

```
options ls=78 ps=60;

Data myel;
    infile "chap4_myel.txt" firstobs=2;
    input dur status trt renal;
        trt1=trt-1;
run;

proc phreg data=myel;
model dur*status(0)=trt1;
run;

proc lifetest data=myel;
time dur*status(0);
test trt1;
run;
```

The PHREG Procedure

Model Information	
Data Set	WORK.MYEL
Dependent Variable	dur
Censoring Variable	status
Censoring Value(s)	0
Ties Handling	BRESLOW

Number of Observations Read	25
Number of Observations Used	25

Summary of the Number of Event and Censored Values			
Total	Event	Censored	Percent Censored
25	17	8	32.00

Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics		
Criterion	Without Covariates	With Covariates
-2 LOG L	94.084	92.765
AIC	94.084	94.765
SBC	94.084	95.598

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	1.3191	1	0.2508
Score	1.2975	1	0.2547
Wald	1.2633	1	0.2610

Analysis of Maximum Likelihood Estimates						
Parameter	DF	Parameter Estimate	Standard Error	Chi-Square	Pr > ChiSq	Hazard Ratio
trt1	1	0.57276	0.50960	1.2633	0.2610	1.773

The LIFETEST Procedure

Product-Limit Survival Estimates					
dur	Survival	Failure	Survival Standard Error	Number Failed	Number Left
0.00	1.0000	0	0	0	25
8.00	.	.	.	1	24
8.00	0.9200	0.0800	0.0543	2	23
13.00	0.8800	0.1200	0.0650	3	22
18.00	0.8400	0.1600	0.0733	4	21
23.00	0.8000	0.2000	0.0800	5	20
52.00	0.7600	0.2400	0.0854	6	19
63.00	.	.	.	7	18
63.00	0.6800	0.3200	0.0933	8	17
70.00	0.6400	0.3600	0.0960	9	16
76.00	0.6000	0.4000	0.0980	10	15
180.00	0.5600	0.4400	0.0993	11	14
195.00	0.5200	0.4800	0.0999	12	13
210.00	0.4800	0.5200	0.0999	13	12
220.00	0.4400	0.5600	0.0993	14	11
365.00 *	.	.	.	14	10
632.00	0.3960	0.6040	0.0986	15	9
700.00	0.3520	0.6480	0.0970	16	8
852.00 *	.	.	.	16	7
1296.00	0.3017	0.6983	0.0953	17	6
1296.00 *	.	.	.	17	5
1328.00 *	.	.	.	17	4
1460.00 *	.	.	.	17	3
1976.00 *	.	.	.	17	2
1990.00 *	.	.	.	17	1
2240.00 *	.	.	.	17	0

Note: The marked survival times are censored observations.

Summary Statistics for Time Variable dur

Quartile Estimates				
Percent	Point Estimate	95% Confidence Interval		
		Transform	[Lower	Upper)
75	.	LOGLOG	220.00	.
50	210.00	LOGLOG	63.00	1296.00
25	63.00	LOGLOG	8.00	180.00

Mean	Standard Error
562.76	117.32

The LIFETEST Procedure

Note: The mean survival time and its standard error were underestimated because the largest observation was censored and the estimation was restricted to the largest event time.

Summary of the Number of Censored and Uncensored Values			
Total	Failed	Censored	Percent Censored
25	17	8	32.00

Rank Tests for the Association of dur with Covariates

Univariate Chi-Squares for the Wilcoxon Test				
Variable	Test Statistic	Standard Error	Chi-Square	Pr > Chi-Square
trt1	-0.7622	1.3691	0.3100	0.5777

Covariance Matrix for the Wilcoxon Statistics	
Variable	trt1
trt1	1.87445

Forward Stepwise Sequence of Chi-Squares for the Wilcoxon Test					
Variable	DF	Chi-Square	Pr > Chi-Square	Chi-Square Increment	Pr > Increment
trt1	1	0.3100	0.5777	0.3100	0.5777

Univariate Chi-Squares for the Log-Rank Test				
Variable	Test Statistic	Standard Error	Chi-Square	Pr > Chi-Square
trt1	-2.3376	2.0522	1.2975	0.2547

Covariance Matrix for the Log-Rank Statistics	
Variable	trt1
trt1	4.21151

Forward Stepwise Sequence of Chi-Squares for the Log-Rank Test					
Variable	DF	Chi-Square	Pr > Chi-Square	Chi-Square Increment	Pr > Increment
trt1	1	1.2975	0.2547	1.2975	0.2547