0.746	P=0.128
POLY 1.5	P=0.055	P=0.756	P=0.752	P=0.143
POLY 6	P=0.044*	P=0.750	P=0.739	P=0.112
COCH-ARM / FISHERS	P=0.067	P=0.753N	P=0.753N	P=0.181
MAX-ISO-POLY-3	P=0.064	P=0.489	P=0.481	P=0.070
HISTCONT SAME RTE	P=0.013*	P=0.239	P=0.235	P=0.035*
HISTCONT ALL RTES	P=0.059	P=0.619	P=0.609	P=0.053

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin</b>				
<b>Fibroma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	4.4%	0%	0%	0%
TERMINAL (d)	2/34 (6%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	730 (T)	---	---	---
HC TUMORS SAME RTE	2/300 (1%)			
HC TUMORS ALL RTES	19/1100 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.106N	P=0.245N	P=0.252N	P=0.281N
POLY 1.5	P=0.109N	P=0.242N	P=0.246N	P=0.266N
POLY 6	P=0.104N	P=0.248N	P=0.259N	P=0.297N
COCH-ARM / FISHERS	P=0.115N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.072N	P=0.083N	P=0.090N	P=0.117N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	2/50 (4%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	2/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	4.4%	0%	0%	0%
TERMINAL (d)	2/34 (6%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	730 (T)	---	---	---
HC TUMORS SAME RTE	4/300 (1%)			
HC TUMORS ALL RTES	25/1100 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.106N	P=0.245N	P=0.252N	P=0.281N
POLY 1.5	P=0.109N	P=0.242N	P=0.246N	P=0.266N
POLY 6	P=0.104N	P=0.248N	P=0.259N	P=0.297N
COCH-ARM / FISHERS	P=0.115N	P=0.247N	P=0.247N	P=0.247N
MAX-ISO-POLY-3	P=0.072N	P=0.083N	P=0.090N	P=0.117N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin</b>				
<b>Keratoacanthoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	1/45.31	0/43.77	1/42.47	1/37.64
POLY-3 PERCENT (g)	2.2%	0%	2.4%	2.7%
TERMINAL (d)	1/34 (3%)	0/33 (0%)	1/30 (3%)	1/24 (4%)
FIRST INCIDENCE	730 (T)	---	730 (T)	730 (T)
HC TUMORS SAME RTE	1/300 (0%)			
HC TUMORS ALL RTES	8/1100 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.486	P=0.507N	P=0.746	P=0.718
POLY 1.5	P=0.502	P=0.504N	P=0.752	P=0.732
POLY 6	P=0.468	P=0.510N	P=0.739	P=0.701
COCH-ARM / FISHERS	P=0.539	P=0.500N	P=0.753N	P=0.753N
MAX-ISO-POLY-3	P=0.507	P=0.167N	P=0.481	P=0.451
HISTCONT SAME RTE	P=0.143	(e)	P=0.153	P=0.152
HISTCONT ALL RTES	P=0.404	(e)	P=0.340	P=0.324

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Skin</b>				
<b>Lipoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	0/43.77	1/42.47	0/37.64
POLY-3 PERCENT (g)	0%	0%	2.4%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	1/30 (3%)	0/24 (0%)
FIRST INCIDENCE	---	---	730 (T)	---
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	1/1100 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.616	(e)	P=0.487	(e)
POLY 1.5	P=0.642	(e)	P=0.492	(e)
POLY 6	P=0.588	(e)	P=0.481	(e)
COCH-ARM / FISHERS	P=0.694	(e)	P=0.500	(e)
MAX-ISO-POLY-3	P=0.408	(e)	P=0.158	(e)
HISTCONT SAME RTE	(e)	(e)	(e)	(e)
HISTCONT ALL RTES	(e)	(e)	(e)	(e)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Skin  
Squamous Cell Carcinoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	1/1100 (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)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Skin**  
**Squamous Cell Carcinoma, Basal Cell Carcinoma, Basosquamous Tumor (malignant or NOS), or Carcinoma**

TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	1/37.64
POLY-3 PERCENT (g)	0%	0%	0%	2.7%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	1/24 (4%)
FIRST INCIDENCE	---	---	---	730 (T)
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	4/1100 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.177	(e)	(e)	P=0.463
POLY 1.5	P=0.184	(e)	(e)	P=0.475
POLY 6	P=0.171	(e)	(e)	P=0.450
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)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	1/45.31	0/43.77	1/42.47	2/37.64
POLY-3 PERCENT (g)	2.2%	0%	2.4%	5.3%
TERMINAL (d)	1/34 (3%)	0/33 (0%)	1/30 (3%)	2/24 (8%)
FIRST INCIDENCE	730 (T)	---	730 (T)	730 (T)
HC TUMORS SAME RTE	1/300 (0%)			
HC TUMORS ALL RTES	12/1100 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.210	P=0.507N	P=0.746	P=0.436
POLY 1.5	P=0.222	P=0.504N	P=0.752	P=0.457
POLY 6	P=0.199	P=0.510N	P=0.739	P=0.413
COCH-ARM / FISHERS	P=0.247	P=0.500N	P=0.753N	P=0.500
MAX-ISO-POLY-3	P=0.210	P=0.167N	P=0.481	P=0.247
HISTCONT SAME RTE	P=0.029*	(e)	P=0.153	P=0.053
HISTCONT ALL RTES	P=0.127	(e)	P=0.416	P=0.107

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	1/50 (2%)	0/50 (0%)	1/50 (2%)	2/50 (4%)
POLY-3 RATE (b)	1/45.31	0/43.77	1/42.47	2/37.64
POLY-3 PERCENT (g)	2.2%	0%	2.4%	5.3%
TERMINAL (d)	1/34 (3%)	0/33 (0%)	1/30 (3%)	2/24 (8%)
FIRST INCIDENCE	730 (T)	---	730 (T)	730 (T)
HC TUMORS SAME RTE	1/300 (0%)			
HC TUMORS ALL RTES	11/1100 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.210	P=0.507N	P=0.746	P=0.436
POLY 1.5	P=0.222	P=0.504N	P=0.752	P=0.457
POLY 6	P=0.199	P=0.510N	P=0.739	P=0.413
COCH-ARM / FISHERS	P=0.247	P=0.500N	P=0.753N	P=0.500
MAX-ISO-POLY-3	P=0.210	P=0.167N	P=0.481	P=0.247
HISTCONT SAME RTE	P=0.029*	(e)	P=0.153	P=0.053
HISTCONT ALL RTES	P=0.110	(e)	P=0.398	P=0.102

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Skin: Sebaceous Gland  
Adenoma**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	1/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	2.3%	0%	0%
TERMINAL (d)	0/34 (0%)	1/33 (3%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	730 (T)	---	---
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	1/1100 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.581N	P=0.493	(e)	(e)
POLY 1.5	P=0.576N	P=0.496	(e)	(e)
POLY 6	P=0.586N	P=0.490	(e)	(e)
COCH-ARM / FISHERS	P=0.567N	P=0.500	(e)	(e)
MAX-ISO-POLY-3	P=0.442N	P=0.158	(e)	(e)
HISTCONT SAME RTE	(h)	(h)	(e)	(e)
HISTCONT ALL RTES	(h)	(h)	(e)	(e)



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Skin: Sebaceous Gland  
Carcinoma or Adenoma**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	1/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	2.3%	0%	0%
TERMINAL (d)	0/34 (0%)	1/33 (3%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	730 (T)	---	---
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	1/1100 (0%)			

**STATISTICAL TESTS**

POLY 3	P=0.581N	P=0.493	(e)	(e)
POLY 1.5	P=0.576N	P=0.496	(e)	(e)
POLY 6	P=0.586N	P=0.490	(e)	(e)
COCH-ARM / FISHERS	P=0.567N	P=0.500	(e)	(e)
MAX-ISO-POLY-3	P=0.442N	P=0.158	(e)	(e)
HISTCONT SAME RTE	(h)	(h)	(e)	(e)
HISTCONT ALL RTES	(h)	(h)	(e)	(e)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Thyroid Gland: C-Cell  
Adenoma**

**TUMOR RATES**

OVERALL (a)	3/50 (6%)	3/50 (6%)	3/50 (6%)	4/50 (8%)
POLY-3 RATE (b)	3/45.31	3/44.03	3/42.62	4/37.64
POLY-3 PERCENT (g)	6.6%	6.8%	7%	10.6%
TERMINAL (d)	3/34 (9%)	2/33 (6%)	2/30 (7%)	4/24 (17%)
FIRST INCIDENCE	730 (T)	659	694	730 (T)
HC TUMORS SAME RTE	14/299 (5%)			
HC TUMORS ALL RTES	124/1086 (11%)			

**STATISTICAL TESTS**

POLY 3	P=0.310	P=0.649	P=0.634	P=0.400
POLY 1.5	P=0.340	P=0.654	P=0.645	P=0.432
POLY 6	P=0.279	P=0.645	P=0.621	P=0.365
COCH-ARM / FISHERS	P=0.404	P=0.661N	P=0.661N	P=0.500
MAX-ISO-POLY-3	P=0.434	P=0.485	P=0.469	P=0.277
HISTCONT SAME RTE	P=0.134	P=0.451	P=0.426	P=0.166
HISTCONT ALL RTES	P=0.510	P=0.613	P=0.594	P=0.347

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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**Thyroid Gland: C-Cell Carcinoma**

**TUMOR RATES**

OVERALL (a)	1/50 (2%)	2/50 (4%)	2/50 (4%)	2/50 (4%)
POLY-3 RATE (b)	1/45.31	2/43.77	2/42.47	2/38.01
POLY-3 PERCENT (g)	2.2%	4.6%	4.7%	5.3%
TERMINAL (d)	1/34 (3%)	2/33 (6%)	2/30 (7%)	1/24 (4%)
FIRST INCIDENCE	730 (T)	730 (T)	730 (T)	626
HC TUMORS SAME RTE	6/299 (2%)			
HC TUMORS ALL RTES	18/1086 (2%)			

**STATISTICAL TESTS**

POLY 3	P=0.341	P=0.488	P=0.477	P=0.439
POLY 1.5	P=0.366	P=0.493	P=0.487	P=0.458
POLY 6	P=0.315	P=0.483	P=0.466	P=0.419
COCH-ARM / FISHERS	P=0.423	P=0.500	P=0.500	P=0.500
MAX-ISO-POLY-3	P=0.425	P=0.273	P=0.268	P=0.249
HISTCONT SAME RTE	P=0.107	P=0.175	P=0.170	P=0.153
HISTCONT ALL RTES	P=0.057	P=0.195	P=0.189	P=0.171

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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

**TUMOR RATES**

OVERALL (a)	4/50 (8%)	5/50 (10%)	5/50 (10%)	6/50 (12%)
POLY-3 RATE (b)	4/45.31	5/44.03	5/42.62	6/38.01
POLY-3 PERCENT (g)	8.8%	11.4%	11.7%	15.8%
TERMINAL (d)	4/34 (12%)	4/33 (12%)	4/30 (13%)	5/24 (21%)
FIRST INCIDENCE	730 (T)	659	694	626
HC TUMORS SAME RTE	20/299 (7%)			
HC TUMORS ALL RTES	141/1086 (13%)			

**STATISTICAL TESTS**

POLY 3	P=0.212	P=0.482	P=0.462	P=0.264
POLY 1.5	P=0.243	P=0.489	P=0.477	P=0.296
POLY 6	P=0.182	P=0.476	P=0.443	P=0.232
COCH-ARM / FISHERS	P=0.316	P=0.500	P=0.500	P=0.370
MAX-ISO-POLY-3	P=0.302	P=0.348	P=0.332	P=0.186
HISTCONT SAME RTE	P=0.043*	P=0.241	P=0.224	P=0.106
HISTCONT ALL RTES	P=0.353	P=0.440	P=0.418	P=0.226

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Thyroid Gland: Follicular Cell Adenoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	1/50 (2%)	1/50 (2%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	1/43.77	1/42.47	0/37.64
POLY-3 PERCENT (g)	0%	2.3%	2.4%	0%
TERMINAL (d)	0/34 (0%)	1/33 (3%)	1/30 (3%)	0/24 (0%)
FIRST INCIDENCE	---	730 (T)	730 (T)	---
HC TUMORS SAME RTE	1/299 (0%)			
HC TUMORS ALL RTES	5/1086 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.643N	P=0.493	P=0.487	(e)
POLY 1.5	P=0.627N	P=0.496	P=0.492	(e)
POLY 6	P=0.660N	P=0.490	P=0.481	(e)
COCH-ARM / FISHERS	P=0.595N	P=0.500	P=0.500	(e)
MAX-ISO-POLY-3	P=0.436	P=0.158	P=0.158	(e)
HISTCONT SAME RTE	(h)	(h)	(h)	(e)
HISTCONT ALL RTES	(h)	(h)	(h)	(e)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

**Thyroid Gland: Follicular Cell Carcinoma**

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	1/50 (2%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	1/37.64
POLY-3 PERCENT (g)	0%	0%	0%	2.7%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	1/24 (4%)
FIRST INCIDENCE	---	---	---	730 (T)
HC TUMORS SAME RTE	0/299 (0%)			
HC TUMORS ALL RTES	6/1086 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.177	(e)	(e)	P=0.463
POLY 1.5	P=0.184	(e)	(e)	P=0.475
POLY 6	P=0.171	(e)	(e)	P=0.450
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)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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

**TUMOR RATES**

OVERALL (a)	0/50 (0%)	1/50 (2%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	0/45.31	1/43.77	1/42.47	1/37.64
POLY-3 PERCENT (g)	0%	2.3%	2.4%	2.7%
TERMINAL (d)	0/34 (0%)	1/33 (3%)	1/30 (3%)	1/24 (4%)
FIRST INCIDENCE	---	730 (T)	730 (T)	730 (T)
HC TUMORS SAME RTE	1/299 (0%)			
HC TUMORS ALL RTES	10/1086 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.315	P=0.493	P=0.487	P=0.463
POLY 1.5	P=0.337	P=0.496	P=0.492	P=0.475
POLY 6	P=0.292	P=0.490	P=0.481	P=0.450
COCH-ARM / FISHERS	P=0.384	P=0.500	P=0.500	P=0.500
MAX-ISO-POLY-3	P=0.334	P=0.158	P=0.158	P=0.158
HISTCONT SAME RTE	P=0.103	P=0.119	P=0.119	P=0.122
HISTCONT ALL RTES	P=0.293	P=0.189	P=0.189	P=0.188

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Uterus</b>				
<b>Polyp Stromal</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	8/50 (16%)	8/50 (16%)	8/50 (16%)	7/50 (14%)
POLY-3 RATE (b)	8/46.24	8/44.36	8/43.27	7/39.12
POLY-3 PERCENT (g)	17.3%	18%	18.5%	17.9%
TERMINAL (d)	6/34 (18%)	6/33 (18%)	5/30 (17%)	3/24 (13%)
FIRST INCIDENCE	438	577	607	590
HC TUMORS SAME RTE	62/300 (21%)			
HC TUMORS ALL RTES	203/1100 (19%)			

**STATISTICAL TESTS**

POLY 3	P=0.519	P=0.573	P=0.551	P=0.584
POLY 1.5	P=0.536N	P=0.585	P=0.573	P=0.598N
POLY 6	P=0.479	P=0.562	P=0.530	P=0.548
COCH-ARM / FISHERS	P=0.434N	P=0.607N	P=0.607N	P=0.500N
MAX-ISO-POLY-3	P=0.702	P=0.463	P=0.442	P=0.473
HISTCONT SAME RTE	P=0.822	P=0.596	P=0.571	P=0.608
HISTCONT ALL RTES	P=0.817	P=0.587	P=0.562	P=0.599



TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Uterus</b>				
<b>Sarcoma Stromal</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	2/50 (4%)	0/50 (0%)	1/50 (2%)	1/50 (2%)
POLY-3 RATE (b)	2/46.01	0/43.77	1/42.47	1/38.01
POLY-3 PERCENT (g)	4.4%	0%	2.4%	2.6%
TERMINAL (d)	1/34 (3%)	0/33 (0%)	1/30 (3%)	0/24 (0%)
FIRST INCIDENCE	493	---	730 (T)	627
HC TUMORS SAME RTE	3/300 (1%)			
HC TUMORS ALL RTES	8/1100 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.521N	P=0.248N	P=0.528N	P=0.566N
POLY 1.5	P=0.515N	P=0.244N	P=0.516N	P=0.545N
POLY 6	P=0.527N	P=0.253N	P=0.541N	P=0.587N
COCH-ARM / FISHERS	P=0.500N	P=0.247N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.371N	P=0.087N	P=0.311N	P=0.351N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Uterus</b>				
<b>Sarcoma Stromal or Polyp Stromal</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	10/50 (20%)	8/50 (16%)	8/50 (16%)	8/50 (16%)
POLY-3 RATE (b)	10/46.93	8/44.36	8/43.27	8/39.49
POLY-3 PERCENT (g)	21.3%	18%	18.5%	20.3%
TERMINAL (d)	7/34 (21%)	6/33 (18%)	5/30 (17%)	3/24 (13%)
FIRST INCIDENCE	438	577	607	590
HC TUMORS SAME RTE	65/300 (22%)			
HC TUMORS ALL RTEs	211/1100 (19%)			

**STATISTICAL TESTS**

POLY 3	P=0.516N	P=0.449N	P=0.472N	P=0.558N
POLY 1.5	P=0.475N	P=0.430N	P=0.443N	P=0.510N
POLY 6	P=0.540	P=0.466N	P=0.500N	P=0.598N
COCH-ARM / FISHERS	P=0.375N	P=0.398N	P=0.398N	P=0.398N
MAX-ISO-POLY-3	P=0.620N	P=0.350N	P=0.373N	P=0.455N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTEs	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Zymbal's Gland Carcinoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	1/45.72	1/43.9	2/43.24	0/37.64
POLY-3 PERCENT (g)	2.2%	2.3%	4.6%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	1/30 (3%)	0/24 (0%)
FIRST INCIDENCE	612	697	451	---
HC TUMORS SAME RTE	3/300 (1%)			
HC TUMORS ALL RTES	6/1100 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.434N	P=0.752	P=0.481	P=0.538N
POLY 1.5	P=0.412N	P=0.755	P=0.489	P=0.526N
POLY 6	P=0.459N	P=0.748	P=0.469	P=0.552N
COCH-ARM / FISHERS	P=0.366N	P=0.753N	P=0.500	P=0.500N
MAX-ISO-POLY-3	P=0.339N	P=0.488	P=0.270	P=0.206N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>Zymbal's Gland Carcinoma or Adenoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	1/50 (2%)	1/50 (2%)	2/50 (4%)	0/50 (0%)
POLY-3 RATE (b)	1/45.72	1/43.9	2/43.24	0/37.64
POLY-3 PERCENT (g)	2.2%	2.3%	4.6%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	1/30 (3%)	0/24 (0%)
FIRST INCIDENCE	612	697	451	---
HC TUMORS SAME RTE	3/300 (1%)			
HC TUMORS ALL RTES	6/1100 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.434N	P=0.752	P=0.481	P=0.538N
POLY 1.5	P=0.412N	P=0.755	P=0.489	P=0.526N
POLY 6	P=0.459N	P=0.748	P=0.469	P=0.552N
COCH-ARM / FISHERS	P=0.366N	P=0.753N	P=0.500	P=0.500N
MAX-ISO-POLY-3	P=0.339N	P=0.488	P=0.270	P=0.206N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>All Organs</b>				
<b>Histiocytic Sarcoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	1/50 (2%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	1/44.27	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	2.3%	0%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	577	---	---
HC TUMORS SAME RTE	4/300 (1%)			
HC TUMORS ALL RTES	9/1100 (1%)			

**STATISTICAL TESTS**

POLY 3	P=0.580N	P=0.495	(e)	(e)
POLY 1.5	P=0.575N	P=0.497	(e)	(e)
POLY 6	P=0.585N	P=0.494	(e)	(e)
COCH-ARM / FISHERS	P=0.567N	P=0.500	(e)	(e)
MAX-ISO-POLY-3	P=0.444N	P=0.158	(e)	(e)
HISTCONT SAME RTE	(h)	(h)	(e)	(e)
HISTCONT ALL RTES	(h)	(h)	(e)	(e)

TDMS No. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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

TUMOR RATES	#	#	#	#
OVERALL (a)	16/50 (32%)	13/50 (26%)	17/50 (34%)	15/50 (30%)
POLY-3 RATE (b)	16/46.69	13/44.49	17/45.2	15/38.81
POLY-3 PERCENT (g)	34.3%	29.2%	37.6%	38.7%
TERMINAL (d)	9/34 (27%)	10/33 (30%)	8/30 (27%)	10/24 (42%)
FIRST INCIDENCE	633	590	541	611
HC TUMORS SAME RTE	100/300 (33%)			
HC TUMORS ALL RTES	265/1100 (24%)			

**STATISTICAL TESTS**

POLY 3	P=0.294	P=0.385N	P=0.453	P=0.423
POLY 1.5	P=0.364	P=0.361N	P=0.471	P=0.505
POLY 6	P=0.228	P=0.416N	P=0.435	P=0.337
COCH-ARM / FISHERS	P=0.531	P=0.330N	P=0.500	P=0.500N
MAX-ISO-POLY-3	P=0.440	P=0.306N	P=0.369	P=0.349
HISTCONT SAME RTE	P=0.534	P=1.000	P=0.482	P=0.457
HISTCONT ALL RTES	P=0.175	P=0.546	P=0.285	P=0.304

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

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

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TUMOR RATES	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	1/300 (0%)			
HC TUMORS ALL RTES	4/1100 (0%)			

**STATISTICAL TESTS**

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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)

---

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

---

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**All Organs  
Mesothelioma: Malignant**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	0/300 (0%)			
HC TUMORS ALL RTES	3/1100 (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)

---



**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>All Organs</b>				
<b>Osteosarcoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	1/300 (0%)			
HC TUMORS ALL RTES	5/1100 (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)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>All Organs</b>				
<b>Osteosarcoma or Osteoma</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	0/50 (0%)	0/50 (0%)	0/50 (0%)	0/50 (0%)
POLY-3 RATE (b)	0/45.31	0/43.77	0/42.47	0/37.64
POLY-3 PERCENT (g)	0%	0%	0%	0%
TERMINAL (d)	0/34 (0%)	0/33 (0%)	0/30 (0%)	0/24 (0%)
FIRST INCIDENCE	---	---	---	---
HC TUMORS SAME RTE	1/300 (0%)			
HC TUMORS ALL RTES	5/1100 (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. 20011 - 05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: RATS/F 344

P08: STATISTICAL ANALYSIS OF PRIMARY TUMORS  
 1-Bromopropane  
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008  
 Time Report Requested: 10:20:06  
 First Dose M/F: 07/14/03 / 07/14/03  
 Lab: BNW

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
 TERMINAL SACRIFICE AT 105 WEEKS**

DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM
<b>All Organs</b>				
<b>Benign Tumors</b>				
<b>TUMOR RATES</b>	#	#	#	#
OVERALL (a)	45/50 (90%)	46/50 (92%)	36/50 (72%)	41/50 (82%)
POLY-3 RATE (b)	45/48.22	46/49.87	36/45.43	41/44.13
POLY-3 PERCENT (g)	93.3%	92.2%	79.3%	92.9%
TERMINAL (d)	33/34 (97%)	30/33 (91%)	26/30 (87%)	23/24 (96%)
FIRST INCIDENCE	438	433	534	450
HC TUMORS SAME RTE	253/300 (84%)			
HC TUMORS ALL RTES	966/1100 (88%)			

**STATISTICAL TESTS**

POLY 3	P=0.399N	P=0.577N	P=0.028N*	P=0.654N
POLY 1.5	P=0.277N	P=0.637	P=0.023N*	P=0.514N
POLY 6	P=0.519N	P=0.448N	P=0.038N*	P=0.689
COCH-ARM / FISHERS	P=0.076N	P=0.500	P=0.020N*	P=0.194N
MAX-ISO-POLY-3	P=0.175N	P=0.412N	P=0.014N*	P=0.463N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

---

**All Organs  
Malignant Tumors**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	26/50 (52%)	23/50 (46%)	28/50 (56%)	20/50 (40%)
POLY-3 RATE (b)	26/48.77	23/46.05	28/47.53	20/39.71
POLY-3 PERCENT (g)	53.3%	50%	58.9%	50.4%
TERMINAL (d)	13/34 (38%)	15/33 (46%)	15/30 (50%)	12/24 (50%)
FIRST INCIDENCE	493	575	417	578
HC TUMORS SAME RTE	144/300 (48%)			
HC TUMORS ALL RTES	428/1100 (39%)			

**STATISTICAL TESTS**

POLY 3	P=0.519N	P=0.452N	P=0.363	P=0.475N
POLY 1.5	P=0.394N	P=0.406N	P=0.392	P=0.350N
POLY 6	P=0.410	P=0.510N	P=0.319	P=0.554
COCH-ARM / FISHERS	P=0.175N	P=0.345N	P=0.421	P=0.158N
MAX-ISO-POLY-3	P=0.590N	P=0.373N	P=0.292	P=0.398N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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**STATISTICAL ANALYSIS OF PRIMARY TUMORS IN RATS(F 344)  
TERMINAL SACRIFICE AT 105 WEEKS**

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DOSE	Females			
	CONTROL	125 PPM	250 PPM	500 PPM

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**All Organs  
Malignant and Benign Tumors**

**TUMOR RATES**

	#	#	#	#
OVERALL (a)	49/50 (98%)	48/50 (96%)	46/50 (92%)	43/50 (86%)
POLY-3 RATE (b)	49/50	48/50	46/49.64	43/44.5
POLY-3 PERCENT (g)	98%	96%	92.7%	96.6%
TERMINAL (d)	33/34 (97%)	31/33 (94%)	27/30 (90%)	24/24 (100%)
FIRST INCIDENCE	438	433	417	450
HC TUMORS SAME RTE	279/300 (93%)			
HC TUMORS ALL RTES	1039/1100 (95%)			

**STATISTICAL TESTS**

POLY 3	P=0.415N	P=0.500N	P=0.211N	P=0.613N
POLY 1.5	P=0.196N	P=0.500N	P=0.195N	P=0.277N
POLY 6	P=0.558	P=0.500N	P=0.237N	P=0.728
COCH-ARM / FISHERS	P=0.010N**	P=0.500N	P=0.181N	P=0.030N*
MAX-ISO-POLY-3	P=0.326N	P=0.281N	P=0.099N	P=0.312N
HISTCONT SAME RTE	(h)	(h)	(h)	(h)
HISTCONT ALL RTES	(h)	(h)	(h)	(h)

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**LEGEND**

- (a) Number of tumor-bearing animals/number of animals examined at site.
  - (b) Number of tumor-bearing animals/Poly-3 number
  - (d) Observed incidence at terminal kill.
  - (e) Value of Statistic cannot be computed.
  - (f) Beneath the control incidence are the P-values associated with the trend test. Beneath the dosed group incidence are the P-values corresponding to pairwise comparisons between the controls and that dosed group.
  - (g) Poly-3 adjusted lifetime tumor incidence.
  - (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 \*\*\*