

Obs	id	age	gender	hr	sysbp	diasbp	bmi	cvd	afb	sho	chf	av3	miord	mitype	year
1	1	83	0	89	152	78	25.5405	1	1	0	0	0	1	0	1
2	2	49	0	84	120	60	24.0240	1	0	0	0	0	0	1	1
3	3	70	1	83	147	88	22.1429	0	0	0	0	0	0	1	1
4	4	70	0	65	123	76	26.6319	1	0	0	1	0	0	1	1
5	5	70	0	63	135	85	24.4126	1	0	0	0	0	0	1	1

Obs	admitdate	disdate	fdate	los	dstat	lenfol	fstat	time_yrs
1	01/13/19	01/18/19	12/31/20	5	0	2178	0	5.96304
2	01/19/19	01/24/19	12/31/20	5	0	2172	0	5.94661
3	01/01/19	01/06/19	12/31/20	5	0	2190	0	5.99589
4	02/17/19	02/27/19	12/11/19	10	0	297	1	0.81314
5	03/01/19	03/07/19	12/31/20	6	0	2131	0	5.83436

The LIFEREG Procedure

Model Information	
Data Set	SURVIVAL.WHAS500
Dependent Variable	Log(time_yrs)
Censoring Variable	fstat
Censoring Value(s)	0
Number of Observations	500
Noncensored Values	215
Right Censored Values	285
Left Censored Values	0
Interval Censored Values	0
Number of Parameters	1
Name of Distribution	Exponential
Log Likelihood	-844.3546851

Number of Observations Read	500
Number of Observations Used	500

Fit Statistics	
-2 Log Likelihood	1688.709
AIC (smaller is better)	1690.709
AICC (smaller is better)	1690.717
BIC (smaller is better)	1694.924

Fit Statistics (Unlogged Response)	
-2 Log Likelihood	1172.212
Exponential AIC (smaller is better)	1174.212
Exponential AICC (smaller is better)	1174.220
Exponential BIC (smaller is better)	1178.427

Algorithm converged.

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates							
Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	1.7261	0.0682	1.5924	1.8597	640.56	<.0001
Scale	0	1.0000	0.0000	1.0000	1.0000		
Weibull Scale	1	5.6186	0.3832	4.9156	6.4221		
Weibull Shape	0	1.0000	0.0000	1.0000	1.0000		

Lagrange Multiplier Statistics		
Parameter	Chi-Square	Pr > ChiSq
Scale	105.9567	<.0001

Obs	time_yrs	LAMBDA_exp	S_exp	model
1	.002737851	.000487288	0.99951	exp
2	.002737851	.000487288	0.99951	exp
3	.002737851	.000487288	0.99951	exp
4	.002737851	.000487288	0.99951	exp
5	.002737851	.000487288	0.99951	exp
6	.002737851	.000487288	0.99951	exp
7	.002737851	.000487288	0.99951	exp
8	.002737851	.000487288	0.99951	exp
9	.005475702	.000974575	0.99903	exp
10	.005475702	.000974575	0.99903	exp

The LIFEREG Procedure

Model Information	
Data Set	SURVIVAL.WHAS500
Dependent Variable	Log(time_yrs)
Censoring Variable	fstat
Censoring Value(s)	0
Number of Observations	500
Noncensored Values	215
Right Censored Values	285
Left Censored Values	0
Interval Censored Values	0
Number of Parameters	2
Name of Distribution	Weibull
Log Likelihood	-742.0737561

Number of Observations Read	500
Number of Observations Used	500

Fit Statistics	
-2 Log Likelihood	1484.148
AIC (smaller is better)	1488.148
AICC (smaller is better)	1488.172
BIC (smaller is better)	1496.577

Fit Statistics (Unlogged Response)	
-2 Log Likelihood	967.650
Weibull AIC (smaller is better)	971.650
Weibull AICC (smaller is better)	971.674
Weibull BIC (smaller is better)	980.079

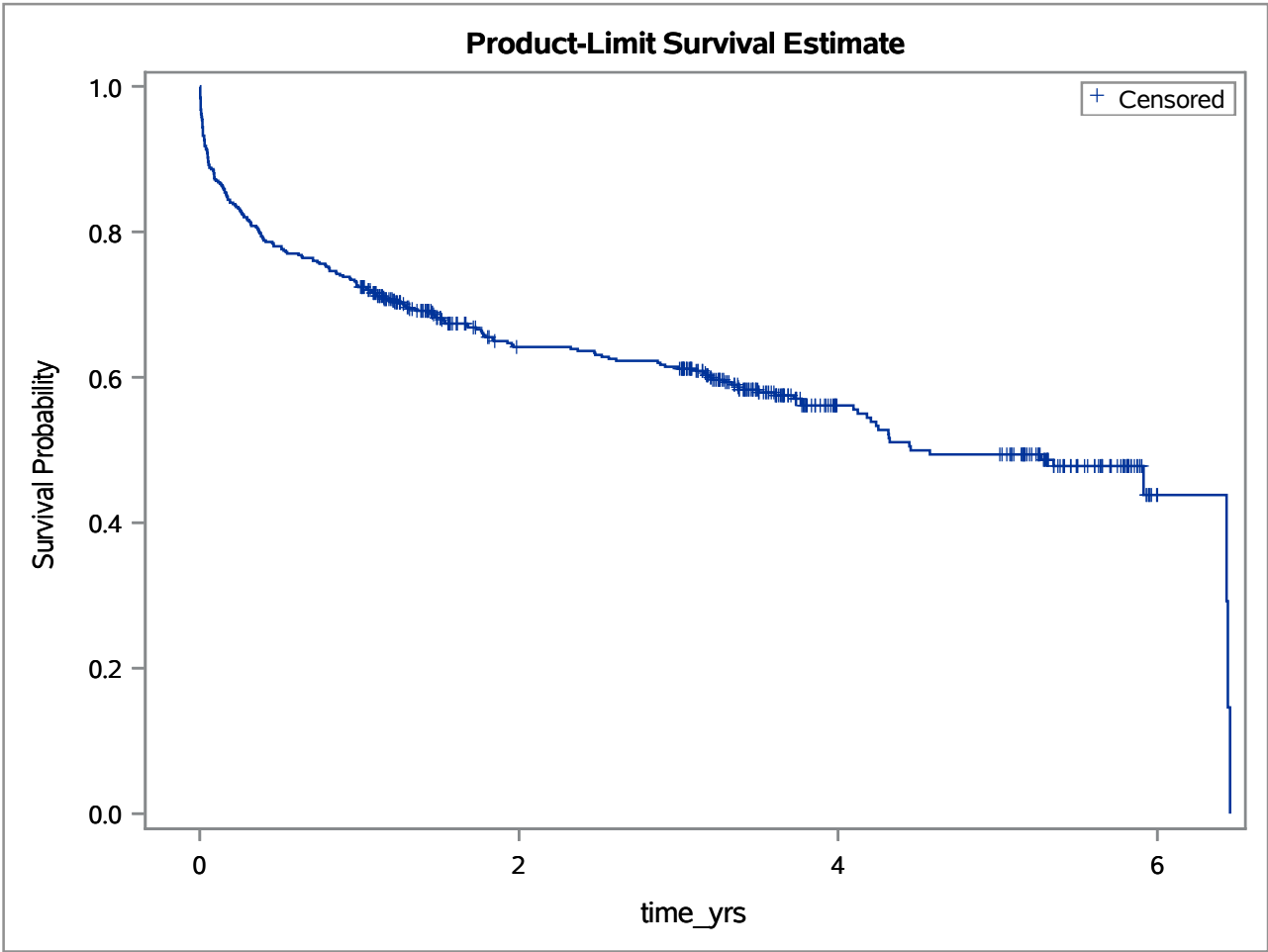
Algorithm converged.

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates							
Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.4217	0.1729	2.0827	2.7606	196.14	<.0001
Scale	1	2.1468	0.1338	1.9000	2.4258		
Weibull Scale	1	11.2645	1.9478	8.0265	15.8087		
Weibull Shape	1	0.4658	0.0290	0.4122	0.5263		

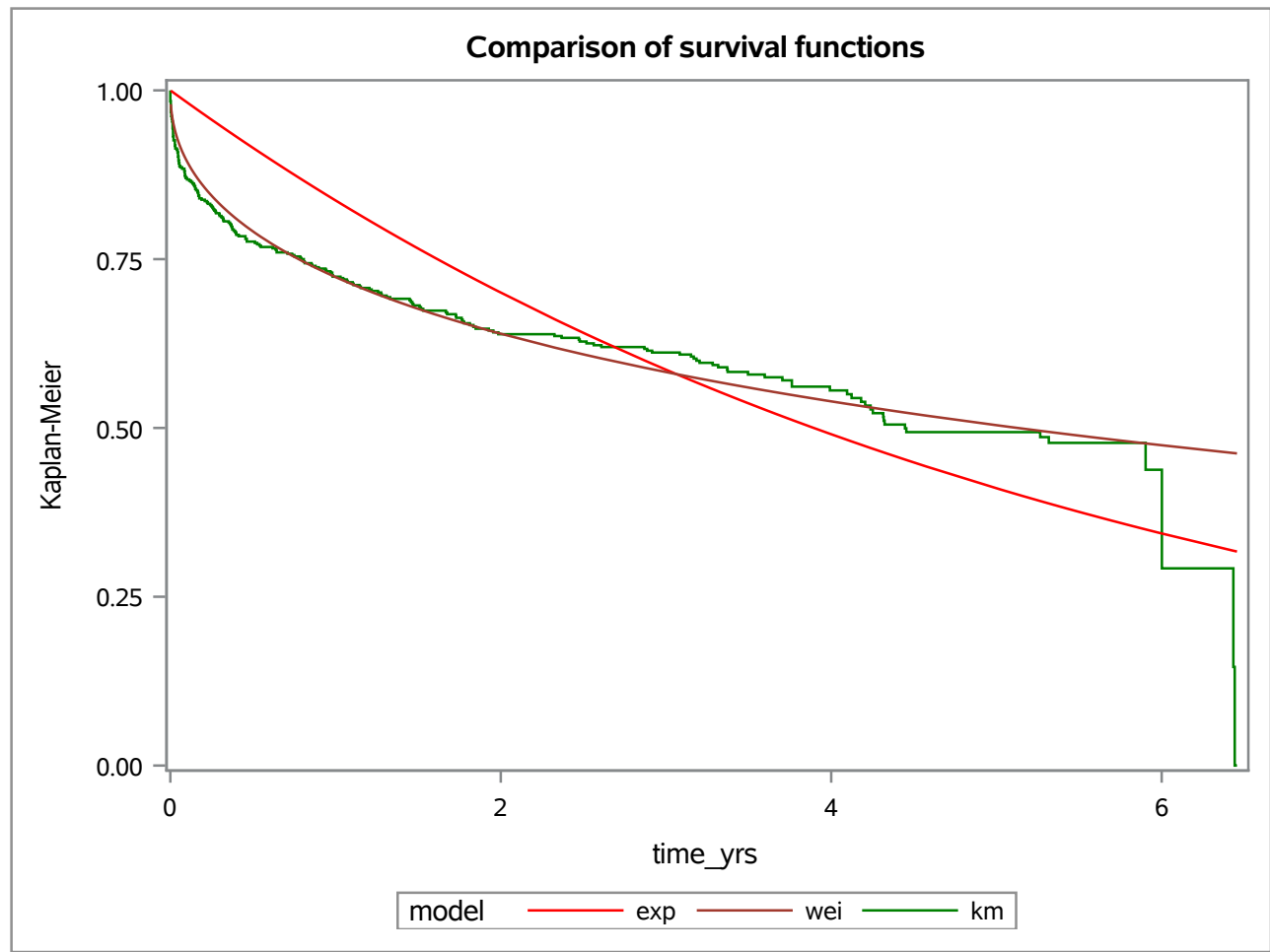
Obs	time_yrs	LAMBDA_weib	S_weib	model
1	.002737851	0.020723	0.97949	weib
2	.002737851	0.020723	0.97949	weib
3	.002737851	0.020723	0.97949	weib
4	.002737851	0.020723	0.97949	weib
5	.002737851	0.020723	0.97949	weib
6	.002737851	0.020723	0.97949	weib
7	.002737851	0.020723	0.97949	weib
8	.002737851	0.020723	0.97949	weib
9	.005475702	0.028620	0.97179	weib
10	.005475702	0.028620	0.97179	weib

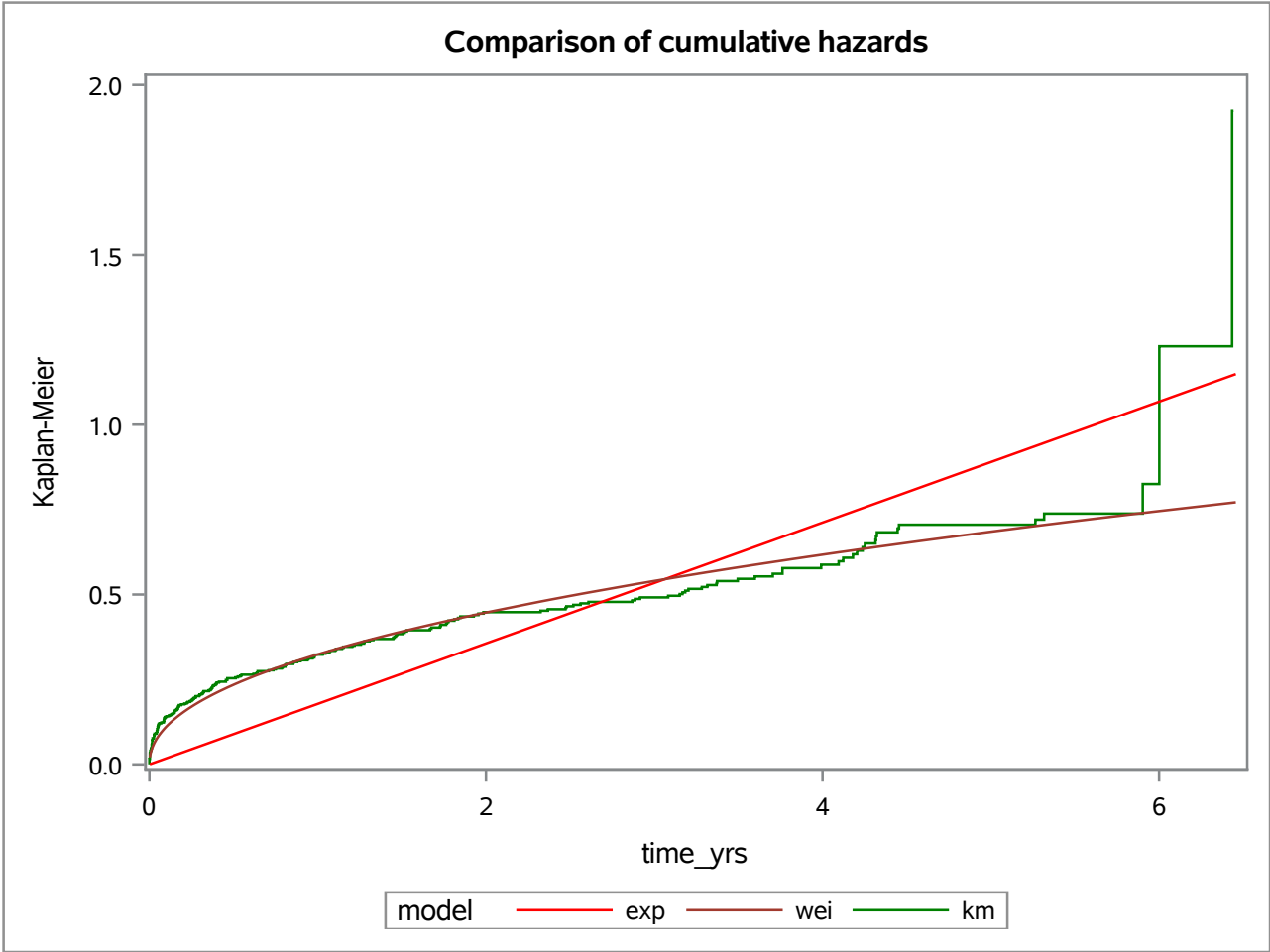
The LIFETEST Procedure



Summary of the Number of Censored and Uncensored Values			
Total	Failed	Censored	Percent Censored
500	215	285	57.00

Obs	time_yrs	S_km	LAMBDA_km	model
1	0.000000	1.000	0.000000	km
2	0.002738	0.984	0.016129	km
3	0.005476	0.968	0.032523	km
4	0.008214	0.962	0.038741	km
5	0.010951	0.958	0.042908	km
6	0.013689	0.954	0.047092	km
7	0.016427	0.944	0.057629	km
8	0.019165	0.932	0.070422	km
9	0.027379	0.926	0.076881	km
10	0.030116	0.918	0.085558	km





Weibull model with covariates and interaction**The LIFEREG Procedure**

Model Information	
Data Set	WORK.CENTER
Dependent Variable	Log(time_yrs)
Censoring Variable	fstat
Censoring Value(s)	0
Number of Observations	500
Noncensored Values	215
Right Censored Values	285
Left Censored Values	0
Interval Censored Values	0
Number of Parameters	6
Name of Distribution	Weibull
Log Likelihood	-665.3290906

Number of Observations Read	500
Number of Observations Used	500

Fit Statistics	
-2 Log Likelihood	1330.658
AIC (smaller is better)	1342.658
AICC (smaller is better)	1342.829
BIC (smaller is better)	1367.946

Fit Statistics (Unlogged Response)	
-2 Log Likelihood	814.161
Weibull AIC (smaller is better)	826.161
Weibull AICC (smaller is better)	826.331
Weibull BIC (smaller is better)	851.448

Algorithm converged.

Weibull model with covariates and interaction

The LIFEREG Procedure

Type III Analysis of Effects			
Effect	DF	Wald Chi-Square	Pr > ChiSq
gender	1	3.3125	0.0688
age_c	1	66.8083	<.0001
bmi_c	1	7.1977	0.0073
gender*age_c	1	9.9443	0.0016

Analysis of Maximum Likelihood Parameter Estimates							
Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	3.1065	0.2696	2.5780	3.6349	132.73	<.0001
gender	1	-0.6523	0.3584	-1.3548	0.0502	3.31	0.0688
age_c	1	-0.1437	0.0176	-0.1782	-0.1093	66.81	<.0001
bmi_c	1	0.0805	0.0300	0.0217	0.1393	7.20	0.0073
gender*age_c	1	0.0766	0.0243	0.0290	0.1242	9.94	0.0016
Scale	1	1.9661	0.1177	1.7485	2.2108		
Weibull Shape	1	0.5086	0.0304	0.4523	0.5719		