

**TDMS No.** 20009 - 03  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** RATS/F 344/N

**P11: STATISTICAL ANALYSIS OF SURVIVAL DATA**  
beta-Picoline  
**CAS Number:** 108-99-6

**Date Report Requested:** 05/27/2011  
**Time Report Requested:** 10:09:56  
**First Dose M/F:** 11/18/04 / 11/19/04  
**Lab:** BAT

F2\_R2

**C Number:** C20009  
**Lock Date:** 06/05/2008  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 2.4.1.0\_004  
**PWG Approval Date:** 06/29/2010



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**MALE RATS**

FIRST TERMINAL SACRIFICE AT 726 DAYS

KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)										
DOSE	TIME (DAYS)									
	90	180	270	365	425	485	545	605	665	726(A)
0 mg/l	98.0	98.0	98.0	96.0	94.0	92.0	88.0	84.0	78.0	66.0
156.25 mg/l	100.0	100.0	100.0	100.0	100.0	100.0	96.0	92.0	84.0	62.0
312.5 mg/l	100.0	100.0	100.0	100.0	98.0	98.0	98.0	94.0	80.0	64.0
625 mg/l	100.0	100.0	100.0	100.0	100.0	100.0	94.0	86.0	70.0	48.0

(A) FIRST TERMINAL SACRIFICE  
 (B) THE FIRST ENTRY IS THE TREND TEST (TARONE, 1975) RESULT. SUBSEQUENT ENTRIES ARE THE RESULTS OF PAIRWISE TESTS (COX, 1972). NEGATIVE TRENDS ARE INDICATED BY "N".  
 (C) MEAN OF ALL UNCENSORED DEATHS PRIOR TO TERMINAL SACRIFICE  
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**MALE RATS**

FIRST TERMINAL SACRIFICE AT 726 DAYS

SURVIVAL SUMMARY STATISTICS				
DOSE	0 mg/l	156.25 mg/l	312.5 mg/l	625 mg/l
<b>SURVIVAL AT END OF STUDY</b> (KAPLAN-MEIER)	66.0%	62.0%	64.0%	48.0%
<b>SIGNIFICANCE (B)</b> (LIFE TABLE)	P=0.092	P=1.000	P=1.000	P=0.160
<b>MEAN DAY OF NATURAL DEATHS (C)</b> (STANDARD ERROR)	554.6 (44.9)	656.4 (14.5)	645.7 (18.2)	639.6 (12.9)
<b>MEAN LIFE SPAN (D)</b> (STANDARD ERROR)	667.7 (18.9)	699.5 (7.3)	697.1 (8.5)	681.1 (9.1)

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**FEMALE RATS**

FIRST TERMINAL SACRIFICE AT 727 DAYS  
INDIVIDUAL SURVIVAL TIMES (DAYS)

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**DOSE = 0 mg/l**

TOTAL 50	UNCENSORED DEATHS 20				CENSORED DEATHS 0				TERMINAL 30				
UNCENSORED DEATH DAYS													
454	488	509	514	531	579	608	621	625	644	682	683	691	700
701	701	712	712	715	719								
CENSORED DEATH DAYS													
None													

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**DOSE = 156.25 mg/l**

TOTAL 50	UNCENSORED DEATHS 18				CENSORED DEATHS 0				TERMINAL 32				
UNCENSORED DEATH DAYS													
474	488	526	526	531	588	614	616	616	642	645	645	670	706
706	706	712	715										
CENSORED DEATH DAYS													
None													

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**DOSE = 312.5 mg/l**

TOTAL 50	UNCENSORED DEATHS 17				CENSORED DEATHS 0				TERMINAL 33				
UNCENSORED DEATH DAYS													
526	527	579	582	603	642	666	666	670	676	677	683	690	691
691	701	721											
CENSORED DEATH DAYS													
None													

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**DOSE = 625 mg/l**

TOTAL 50	UNCENSORED DEATHS 20				CENSORED DEATHS 0				TERMINAL 30				
UNCENSORED DEATH DAYS													
474	515	527	540	551	579	589	598	607	632	638	656	666	684
685	693	695	700	719	719								
CENSORED DEATH DAYS													
None													

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FIRST TERMINAL SACRIFICE AT 727 DAYS

KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)										
DOSE	TIME (DAYS)									
	90	180	270	365	425	485	545	605	665	727(A)
0 mg/l	100.0	100.0	100.0	100.0	100.0	98.0	90.0	88.0	80.0	60.0
156.25 mg/l	100.0	100.0	100.0	100.0	100.0	98.0	90.0	88.0	76.0	64.0
312.5 mg/l	100.0	100.0	100.0	100.0	100.0	100.0	96.0	90.0	88.0	66.0
625 mg/l	100.0	100.0	100.0	100.0	100.0	98.0	92.0	84.0	76.0	60.0

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SURVIVAL SUMMARY STATISTICS				
DOSE	0 mg/l	156.25 mg/l	312.5 mg/l	625 mg/l
<b>SURVIVAL AT END OF STUDY</b> (KAPLAN-MEIER)	60.0%	64.0%	66.0%	60.0%
<b>SIGNIFICANCE (B)</b> (LIFE TABLE)	P=0.951	P=0.853N	P=0.671N	P=1.000
<b>MEAN DAY OF NATURAL DEATHS (C)</b> (STANDARD ERROR)	629.5 (19.5)	618.1 (18.9)	646.5 (14.6)	623.4 (16.6)
<b>MEAN LIFE SPAN (D)</b> (STANDARD ERROR)	688.0 (10.3)	687.8 (10.0)	699.6 (7.3)	685.5 (9.8)

\*\*\* END OF REPORT \*\*\*

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