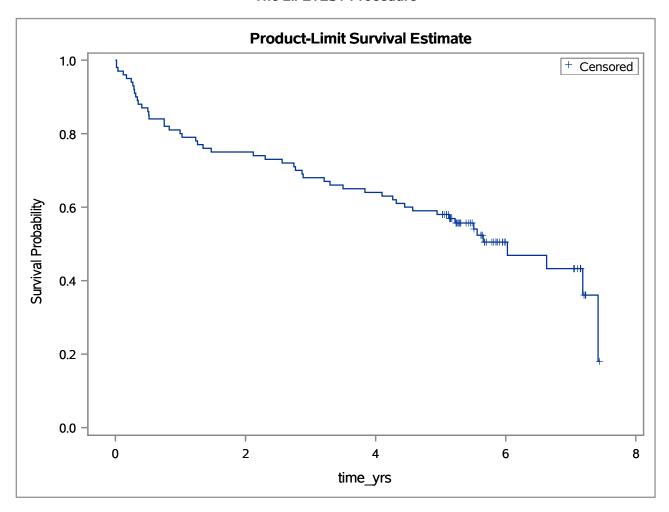
### Kaplan-Meier curve for WHAS100 data



Summ	Summary of the Number of Censored and Uncensored Values			
Total Failed Censored Percent Censored				
100	51	49	49.00	

# Saturday, September 8, 2018 10:26:12 PM **2** Comparison of survival for gender for WHAS100 data

Summary of the Number of Censored and Uncensored Values					
Stratum gender Total Failed Censored Percent Censored					
1	0	65	28	37	56.92
2	1	35	23	12	34.29
Total		100	51	49	49.00

### The LIFETEST Procedure

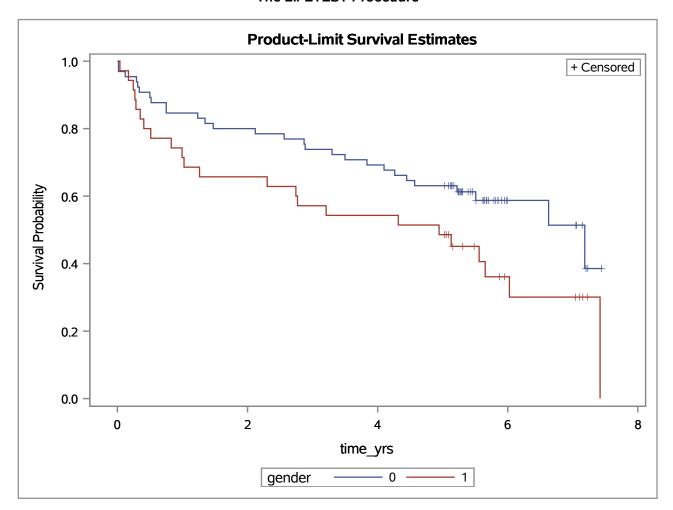
## Testing Homogeneity of Survival Curves for time\_yrs over Strata

Rank Statistics			
gender Log-Rank Wilcoxon			
0	-6.6200	-459.00	
1	6.6200	459.00	

Covariance Matrix for the Log-Rank Statistics				
gender 0 1				
0	11.0351	-11.0351		
1	-11.0351	11.0351		

Covariance Matrix for the Wilcoxon Statistics			
gender 0 1			
0	60848.0	-60848.0	
1	-60848.0	60848.0	

Test of Equality over Strata				
Test Chi-Square DF Chi-Square				
Log-Rank	3.9714	1	0.0463	
Wilcoxon	3.4624	1	0.0628	
-2Log(LR)	4.4183	1	0.0356	



Model Information			
Data Set SURVIVAL.WHAS1			
Dependent Variable	time_yrs		
Censoring Variable	fstat		
Censoring Value(s)	0		
Ties Handling	BRESLOW		

Number of Observations Read	
Number of Observations Used	100

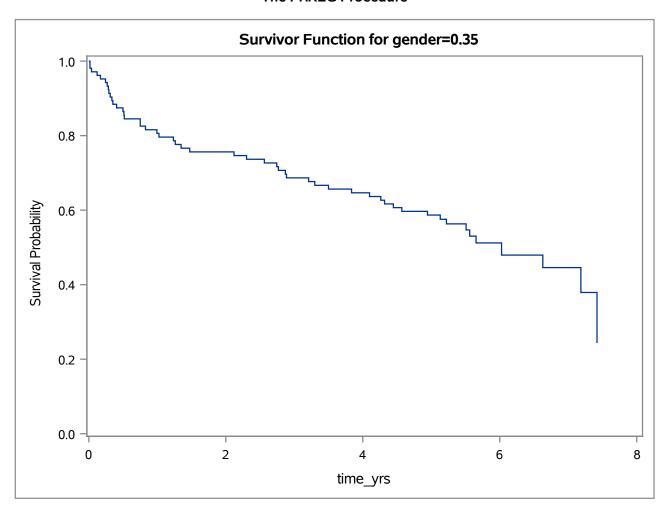
	Summary of the Number of Event and Censored Values				
	Total Event Censored Percent Censored				
ľ	100	51	49	49.00	

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

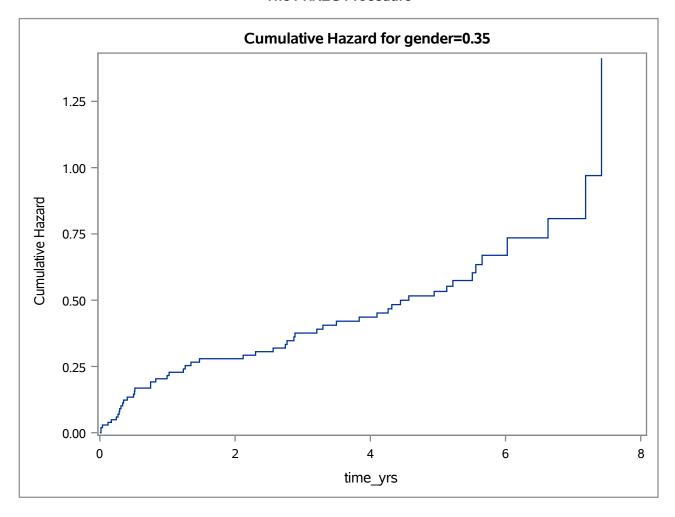
Model Fit Statistics				
Criterion	Without Covariates	With Covariates		
-2 LOG L	418.239	414.485		
AIC	418.239	416.485		
SBC	418.239	418.416		

Testing Global Null Hypothesis: BETA=0					
Test Chi-Square DF Pr > ChiSq					
Likelihood Ratio	3.7548	1	0.0527		
Score	3.9678	1	0.0464		
Wald	3.8705	1	0.0491		

Analysis of Maximum Likelihood Estimates						
Parameter DF Parameter Estimate Error Chi-Square Pr > ChiSq Ratio						
gender	1	0.55555	0.28238	3.8705	0.0491	1.743



### The PHREG Procedure



Reference Set of Covariates for Plotting gender 0.350000

# Saturday, September 8, 2018 10:26:12 PM **8** Comparison of survival for age groups for WHAS100 data

Summary of the Number of Censored and Uncensored Values					
Stratum age_gp Total Failed Censored Percent Censored					
1	0-59	27	9	18	66.67
2	60-69	22	7	15	68.18
3	70-79	26	14	12	46.15
4	>=80	25	21	4	16.00
Total		100	51	49	49.00

### The LIFETEST Procedure

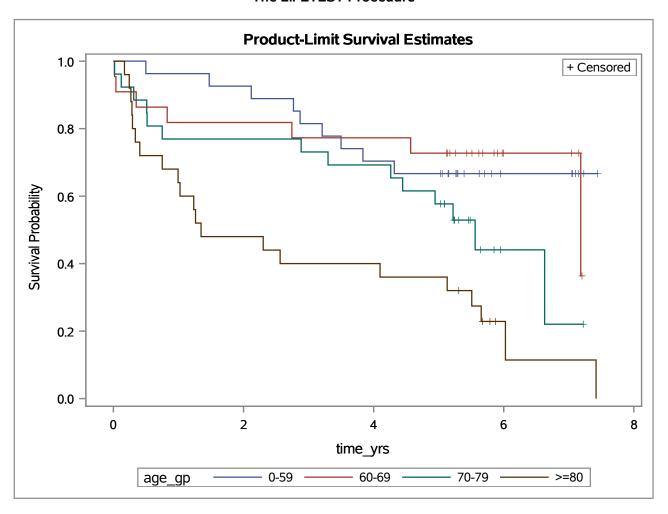
## Testing Homogeneity of Survival Curves for time\_yrs over Strata

Rank Statistics				
age_gp Log-Rank Wilcoxon				
0-59	-7.210	-459.00		
60-69	-5.354	-339.00		
70-79	1.415	28.00		
>=80	11.150	770.00		

Covariance Matrix for the Log-Rank Statistics					
age_gp	0-59 60-69 70-79 >=80				
0-59	10.9624	-3.8997	-3.9227	-3.1400	
60-69	-3.8997	9.2399	-3.0718	-2.2684	
70-79	-3.9227	-3.0718	9.3450	-2.3505	
>=80	-3.1400	-2.2684	-2.3505	7.7590	

Covariance Matrix for the Wilcoxon Statistics					
age_gp	0-59	0-59 60-69 70-79 >=80			
0-59	59231.8	-19876.1	-22306.7	-17049.1	
60-69	-19876.1	49758.6	-16966.8	-12915.6	
70-79	-22306.7	-16966.8	53924.3	-14650.8	
>=80	-17049.1	-12915.6	-14650.8	44615.5	

Test of Equality over Strata				
Test Chi-Square DF Chi-Squar				
Log-Rank	18.6824	3	0.0003	
Wilcoxon	14.8959	3	0.0019	
-2Log(LR)	19.7556	3	0.0002	



# Saturday, September 8, 2018 10:26:12 PM 11 Comparison of survival for age groups for WHAS100 data

Model Information			
Data Set	WORK.TEMP		
Dependent Variable	time_yrs		
Censoring Variable	fstat		
Censoring Value(s)	0		
Ties Handling	BRESLOW		

Number of Observations Read	
Number of Observations Used	100

Class Level Information					
Class	Design Value Variables				
age_gp	0-59	1	0	0	
	60-69	0	1	0	
	70-79	0	0	1	
	>=80	0	0	0	

Summary of the Number of Event and Censored Values			
Total	Event	Censored	Percent Censored
100	51	49	49.00

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

Model Fit Statistics				
Criterion	Without Covariates	With Covariates		
-2 LOG L	418.239	401.660		
AIC	418.239	407.660		
SBC	418.239	413.455		

Testing Global Null Hypothesis: BETA=0							
Test Chi-Square DF Pr > ChiSq							
Likelihood Ratio	16.5796	3	0.0009				
Score	18.6642	3	0.0003				
Wald	16.6275	3	0.0008				

# Saturday, September 8, 2018 10:26:12 PM 12 Comparison of survival for age groups for WHAS100 data

Type 3 Tests						
Effect DF Chi-Square Pr > ChiSq						
age_gp	3	16.6275	0.0008			

	Analysis of Maximum Likelihood Estimates								
Parameter Standard Chi-Square Pr > ChiSq Ratio Label								Label	
age_gp	0-59	1	-1.37166	0.40119	11.6895	0.0006	0.254	age_gp 0-59	
age_gp	60-69	1	-1.36062	0.44055	9.5385	0.0020	0.257	age_gp 60-69	
age_gp	70-79	1	-0.67566	0.34924	3.7430	0.0530	0.509	age_gp 70-79	

# Saturday, September 8, 2018 10:26:12 PM 13 Comparison of survival for age groups for WHAS100 data

Model Information				
Data Set SURVIVAL.WHAS				
Dependent Variable	time_yrs			
Censoring Variable	fstat			
Censoring Value(s)	0			
Ties Handling	BRESLOW			

Number of Observations Read	100
Number of Observations Used	100

	Summary of the Number of Event and Censored Values					
	Total Event Censored Censored					
ľ	100	51	49	49.00		

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

Model Fit Statistics						
Without With Criterion Covariates Covariates						
-2 LOG L	418.239	400.888				
AIC	418.239	402.888				
SBC	418.239	404.820				

Testing Global Null Hypothesis: BETA=0							
Test Chi-Square DF Pr > ChiSq							
Likelihood Ratio	17.3516	1	<.0001				
Score	15.6273	1	<.0001				
Wald	14.5989	1	0.0001				

Analysis of Maximum Likelihood Estimates							
Parameter	Parameter DF Parameter Standard Chi-Square Pr > ChiSq Ratio						
age	1	0.04566	0.01195	14.5989	0.0001	1.047	