

TDMS No. 99019 - 04

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Triethylamine

CAS Number: 121-44-8

Date Report Requested: 10/15/2008

Time Report Requested: 07:47:53

First Dose M/F: 01/20/03 / 01/20/03

Lab: BNW

F1_Rev.1_M3

C Number: C99019
Lock Date: 09/16/2003
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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SUMMARY OF STATISTICALLY SIGNIFICANT ($P \leq .05$) RESULTS IN THE ANALYSIS OF Triethylamine

MALE MICE

Organ

Nose: Olfactory Epithelium

Nose: Respiratory Epithelium

Nose: Turbinate

Morphology

Atrophy

Degeneration Hyaline

Vacuolization Cytoplasmic

Degeneration Hyaline

Metaplasia

Hyperostosis

Ulcer

FEMALE MICE

Organ

Nose: Olfactory Epithelium

Nose: Respiratory Epithelium

Nose: Turbinate

Morphology

Atrophy

Degeneration Hyaline

Vacuolization Cytoplasmic

Degeneration Hyaline

Metaplasia

Hyperostosis

Ulcer

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Males					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Olfactory Epithelium
Atrophy**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	9/10 (90%)	10/10 (100%)	10/10 (100%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	9/10.00	10/10.00	10/10.00
POLY-3 PERCENT (g)	0%	0%	0%	90%	100%	100%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	9/10 (90%)	10/10 (100%)	10/10 (100%)
FIRST INCIDENCE	---	---	---	95 (T)	95 (T)	95 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Males					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Olfactory Epithelium
Degeneration Hyaline**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)	6/10 (60%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	1/10.00	6/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%	60%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)	6/10 (60%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	95 (T)	95 (T)	---

STATISTICAL TESTS

POLY 3	P=0.130	(e)	(e)	P=0.500	P<0.001**	(e)
POLY 1.5	P=0.130	(e)	(e)	P=0.500	P<0.001**	(e)
POLY 6	P=0.130	(e)	(e)	P=0.500	P<0.001**	(e)
COCH-ARM / FISHERS	P=0.193	(e)	(e)	P=0.500	P=0.005**	(e)
MAX-ISO-POLY-3	P=0.006**	(e)	(e)	P=0.158	P<0.001**	(e)

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Males					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Olfactory Epithelium
Vacuolization Cytoplasmic**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	6/10 (60%)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	6/10.00	0/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	60%	0%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	6/10 (60%)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	95 (T)	---	---

STATISTICAL TESTS

POLY 3	P=0.369N	(e)	(e)	P<0.001**	(e)	(e)
POLY 1.5	P=0.369N	(e)	(e)	P<0.001**	(e)	(e)
POLY 6	P=0.369N	(e)	(e)	P<0.001**	(e)	(e)
COCH-ARM / FISHERS	P=0.407N	(e)	(e)	P=0.005**	(e)	(e)
MAX-ISO-POLY-3	P=0.030*	(e)	(e)	P<0.001**	(e)	(e)

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Males					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Respiratory Epithelium
Degeneration Hyaline**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	9/10 (90%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	0/10.00	9/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	90%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	9/10 (90%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---	95 (T)	---

STATISTICAL TESTS

POLY 3	P<0.001**	(e)	(e)	(e)	P<0.001**	(e)
POLY 1.5	P<0.001**	(e)	(e)	(e)	P<0.001**	(e)
POLY 6	P<0.001**	(e)	(e)	(e)	P<0.001**	(e)
COCH-ARM / FISHERS	P=0.078	(e)	(e)	(e)	P<0.001**	(e)
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	(e)	P<0.001**	(e)

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Males					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Respiratory Epithelium
Metaplasia**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	10/10 (100%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00	10/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	100%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	10/10 (100%)
FIRST INCIDENCE	---	---	---	---	---	95 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
POLY 1.5	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
POLY 6	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Males					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Turbinate
Hyperostosis**

LESION RATES

OVERALL (a)	0/10 (0%)	10/10 (100%)	9/10 (90%)	10/10 (100%)	10/10 (100%)	10/10 (100%)
POLY-3 RATE (b)	0/10.00	10/10.00	9/10.00	10/10.00	10/10.00	10/10.00
POLY-3 PERCENT (g)	0%	100%	90%	100%	100%	100%
TERMINAL (d)	0/10 (0%)	10/10 (100%)	9/10 (90%)	10/10 (100%)	10/10 (100%)	10/10 (100%)
FIRST INCIDENCE	---	95 (T)	95 (T)	95 (T)	95 (T)	95 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Males					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

Nose: Turbinate
Ulcer

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	8/10 (80%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00	8/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	80%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	8/10 (80%)
FIRST INCIDENCE	---	---	---	---	---	95 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
POLY 1.5	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
POLY 6	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Females					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Olfactory Epithelium
Atrophy**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	10/10 (100%)	10/10 (100%)	10/10 (100%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	10/10.00	10/10.00	10/10.00
POLY-3 PERCENT (g)	0%	0%	0%	100%	100%	100%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	10/10 (100%)	10/10 (100%)	10/10 (100%)
FIRST INCIDENCE	---	---	---	96 (T)	96 (T)	96 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Females					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Olfactory Epithelium
Degeneration Hyaline**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	7/10 (70%)	10/10 (100%)	8/10 (80%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	7/10.00	10/10.00	8/10.00
POLY-3 PERCENT (g)	0%	0%	0%	70%	100%	80%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	7/10 (70%)	10/10 (100%)	8/10 (80%)
FIRST INCIDENCE	---	---	---	96 (T)	96 (T)	96 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	P=0.002**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Females					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Olfactory Epithelium
Vacuolization Cytoplasmic**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	5/10 (50%)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	5/10.00	0/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	50%	0%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	5/10 (50%)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	96 (T)	---	---

STATISTICAL TESTS

POLY 3	P=0.421N	(e)	(e)	P=0.008**	(e)	(e)
POLY 1.5	P=0.421N	(e)	(e)	P=0.008**	(e)	(e)
POLY 6	P=0.421N	(e)	(e)	P=0.008**	(e)	(e)
COCH-ARM / FISHERS	P=0.438N	(e)	(e)	P=0.016*	(e)	(e)
MAX-ISO-POLY-3	P=0.074	(e)	(e)	P=0.002**	(e)	(e)

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Females					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Respiratory Epithelium
Degeneration Hyaline**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	7/10 (70%)	10/10 (100%)	8/10 (80%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	7/10.00	10/10.00	8/10.00
POLY-3 PERCENT (g)	0%	0%	0%	70%	100%	80%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	7/10 (70%)	10/10 (100%)	8/10 (80%)
FIRST INCIDENCE	---	---	---	96 (T)	96 (T)	96 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	P=0.002**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	P<0.001**	P<0.001**	P<0.001**

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Females					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Respiratory Epithelium
Metaplasia**

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	9/10 (90%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00	9/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	90%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	9/10 (90%)
FIRST INCIDENCE	---	---	---	---	---	96 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
POLY 1.5	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
POLY 6	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Females					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

**Nose: Turbinate
Hyperostosis**

LESION RATES

OVERALL (a)	0/10 (0%)	8/10 (80%)	10/10 (100%)	10/10 (100%)	9/10 (90%)	10/10 (100%)
POLY-3 RATE (b)	0/10.00	8/10.00	10/10.00	10/10.00	9/10.00	10/10.00
POLY-3 PERCENT (g)	0%	80%	100%	100%	90%	100%
TERMINAL (d)	0/10 (0%)	8/10 (80%)	10/10 (100%)	10/10 (100%)	9/10 (90%)	10/10 (100%)
FIRST INCIDENCE	---	96 (T)	96 (T)	96 (T)	96 (T)	96 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 1.5	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**
POLY 6	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**
COCH-ARM / FISHERS	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**
MAX-ISO-POLY-3	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**	P<0.001**

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MICE(B6C3F1)
TERMINAL SACRIFICE AT 14 WEEKS**

DOSE	Females					
	CONTROL	12.5 PPM	25 PPM	50 PPM	100 PPM	200 PPM

Nose: Turbinate
Ulcer

LESION RATES

OVERALL (a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	9/10 (90%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00	9/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	90%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	9/10 (90%)
FIRST INCIDENCE	---	---	---	---	---	96 (T)

STATISTICAL TESTS

POLY 3	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
POLY 1.5	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
POLY 6	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
COCH-ARM / FISHERS	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**
MAX-ISO-POLY-3	P<0.001**	(e)	(e)	(e)	(e)	P<0.001**

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.
 - (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. The life table analysis regards tumors in animals dying prior to terminal kill as being (directly or indirectly) the cause of death.
 - (e) Value of Statistic cannot be computed.
 - (g) Poly-3 adjusted lifetime tumor incidence.
 - (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
- Logistic regression is an alternative method for analyzing the incidence of non-fatal tumors.
The Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates.

*** END OF REPORT ***