

Experiment Number: 20009-02
Test Type: 90-DAY
Route: DOSED WATER
Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
CAS Number: 108-99-6

Date Report Requested: 10/19/2014
Time Report Requested: 15:45:16
First Dose M/F: NA / NA
Lab: BAT

C Number:	C20009
Lock Date:	07/30/2004
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Both
PWG Approval Date	NONE

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SUMMARY OF STATISTICALLY SIGNIFICANT ($P \leq .05$) RESULTS IN THE ANALYSIS OF BETA-PICOLINE

MALE MOUSE

Organ

Kidney

FEMALE MOUSE

Organ

Liver

Morphology

Infiltration Cellular Mononuclear CI

Morphology

Inflammation Chronic

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Heart: Myocardium						
Infiltration Cellular Mononuclear CI						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	2/10 (20%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	2/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	20%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	2/10 (20%)
FIRST INCIDENCE	---	---	---	---	---	92(T)
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.227
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.227
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.227
COCH-ARM / FISHERS	P=0.132	(e)	(e)	(e)	(e)	P=0.237
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.067
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Kidney						
Infiltration Cellular Mononuclear CI						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)	0/10 (0%)	2/10 (20%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	1/10.00	0/10.00	2/10.00
POLY-3 PERCENT (g)	0%	0%	0%	10%	0%	20%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)	0/10 (0%)	2/10 (20%)
FIRST INCIDENCE	---	---	---	92(T)	---	92(T)
STATISTICAL TESTS						
POLY 3	P=0.036*	(e)	(e)	P=0.500	(e)	P=0.227
POLY 1.5	P=0.036*	(e)	(e)	P=0.500	(e)	P=0.227
POLY 6	P=0.036*	(e)	(e)	P=0.500	(e)	P=0.227
COCH-ARM / FISHERS	P=0.038*	(e)	(e)	P=0.500	(e)	P=0.237
MAX-ISO-POLY-3	P=0.034*	(e)	(e)	P=0.159	(e)	P=0.067
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Kidney Mineralization						
LESION RATES						
OVERALL(a)	2/10 (20%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)
POLY-3 RATE (b)	2/10.00	0/10.00	0/10.00	0/10.00	0/10.00	1/10.00
POLY-3 PERCENT (g)	20%	0%	0%	0%	0%	10%
TERMINAL (d)	2/10 (20%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)
FIRST INCIDENCE	92(T)	---	---	---	---	92(T)
STATISTICAL TESTS						
POLY 3	P=0.649	P=0.227N	P=0.227N	P=0.227N	P=0.227N	P=0.500N
POLY 1.5	P=0.649	P=0.227N	P=0.227N	P=0.227N	P=0.227N	P=0.500N
POLY 6	P=0.649	P=0.227N	P=0.227N	P=0.227N	P=0.227N	P=0.500N
COCH-ARM / FISHERS	P=0.647	P=0.237N	P=0.237N	P=0.237N	P=0.237N	P=0.500N
MAX-ISO-POLY-3	P=0.055N	P=0.067N	P=0.067N	P=0.067N	P=0.067N	P=0.274N
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
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 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Kidney						
Nephropathy						
LESION RATES						
OVERALL(a)	1/10 (10%)	2/10 (20%)	1/10 (10%)	1/10 (10%)	2/10 (20%)	2/10 (20%)
POLY-3 RATE (b)	1/10.00	2/10.00	1/10.00	1/10.00	2/10.00	2/10.00
POLY-3 PERCENT (g)	10%	20%	10%	10%	20%	20%
TERMINAL (d)	1/10 (10%)	2/10 (20%)	1/10 (10%)	1/10 (10%)	2/10 (20%)	2/10 (20%)
FIRST INCIDENCE	92(T)	92(T)	92(T)	92(T)	92(T)	92(T)
STATISTICAL TESTS						
POLY 3	P=0.364	P=0.500	P=0.760	P=0.760	P=0.500	P=0.500
POLY 1.5	P=0.364	P=0.500	P=0.760	P=0.760	P=0.500	P=0.500
POLY 6	P=0.364	P=0.500	P=0.760	P=0.760	P=0.500	P=0.500
COCH-ARM / FISHERS	P=0.359	P=0.500	P=0.763N	P=0.763N	P=0.500	P=0.500
MAX-ISO-POLY-3	P=0.501	P=0.274	P=1.000	P=1.000	P=0.274	P=0.274
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

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 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Kidney: Renal Tubule						
Casts Protein						
LESION RATES						
OVERALL(a)	1/10 (10%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/10.00	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	0%	0%
TERMINAL (d)	1/10 (10%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---	---
STATISTICAL TESTS						
POLY 3	P=0.416N	P=0.500N	P=0.500N	P=0.500N	P=0.500N	P=0.500N
POLY 1.5	P=0.416N	P=0.500N	P=0.500N	P=0.500N	P=0.500N	P=0.500N
POLY 6	P=0.416N	P=0.500N	P=0.500N	P=0.500N	P=0.500N	P=0.500N
COCH-ARM / FISHERS	P=0.415N	P=0.500N	P=0.500N	P=0.500N	P=0.500N	P=0.500N
MAX-ISO-POLY-3	P=0.075N	P=0.159N	P=0.159N	P=0.159N	P=0.159N	P=0.159N
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Liver						
Inflammation Chronic						
LESION RATES						
OVERALL(a)	3/10 (30%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	3/10 (30%)
POLY-3 RATE (b)	3/10.00	0/0.00	0/0.00	0/0.00	0/0.00	3/10.00
POLY-3 PERCENT (g)	30%	0%	0%	0%	0%	30%
TERMINAL (d)	3/10 (30%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	3/10 (30%)
FIRST INCIDENCE	92(T)	---	---	---	---	92(T)
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.678
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.678
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.678
COCH-ARM / FISHERS	P=0.596	(e)	(e)	(e)	(e)	P=0.686N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=1.000
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Lung Inflammation						
LESION RATES						
OVERALL(a)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	0%	0%
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---	---
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500N
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500N
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500N
COCH-ARM / FISHERS	P=0.304N	(e)	(e)	(e)	(e)	P=0.500N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159N
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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 Species/Strain: Mouse/B6C3F1

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Pancreas						
Infiltration Cellular Mononuclear CI						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---	---	---
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Parathyroid Gland						
Cyst						
LESION RATES						
OVERALL(a)	0/6 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/9 (11%)
POLY-3 RATE (b)	0/6.00	0/0.00	0/0.00	0/0.00	0/0.00	1/9.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	11.1%
TERMINAL (d)	0/6 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/9 (11%)
FIRST INCIDENCE	---	---	---	---	---	92(T)
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.580
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.580
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.580
COCH-ARM / FISHERS	P=0.376	(e)	(e)	(e)	(e)	P=0.600
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.231
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	MALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Thyroid Gland						
Ectopic Thymus						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	---	92(T)
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.304	(e)	(e)	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Heart: Myocardium						
Infiltration Cellular Mononuclear CI						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---	---	---
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

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**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Kidney						
Infiltration Cellular Mononuclear CI						
LESION RATES						
OVERALL(a)	2/10 (20%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)
POLY-3 RATE (b)	2/10.00	0/10.00	0/10.00	0/10.00	0/10.00	1/10.00
POLY-3 PERCENT (g)	20%	0%	0%	0%	0%	10%
TERMINAL (d)	2/10 (20%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)
FIRST INCIDENCE	92(T)	---	---	---	---	92(T)
STATISTICAL TESTS						
POLY 3	P=0.649	P=0.227N	P=0.227N	P=0.227N	P=0.227N	P=0.500N
POLY 1.5	P=0.649	P=0.227N	P=0.227N	P=0.227N	P=0.227N	P=0.500N
POLY 6	P=0.649	P=0.227N	P=0.227N	P=0.227N	P=0.227N	P=0.500N
COCH-ARM / FISHERS	P=0.647	P=0.237N	P=0.237N	P=0.237N	P=0.237N	P=0.500N
MAX-ISO-POLY-3	P=0.055N	P=0.067N	P=0.067N	P=0.067N	P=0.067N	P=0.274N
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
 Time Report Requested: 15:45:16
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Kidney						
Mineralization						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	---	92(T)
STATISTICAL TESTS						
POLY 3	P=0.107	(e)	(e)	(e)	(e)	P=0.500
POLY 1.5	P=0.107	(e)	(e)	(e)	(e)	P=0.500
POLY 6	P=0.107	(e)	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.105	(e)	(e)	(e)	(e)	P=0.500
MAX-ISO-POLY-3	P=0.075	(e)	(e)	(e)	(e)	P=0.159
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
 Time Report Requested: 15:45:16
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Kidney						
Nephropathy						
LESION RATES						
OVERALL(a)	2/10 (20%)	0/10 (0%)	1/10 (10%)	2/10 (20%)	0/10 (0%)	2/10 (20%)
POLY-3 RATE (b)	2/10.00	0/10.00	1/10.00	2/10.00	0/10.00	2/10.00
POLY-3 PERCENT (g)	20%	0%	10%	20%	0%	20%
TERMINAL (d)	2/10 (20%)	0/10 (0%)	1/10 (10%)	2/10 (20%)	0/10 (0%)	2/10 (20%)
FIRST INCIDENCE	92(T)	---	92(T)	92(T)	---	92(T)
STATISTICAL TESTS						
POLY 3	P=0.447	P=0.227N	P=0.500N	P=0.702	P=0.227N	P=0.702
POLY 1.5	P=0.447	P=0.227N	P=0.500N	P=0.702	P=0.227N	P=0.702
POLY 6	P=0.447	P=0.227N	P=0.500N	P=0.702	P=0.227N	P=0.702
COCH-ARM / FISHERS	P=0.447	P=0.237N	P=0.500N	P=0.709N	P=0.237N	P=0.709N
MAX-ISO-POLY-3	P=0.450	P=0.067N	P=0.274N	P=1.000	P=0.067N	P=1.000
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
 Time Report Requested: 15:45:16
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Kidney: Renal Tubule						
Casts Protein						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---	---	---
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
 Time Report Requested: 15:45:16
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Liver						
Inflammation Chronic						
LESION RATES						
OVERALL(a)	10/10 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	5/10 (50%)
POLY-3 RATE (b)	10/10.00	0/0.00	0/0.00	0/0.00	0/0.00	5/10.00
POLY-3 PERCENT (g)	100%	0%	0%	0%	0%	50%
TERMINAL (d)	10/10 (100%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	5/10 (50%)
FIRST INCIDENCE	92(T)	---	---	---	---	92(T)
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.008N**
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.008N**
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.008N**
COCH-ARM / FISHERS	P=0.010N**	(e)	(e)	(e)	(e)	P=0.016N*
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.001N**
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
 Time Report Requested: 15:45:16
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Lung						
Inflammation						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---	---	---
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
 Time Report Requested: 15:45:16
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Pancreas						
Infiltration Cellular Mononuclear CI						
LESION RATES						
OVERALL(a)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	1/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	10%	0%	0%	0%	0%	0%
TERMINAL (d)	1/10 (10%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	92(T)	---	---	---	---	---
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500N
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500N
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500N
COCH-ARM / FISHERS	P=0.304N	(e)	(e)	(e)	(e)	P=0.500N
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159N
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
 Time Report Requested: 15:45:16
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Parathyroid Gland						
Cyst						
LESION RATES						
OVERALL(a)	0/7 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/8 (0%)
POLY-3 RATE (b)	0/7.00	0/0.00	0/0.00	0/0.00	0/0.00	0/8.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%
TERMINAL (d)	0/7 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/8 (0%)
FIRST INCIDENCE	---	---	---	---	---	---
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
 Time Report Requested: 15:45:16
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Thyroid Gland						
Ectopic Thymus						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	0/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	0%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/10 (0%)
FIRST INCIDENCE	---	---	---	---	---	---
STATISTICAL TESTS						
POLY 3	(n)	(n)	(n)	(n)	(n)	(n)
POLY 1.5	(n)	(n)	(n)	(n)	(n)	(n)
POLY 6	(n)	(n)	(n)	(n)	(n)	(n)
COCH-ARM / FISHERS	(n)	(n)	(n)	(n)	(n)	(n)
MAX-ISO-POLY-3	(n)	(n)	(n)	(n)	(n)	(n)
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02
 Test Type: 90-DAY
 Route: DOSED WATER
 Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 10/19/2014
 Time Report Requested: 15:45:16
 First Dose M/F: NA / NA
 Lab: BAT

**STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS IN MOUSE(B6C3F1)
 LAST REMOVAL AT 14286 WEEKS**

DOSE	FEMALE					
	0 MG/L	78 MG/L	156 MG/L	312 MG/L	625 MG/L	1250 MG/L
Uterus: Endometrium						
Hyperplasia Cystic						
LESION RATES						
OVERALL(a)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
POLY-3 RATE (b)	0/10.00	0/0.00	0/0.00	0/0.00	0/0.00	1/10.00
POLY-3 PERCENT (g)	0%	0%	0%	0%	0%	10%
TERMINAL (d)	0/10 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)	1/10 (10%)
FIRST INCIDENCE	---	---	---	---	---	92(T)
STATISTICAL TESTS						
POLY 3	(e)	(e)	(e)	(e)	(e)	P=0.500
POLY 1.5	(e)	(e)	(e)	(e)	(e)	P=0.500
POLY 6	(e)	(e)	(e)	(e)	(e)	P=0.500
COCH-ARM / FISHERS	P=0.304	(e)	(e)	(e)	(e)	P=0.500
MAX-ISO-POLY-3	(e)	(e)	(e)	(e)	(e)	P=0.159
HISTCONT SAME RTE						
HISTCONT ALL RTES						
CURR VS HC SAME RTE						
CURR VS HC ALL RTES						

Experiment Number: 20009-02

Test Type: 90-DAY

Route: DOSED WATER

Species/Strain: Mouse/B6C3F1

P10: STATISTICAL ANALYSIS OF NON-NEOPLASTIC LESIONS

Test Compound: beta-Picoline

CAS Number: 108-99-6

Date Report Requested: 10/19/2014

Time Report Requested: 15:45:16

First Dose M/F: NA / NA

Lab: BAT

LEGEND

- (a) Number of tumor-bearing animals/number of animals examined at site.
 - (b) Number of tumor-bearing animals/Poly-3 number
 - (d) Observed incidence at terminal kill.
 - (e) Value of statistic cannot be computed.
 - (f) Beneath the control incidence are the P-values associated with the trend test. Beneath the dosed group incidence are the P-values corresponding to pairwise comparisons between the controls and that dosed group.
 - (g) Poly-3 adjusted lifetime tumor incidence.
 - (n) No statistics are calculated if all dose groups have fewer than two tumors.
 - (I) Interim sacrifice
 - (T) Terminal sacrifice
 - # Tumor rates based on numbers of animals necropsied.
 - * To the right of any statistical result, indicates significance at ($P \leq 0.05$).
 - ** To the right of any statistical result, indicates significance at ($P \leq 0.01$).
 - N Indicates a negative trend for all tests
- The Cochran-Armitage and Fishers exact tests compare directly the overall incidence rates.

**** END OF REPORT ****