

**Experiment Number:** 20303 - 05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** RATS/F 344/N

**P11: STATISTICAL ANALYSIS OF SURVIVAL DATA**

Vinylidene chloride  
**CAS Number:** 75-35-4

**Date Report Requested:** 12/12/2011  
**Time Report Requested:** 09:47:55  
**First Dose M/F:** 06/06/05 / 06/06/05  
**Lab:** BNW

F1\_R2

**NTP Study Number:** C20303  
**Lock Date:** 05/09/2008  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 2.5.0.0\_004  
**PWG Approval Date:** NONE

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MALE RATS

FIRST TERMINAL SACRIFICE AT 729 DAYS  
INDIVIDUAL SURVIVAL TIMES (DAYS)

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**DOSE = Control**

TOTAL 50	UNCENSORED DEATHS 25					CENSORED DEATHS 0					TERMINAL 25			
UNCENSORED DEATH DAYS														
367	492	514	551	562	564	591	614	620	635	645	654	661	669	
670	675	676	677	679	686	698	705	712	717	719				
CENSORED DEATH DAYS														
None														

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**DOSE = 25 ppm**

TOTAL 50	UNCENSORED DEATHS 23					CENSORED DEATHS 0					TERMINAL 27			
UNCENSORED DEATH DAYS														
294	355	466	492	535	543	548	560	563	599	607	611	619	619	
630	631	649	656	661	668	694	711	723						
CENSORED DEATH DAYS														
None														

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**DOSE = 50 ppm**

TOTAL 50	UNCENSORED DEATHS 28					CENSORED DEATHS 0					TERMINAL 22			
UNCENSORED DEATH DAYS														
296	418	423	500	502	535	555	557	563	574	575	586	591	596	
603	617	617	637	642	642	660	661	666	668	683	689	698	705	
CENSORED DEATH DAYS														
None														

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INDIVIDUAL SURVIVAL TIMES (DAYS)

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**DOSE = 100 ppm**

TOTAL 50			UNCENSORED DEATHS 31					CENSORED DEATHS 0					TERMINAL 19	
UNCENSORED DEATH DAYS														
10	437	449	495	534	534	535	542	561	583	583	593	600	607	
617	619	619	628	635	653	656	670	676	694	698	698	698	701	
701	718	726												
CENSORED DEATH DAYS														
None														

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**MALE RATS**

FIRST TERMINAL SACRIFICE AT 729 DAYS

KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)										
DOSE	TIME (DAYS)									
	90	180	270	365	425	485	545	605	665	729(A)
Control	100.0	100.0	100.0	100.0	98.0	98.0	94.0	86.0	74.0	50.0
25 ppm	100.0	100.0	100.0	96.0	96.0	94.0	88.0	80.0	62.0	54.0
50 ppm	100.0	100.0	100.0	98.0	94.0	94.0	88.0	70.0	56.0	44.0
100 ppm	98.0	98.0	98.0	98.0	98.0	94.0	84.0	74.0	58.0	38.0

(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  
 (D) MEAN OF ALL DEATHS (UNCENSORED, CENSORED, TERMINAL SACRIFICE)

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**MALE RATS**

FIRST TERMINAL SACRIFICE AT 729 DAYS

<b>SURVIVAL SUMMARY STATISTICS</b>				
<b>DOSE</b>	Control	25 ppm	50 ppm	100 ppm
<b>SURVIVAL AT END OF STUDY</b> (KAPLAN-MEIER)	50.0%	54.0%	44.0%	38.0%
<b>SIGNIFICANCE (B)</b> (LIFE TABLE)	P=0.121	P=1.000N	P=0.372	P=0.207
<b>MEAN DAY OF NATURAL DEATHS (C)</b> (STANDARD ERROR)	630.1 (16.7)	584.1 (21.9)	587.8 (17.8)	595.8 (24.0)
<b>MEAN LIFE SPAN (D)</b> (STANDARD ERROR)	679.6 (10.9)	662.3 (14.3)	649.9 (14.1)	646.4 (17.4)

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Lab: BNW

**FEMALE RATS**

FIRST TERMINAL SACRIFICE AT 731 DAYS  
INDIVIDUAL SURVIVAL TIMES (DAYS)

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**DOSE = Control**

TOTAL 50	UNCENSORED DEATHS 20				CENSORED DEATHS 0				TERMINAL 30				
UNCENSORED DEATH DAYS													
547	551	579	592	631	656	661	666	675	687	687	691	694	698
698	703	719	724	724	725								
CENSORED DEATH DAYS													
None													

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**DOSE = 25 ppm**

TOTAL 50	UNCENSORED DEATHS 24				CENSORED DEATHS 0				TERMINAL 26				
UNCENSORED DEATH DAYS													
451	470	535	541	551	571	600	610	613	625	633	639	639	653
661	661	675	689	691	694	709	712	717	719				
CENSORED DEATH DAYS													
None													

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**DOSE = 50 ppm**

TOTAL 50	UNCENSORED DEATHS 21				CENSORED DEATHS 0				TERMINAL 29				
UNCENSORED DEATH DAYS													
421	423	514	514	526	563	563	579	583	603	606	621	634	659
663	670	672	698	715	726	729							
CENSORED DEATH DAYS													
None													

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**FEMALE RATS**

FIRST TERMINAL SACRIFICE AT 731 DAYS  
INDIVIDUAL SURVIVAL TIMES (DAYS)

---

**DOSE = 100 ppm**

TOTAL 50	UNCENSORED DEATHS 31						CENSORED DEATHS 0						TERMINAL 19
UNCENSORED DEATH DAYS													
116	395	567	579	586	607	628	642	642	645	655	655	656	656
656	669	670	676	677	683	691	697	698	701	703	704	705	712
717	724	725											
CENSORED DEATH DAYS													
None													

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FIRST TERMINAL SACRIFICE AT 731 DAYS

KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)											
DOSE	TIME (DAYS)										
	90	180	270	365	425	485	545	605	665	731(A)	
Control	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	92.0	86.0	60.0
25 ppm	100.0	100.0	100.0	100.0	100.0	96.0	92.0	86.0	68.0	52.0	
50 ppm	100.0	100.0	100.0	100.0	96.0	96.0	90.0	80.0	70.0	58.0	
100 ppm	100.0	98.0	98.0	98.0	96.0	96.0	96.0	90.0	70.0	38.0	

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SURVIVAL SUMMARY STATISTICS				
DOSE	Control	25 ppm	50 ppm	100 ppm
<b>SURVIVAL AT END OF STUDY</b> (KAPLAN-MEIER)	60.0%	52.0%	58.0%	38.0%
<b>SIGNIFICANCE (B)</b> (LIFE TABLE)	P=0.046	P=0.337	P=0.709	P=0.029
<b>MEAN DAY OF NATURAL DEATHS (C)</b> (STANDARD ERROR)	665.4 (12.6)	627.5 (15.4)	603.9 (19.6)	639.9 (20.9)
<b>MEAN LIFE SPAN (D)</b> (STANDARD ERROR)	704.8 (6.8)	681.3 (10.4)	677.6 (12.1)	674.5 (14.3)

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

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