

TDMS No. 96011-05
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/F 344

P11: STATISTICAL ANALYSIS OF SURVIVAL DATA
CUMENE
CAS Number: 98-82-8
Pathologist: PIERCE, J. - RENNE, R.
F 1 R2

Date Report Reqsted: 01/12/2006
Time Report Reqsted: 9:52:37
First Dose M/F: 06/04/01 / 06/04/01
Lab: BNW

C Number:	C96011		
Lock Date:	01/28/2004		
Cage Range:	1 - 9999		
Date Range:	1-JAN-1940 to 17-SEP-2040		
Reasons For Removal:	ALL		
Removal Date Range:	JAN /1 /1940 - SEP /17 /2040		
Treatment Groups:	Include 1 CONTROL	Include 2 CONTROL	Include 3 250 PPM
	Include 4 250 PPM	Include 5 500 PPM	Include 6 500 PPM
	Include 7 1000 PPM	Include 8 1000 PPM	

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MALE RATS

FIRST TERMINAL SACRIFICE AT 729 DAYS

INDIVIDUAL SURVIVAL TIMES (DAYS)

DOSE = CONTROL

TOTAL 50	UNCENSORED DEATHS 24	CENSORED DEATHS 0	TERMINAL 26
UNCENSORED DEATHS			
296 467 495	558 562 571 599	600 607 613 620 622 628	632
647 674 689	694 702 708 710 712	714 719	
CENSORED DEATHS			
None			

DOSE = 250 PPM

TOTAL 50	UNCENSORED DEATHS 27	CENSORED DEATHS 0	TERMINAL 23
UNCENSORED DEATHS			
445 480 519	528 536 541 565	565 575 589 596 613 618	618
624 632 639	643 665 669 670 674	674 683 686 705 711	
CENSORED DEATHS			
None			

DOSE = 500 PPM

TOTAL 50	UNCENSORED DEATHS 23	CENSORED DEATHS 0	TERMINAL 27
UNCENSORED DEATHS			
213 460 495	523 554 554 569	600 625 626 634 638 639	645
646 648 670	670 674 679 688	695 702	
CENSORED DEATHS			
None			

DOSE = 1000 PPM

TOTAL 50	UNCENSORED DEATHS 26	CENSORED DEATHS 0	TERMINAL 24
UNCENSORED DEATHS			

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453	515	541	554	584	600	618	624	628	635	635	642	650	660
667	674	677	677	677	688	705	711	717	718	720	726		

CENSORED DEATHS

None

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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	98.0	98.0	96.0	94.0	84.0	70.0	52.0
250 PPM	100.0	100.0	100.0	100.0	100.0	96.0	88.0	78.0	62.0	46.0
500 PPM	100.0	100.0	98.0	98.0	98.0	96.0	92.0	84.0	68.0	54.0
1000 PPM	100.0	100.0	100.0	100.0	100.0	98.0	94.0	88.0	72.0	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

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

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FEMALE RATS

FIRST TERMINAL SACRIFICE AT 730 DAYS

INDIVIDUAL SURVIVAL TIMES (DAYS)

SURVIVAL SUMMARY STATISTICS				
DOSE	CONTROL	250 PPM	500 PPM	1000 PPM
SURVIVAL AT END OF STUDY (KAPLAN-MEIER)	52.0%	46.0%	54.0%	48.0%
SIGNIFICANCE (B) (LIFE TABLE)	P=0.994N	P=0.511	P=1.000N	P=0.946
MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR)	618.3 (19.9)	609.7 (13.4)	602.0 (22.3)	642.2 (13.4)
MEAN LIFE SPAN (D) (STANDARD ERROR)	675.9 (12.3)	664.6 (11.1)	670.6 (13.6)	683.8 (9.3)

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FEMALE RATS

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INDIVIDUAL SURVIVAL TIMES (DAYS)

DOSE = CONTROL

TOTAL 50	UNCENSORED DEATHS 29				CENSORED DEATHS 0				TERMINAL 21				
UNCENSORED DEATHS													
374	485	492	501	519	547	558	596	613	618	628	635	660	662
662	663	668	674	676	688	702	705	710	716	716	716	716	718
722													
CENSORED DEATHS	None												

DOSE = 250 PPM

TOTAL 50	UNCENSORED DEATHS 23				CENSORED DEATHS 0				TERMINAL 27				
UNCENSORED DEATHS													
16	514	536	547	562	571	591	598	628	635	655	660	663	670
673	688	696	697	702	704	709	716	717					
CENSORED DEATHS	None												

DOSE = 500 PPM

TOTAL 50	UNCENSORED DEATHS 19				CENSORED DEATHS 0				TERMINAL 31				
UNCENSORED DEATHS													
339	516	528	530	530	579	611	612	624	625	645	660	661	673
676	689	704	715	722									
CENSORED DEATHS	None												

DOSE = 1000 PPM

TOTAL 50	UNCENSORED DEATHS 18				CENSORED DEATHS 0				TERMINAL 32			
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FIRST TERMINAL SACRIFICE AT 730 DAYS

INDIVIDUAL SURVIVAL TIMES (DAYS)

UNCENSORED DEATHS

267	400	411	542	607	618	619	625	628	638	659	674	683	688
695	696	696	704										

CENSORED DEATHS

None

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Lab: BNW

KAPLAN-MEIER SURVIVAL PROBABILITY ESTIMATES (%)

DOSE	TIME (DAYS)									
	90	180	270	365	425	485	545	605	665	730(A)
CONTROL	100.0	100.0	100.0	100.0	98.0	96.0	90.0	84.0	68.0	42.0
250 PPM	98.0	98.0	98.0	98.0	98.0	98.0	94.0	84.0	74.0	54.0
500 PPM	100.0	100.0	100.0	98.0	98.0	98.0	90.0	88.0	74.0	62.0
1000 PPM	100.0	100.0	98.0	98.0	94.0	94.0	92.0	92.0	78.0	64.0

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SURVIVAL SUMMARY STATISTICS

DOSE	CONTROL	250 PPM	500 PPM	1000 PPM
SURVIVAL AT END OF STUDY (KAPLAN-MEIER)	42.0%	54.0%	62.0%	64.0%
SIGNIFICANCE (B) (LIFE TABLE)	P=0.061N	P=0.357N	P=0.109N	P=0.071N
MEAN DAY OF NATURAL DEATHS (C) (STANDARD ERROR)	632.4 (16.6)	615.1 (30.2)	612.6 (21.4)	602.8 (28.9)
MEAN LIFE SPAN (D) (STANDARD ERROR)	673.4 (11.8)	677.2 (16.0)	685.4 (11.4)	684.2 (13.4)

*** END OF REPORT ***

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