Product-Limit Survival Estimates							
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left		
0.000000	1.0000	0	0	0	500		
0.156057	0.9980	0.00200	0.00200	1	499		
0.172485	0.9960	0.00400	0.00282	2	498		
0.205339	0.9940	0.00600	0.00345	3	497		
0.208077	0.9920	0.00800	0.00398	4	496		
0.219028				5	495		
0.219028				6	494		
0.219028	0.9860	0.0140	0.00525	7	493		
0.224504	0.9840	0.0160	0.00561	8	492		
0.227242				9	491		
0.227242	0.9800	0.0200	0.00626	10	490		
0.229979	0.9780	0.0220	0.00656	11	489		
0.232717				12	488		
0.232717	0.9740	0.0260	0.00712	13	487		
0.235455				14	486		
0.235455				15	485		
0.235455	0.9680	0.0320	0.00787	16	484		
0.243669	0.9660	0.0340	0.00810	17	483		
0.246407				18	482		
0.246407	0.9620	0.0380	0.00855	19	481		
0.251882	0.9600	0.0400	0.00876	20	480		
0.254620	0.9580	0.0420	0.00897	21	479		
0.257358				22	478		
0.257358	0.9540	0.0460	0.00937	23	477		
0.262834				24	476		
0.262834				25	475		
0.262834				26	474		
0.262834				27	473		
0.262834	0.9440	0.0560	0.0103	28	472		
0.265572	0.9420	0.0580	0.0105	29	471		
0.268309	0.9400	0.0600	0.0106	30	470		
0.271047				31	469		
0.271047				32	468		
0.271047	0.9340	0.0660	0.0111	33	467		

Product-Limit Survival Estimates								
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left			
0.273785				34	466			
0.273785				35	465			
0.273785				36	464			
0.273785	0.9260	0.0740	0.0117	37	463			
0.276523				38	462			
0.276523				39	461			
0.276523	0.9200	0.0800	0.0121	40	460			
0.279261				41	459			
0.279261	0.9160	0.0840	0.0124	42	458			
0.281999				43	457			
0.281999				44	456			
0.281999	0.9100	0.0900	0.0128	45	455			
0.284736				46	454			
0.284736				47	453			
0.284736				48	452			
0.284736	0.9020	0.0980	0.0133	49	451			
0.287474				50	450			
0.287474				51	449			
0.287474				52	448			
0.287474	0.8940	0.1060	0.0138	53	447			
0.290212				54	446			
0.290212	0.8900	0.1100	0.0140	55	445			
0.292950			-	56	444			
0.292950	0.8860	0.1140	0.0142	57	443			
0.295688	0.8840	0.1160	0.0143	58	442			
0.301164				59	441			
0.301164				60	440			
0.301164				61	439			
0.301164				62	438			
0.301164				63	437			
0.301164				64	436			
0.301164				65	435			
0.301164				66	434			
0.301164				67	433			

Product-Limit Survival Estimates								
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left			
0.301164	0.8640	0.1360	0.0153	68	432			
0.303901				69	431			
0.303901				70	430			
0.303901				71	429			
0.303901				72	428			
0.303901	0.8540	0.1460	0.0158	73	427			
0.306639				74	426			
0.306639				75	425			
0.306639				76	424			
0.306639				77	423			
0.306639	0.8440	0.1560	0.0162	78	422			
0.309377				79	421			
0.309377	0.8400	0.1600	0.0164	80	420			
0.312115				81	419			
0.312115				82	418			
0.312115	0.8340	0.1660	0.0166	83	417			
0.314853				84	416			
0.314853				85	415			
0.314853				86	414			
0.314853	0.8260	0.1740	0.0170	87	413			
0.317591				88	412			
0.317591				89	411			
0.317591	0.8200	0.1800	0.0172	90	410			
0.320329				91	409			
0.320329				92	408			
0.320329				93	407			
0.320329				94	406			
0.320329	0.8100	0.1900	0.0175	95	405			
0.323066				96	404			
0.323066				97	403			
0.323066				98	402			
0.323066				99	401			
0.323066				100	400			
0.323066				101	399			

Product-Limit Survival Estimates							
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left		
0.323066				102	398		
0.323066				103	397		
0.323066	0.7920	0.2080	0.0182	104	396		
0.325804				105	395		
0.325804	0.7880	0.2120	0.0183	106	394		
0.328542				107	393		
0.328542				108	392		
0.328542				109	391		
0.328542				110	390		
0.328542				111	389		
0.328542				112	388		
0.328542				113	387		
0.328542				114	386		
0.328542	0.7700	0.2300	0.0188	115	385		
0.331280				116	384		
0.331280				117	383		
0.331280				118	382		
0.331280				119	381		
0.331280	0.7600	0.2400	0.0191	120	380		
0.334018				121	379		
0.334018				122	378		
0.334018				123	377		
0.334018	0.7520	0.2480	0.0193	124	376		
0.336756				125	375		
0.336756				126	374		
0.336756	0.7460	0.2540	0.0195	127	373		
0.339493				128	372		
0.339493	<u> </u>			129	371		
0.339493				130	370		
0.339493	<u> </u>			131	369		
0.339493				132	368		
0.339493	0.7340	0.2660	0.0198	133	367		
0.342231				134	366		
0.342231				135	365		

Product-Limit Survival Estimates								
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left			
0.342231				136	364			
0.342231				137	363			
0.342231				138	362			
0.342231				139	361			
0.342231				140	360			
0.342231	0.7180	0.2820	0.0201	141	359			
0.344969				142	358			
0.344969	0.7140	0.2860	0.0202	143	357			
0.347707				144	356			
0.347707				145	355			
0.347707				146	354			
0.347707				147	353			
0.347707				148	352			
0.347707				149	351			
0.347707				150	350			
0.347707				151	349			
0.347707	0.6960	0.3040	0.0206	152	348			
0.350445				153	347			
0.350445				154	346			
0.350445				155	345			
0.350445				156	344			
0.350445				157	343			
0.350445				158	342			
0.350445				159	341			
0.350445	0.6800	0.3200	0.0209	160	340			
0.353183				161	339			
0.353183				162	338			
0.353183				163	337			
0.353183	0.6720	0.3280	0.0210	164	336			
0.355921				165	335			
0.355921				166	334			
0.355921				167	333			
0.355921				168	332			
0.355921				169	331			

	Product-Limit Survival Estimates							
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left			
0.355921				170	330			
0.355921				171	329			
0.355921				172	328			
0.355921				173	327			
0.355921				174	326			
0.355921				175	325			
0.355921				176	324			
0.355921				177	323			
0.355921				178	322			
0.355921				179	321			
0.355921				180	320			
0.355921				181	319			
0.355921	0.6360	0.3640	0.0215	182	318			
0.358658				183	317			
0.358658				184	316			
0.358658	0.6300	0.3700	0.0216	185	315			
0.361396				186	314			
0.361396				187	313			
0.361396				188	312			
0.361396				189	311			
0.361396				190	310			
0.361396				191	309			
0.361396	0.6160	0.3840	0.0218	192	308			
0.364134				193	307			
0.364134	·			194	306			
0.364134	·			195	305			
0.364134	0.6080	0.3920	0.0218	196	304			
0.366872				197	303			
0.366872	·			198	302			
0.366872				199	301			
0.366872	·			200	300			
0.366872				201	299			
0.366872	0.5960	0.4040	0.0219	202	298			
0.369610				203	297			

Product-Limit Survival Estimates								
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left			
0.369610				204	296			
0.369610				205	295			
0.369610				206	294			
0.369610				207	293			
0.369610	0.5840	0.4160	0.0220	208	292			
0.372348				209	291			
0.372348				210	290			
0.372348				211	289			
0.372348				212	288			
0.372348				213	287			
0.372348				214	286			
0.372348				215	285			
0.372348	0.5680	0.4320	0.0222	216	284			
0.375086				217	283			
0.375086				218	282			
0.375086				219	281			
0.375086	0.5600	0.4400	0.0222	220	280			
0.377823				221	279			
0.377823				222	278			
0.377823				223	277			
0.377823	0.5520	0.4480	0.0222	224	276			
0.380561				225	275			
0.380561			·	226	274			
0.380561				227	273			
0.380561				228	272			
0.380561				229	271			
0.380561	0.5400	0.4600	0.0223	230	270			
0.383299				231	269			
0.383299				232	268			
0.383299				233	267			
0.383299				234	266			
0.383299				235	265			
0.383299				236	264			
0.383299				237	263			

Product-Limit Survival Estimates							
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left		
0.383299				238	262		
0.383299				239	261		
0.383299				240	260		
0.383299			-	241	259		
0.383299				242	258		
0.383299				243	257		
0.383299				244	256		
0.383299				245	255		
0.383299				246	254		
0.383299	0.5060	0.4940	0.0224	247	253		
0.386037				248	252		
0.386037				249	251		
0.386037	0.5000	0.5000	0.0224	250	250		
0.388775				251	249		
0.388775				252	248		
0.388775				253	247		
0.388775				254	246		
0.388775				255	245		
0.388775	0.4880	0.5120	0.0224	256	244		
0.391513				257	243		
0.391513				258	242		
0.391513				259	241		
0.391513	0.4800	0.5200	0.0223	260	240		
0.394251				261	239		
0.394251				262	238		
0.394251				263	237		
0.394251				264	236		
0.394251	0.4700	0.5300	0.0223	265	235		
0.396988				266	234		
0.396988				267	233		
0.396988				268	232		
0.396988				269	231		
0.396988	0.4600	0.5400	0.0223	270	230		
0.399726				271	229		

Product-Limit Survival Estimates								
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left			
0.399726				272	228			
0.399726				273	227			
0.399726				274	226			
0.399726				275	225			
0.399726				276	224			
0.399726	0.4460	0.5540	0.0222	277	223			
0.402464				278	222			
0.402464				279	221			
0.402464				280	220			
0.402464				281	219			
0.402464	0.4360	0.5640	0.0222	282	218			
0.405202				283	217			
0.405202				284	216			
0.405202				285	215			
0.405202				286	214			
0.405202				287	213			
0.405202				288	212			
0.405202				289	211			
0.405202				290	210			
0.405202	0.4180	0.5820	0.0221	291	209			
0.407940				292	208			
0.407940				293	207			
0.407940				294	206			
0.407940				295	205			
0.407940				296	204			
0.407940	0.4060	0.5940	0.0220	297	203			
0.410678				298	202			
0.410678				299	201			
0.410678				300	200			
0.410678				301	199			
0.410678				302	198			
0.410678				303	197			
0.410678				304	196			
0.410678				305	195			

Product-Limit Survival Estimates							
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left		
0.410678				306	194		
0.410678				307	193		
0.410678	0.3840	0.6160	0.0218	308	192		
0.413415			-	309	191		
0.413415			-	310	190		
0.413415	0.3780	0.6220	0.0217	311	189		
0.416153				312	188		
0.416153				313	187		
0.416153				314	186		
0.416153	0.3700	0.6300	0.0216	315	185		
0.418891				316	184		
0.418891				317	183		
0.418891				318	182		
0.418891	0.3620	0.6380	0.0215	319	181		
0.421629				320	180		
0.421629	0.3580	0.6420	0.0214	321	179		
0.424367				322	178		
0.424367				323	177		
0.424367	0.3520	0.6480	0.0214	324	176		
0.427105				325	175		
0.427105				326	174		
0.427105				327	173		
0.427105				328	172		
0.427105				329	171		
0.427105				330	170		
0.427105	<u>.</u>			331	169		
0.427105	<u>.</u>			332	168		
0.427105	<u>.</u>			333	167		
0.427105	0.3320	0.6680	0.0211	334	166		
0.432580				335	165		
0.432580				336	164		
0.432580				337	163		
0.432580				338	162		
0.432580				339	161		

Product-Limit Survival Estimates								
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left			
0.432580	0.3200	0.6800	0.0209	340	160			
0.435318				341	159			
0.435318				342	158			
0.435318				343	157			
0.435318	0.3120	0.6880	0.0207	344	156			
0.438056				345	155			
0.438056				346	154			
0.438056				347	153			
0.438056				348	152			
0.438056				349	151			
0.438056				350	150			
0.438056				351	149			
0.438056				352	148			
0.438056				353	147			
0.438056				354	146			
0.438056				355	145			
0.438056				356	144			
0.438056				357	143			
0.438056				358	142			
0.438056	0.2820	0.7180	0.0201	359	141			
0.440794				360	140			
0.440794				361	139			
0.440794				362	138			
0.440794	0.2740	0.7260	0.0199	363	137			
0.443532				364	136			
0.443532				365	135			
0.443532				366	134			
0.443532	0.2660	0.7340	0.0198	367	133			
0.446270				368	132			
0.446270	0.2620	0.7380	0.0197	369	131			
0.449008				370	130			
0.449008				371	129			
0.449008				372	128			
0.449008				373	127			

Product-Limit Survival Estimates								
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left			
0.449008				374	126			
0.449008				375	125			
0.449008				376	124			
0.449008	0.2460	0.7540	0.0193	377	123			
0.451745				378	122			
0.451745				379	121			
0.451745	0.2400	0.7600	0.0191	380	120			
0.454483				381	119			
0.454483				382	118			
0.454483				383	117			
0.454483				384	116			
0.454483				385	115			
0.454483				386	114			
0.454483	0.2260	0.7740	0.0187	387	113			
0.457221	0.2240	0.7760	0.0186	388	112			
0.459959				389	111			
0.459959				390	110			
0.459959				391	109			
0.459959				392	108			
0.459959	0.2140	0.7860	0.0183	393	107			
0.462697				394	106			
0.462697				395	105			
0.462697				396	104			
0.462697				397	103			
0.462697	0.2040	0.7960	0.0180	398	102			
0.465435				399	101			
0.465435				400	100			
0.465435				401	99			
0.465435				402	98			
0.465435				403	97			
0.465435				404	96			
0.465435				405	95			
0.465435	0.1880	0.8120	0.0175	406	94			
0.468172	0.1860	0.8140	0.0174	407	93			

Product-Limit Survival Estimates					
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left
0.470910				408	92
0.470910				409	91
0.470910	0.1800	0.8200	0.0172	410	90
0.473648				411	89
0.473648	0.1760	0.8240	0.0170	412	88
0.476386				413	87
0.476386				414	86
0.476386				415	85
0.476386				416	84
0.476386	0.1660	0.8340	0.0166	417	83
0.479124				418	82
0.479124				419	81
0.479124				420	80
0.479124	0.1580	0.8420	0.0163	421	79
0.481862				422	78
0.481862	0.1540	0.8460	0.0161	423	77
0.484600				424	76
0.484600	0.1500	0.8500	0.0160	425	75
0.487337				426	74
0.487337	0.1460	0.8540	0.0158	427	73
0.490075				428	72
0.490075				429	71
0.490075	0.1400	0.8600	0.0155	430	70
0.492813				431	69
0.492813				432	68
0.492813				433	67
0.492813				434	66
0.492813	0.1300	0.8700	0.0150	435	65
0.498289				436	64
0.498289				437	63
0.498289	0.1240	0.8760	0.0147	438	62
0.503765				439	61
0.503765	0.1200	0.8800	0.0145	440	60
0.509240	0.1180	0.8820	0.0144	441	59

Product-Limit Survival Estimates					
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left
0.514716	0.1160	0.8840	0.0143	442	58
0.517454				443	57
0.517454	0.1120	0.8880	0.0141	444	56
0.520192			-	445	55
0.520192			-	446	54
0.520192			-	447	53
0.520192	0.1040	0.8960	0.0137	448	52
0.522930	0.1020	0.8980	0.0135	449	51
0.525667				450	50
0.525667				451	49
0.525667	0.0960	0.9040	0.0132	452	48
0.528405	0.0940	0.9060	0.0131	453	47
0.531143	0.0920	0.9080	0.0129	454	46
0.536619				455	45
0.536619	0.0880	0.9120	0.0127	456	44
0.539357				457	43
0.539357	0.0840	0.9160	0.0124	458	42
0.542094				459	41
0.542094				460	40
0.542094				461	39
0.542094				462	38
0.542094	0.0740	0.9260	0.0117	463	37
0.547570				464	36
0.547570				465	35
0.547570				466	34
0.547570				467	33
0.547570				468	32
0.547570				469	31
0.547570				470	30
0.547570	0.0580	0.9420	0.0105	471	29
0.550308	0.0560	0.9440	0.0103	472	28
0.553046				473	27
0.553046				474	26
0.553046	0.0500	0.9500	0.00975	475	25

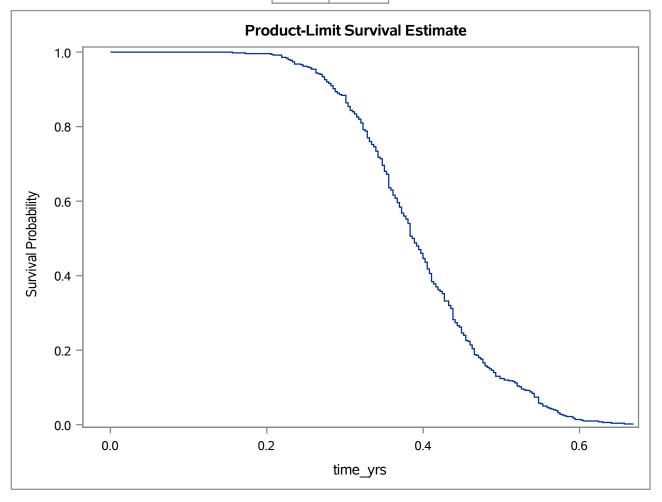
Product-Limit Survival Estimates					
time_yrs	Survival	Failure	Survival Standard Error	Number Failed	Number Left
0.558522				476	24
0.558522	0.0460	0.9540	0.00937	477	23
0.561259	0.0440	0.9560	0.00917	478	22
0.563997	0.0420	0.9580	0.00897	479	21
0.566735	0.0400	0.9600	0.00876	480	20
0.569473	0.0380	0.9620	0.00855	481	19
0.572211				482	18
0.572211				483	17
0.572211	0.0320	0.9680	0.00787	484	16
0.574949				485	15
0.574949	0.0280	0.9720	0.00738	486	14
0.577687	0.0260	0.9740	0.00712	487	13
0.580424	0.0240	0.9760	0.00684	488	12
0.583162	0.0220	0.9780	0.00656	489	11
0.591376				490	10
0.591376	0.0180	0.9820	0.00595	491	9
0.594114				492	8
0.594114	0.0140	0.9860	0.00525	493	7
0.602327	0.0120	0.9880	0.00487	494	6
0.605065	0.0100	0.9900	0.00445	495	5
0.624230	0.00800	0.9920	0.00398	496	4
0.629706	0.00600	0.9940	0.00345	497	3
0.640657	0.00400	0.9960	0.00282	498	2
0.657084	0.00200	0.9980	0.00200	499	1
0.668036	0	1.0000		500	0

#### The LIFETEST Procedure

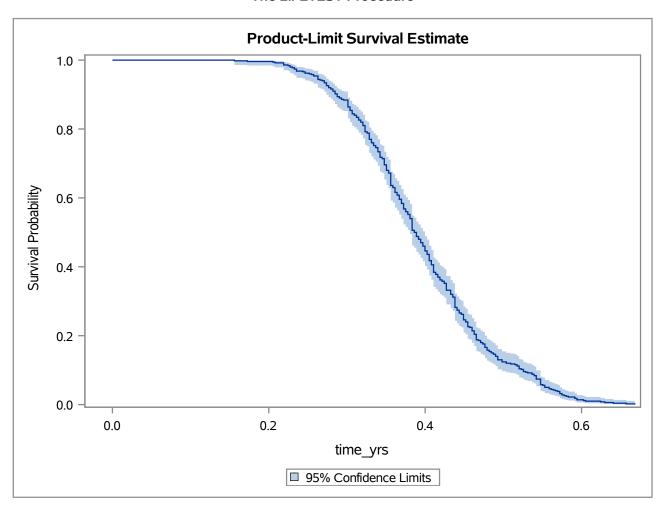
## **Summary Statistics for Time Variable time\_yrs**

Quartile Estimates					
		95% Confidence Interval			
Percent	Point Estimate	Transform	[Lower	Upper)	
75	0.449008	LOGLOG	0.438056	0.462697	
50	0.387406	LOGLOG	0.380561	0.399726	
25	0.336756	LOGLOG	0.325804	0.347707	

Mean	Standard Error
0.396178	0.003954



Summary of the Number of Censored and Uncensored Values					
Total	Total Failed Censored Percent Censored				
500	500	0	0.00		



Sumn	Summary of the Number of Censored and Uncensored Values				
Total	Total Failed Censored Percent Censored				
500	500	0	0.00		

# Saturday, September 8, 2018 07:21:01 PM **18 Comparison of survival for gender for WHAS500 data**

Summary of the Number of Censored and Uncensored Values						
Stratum	Stratum gender Total Failed Censored Censored					
1	0	125	125	0	0.00	
2	1	375	375	0	0.00	
Total		500	500	0	0.00	

# Comparison of survival for gender for WHAS500 data

#### The LIFETEST Procedure

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

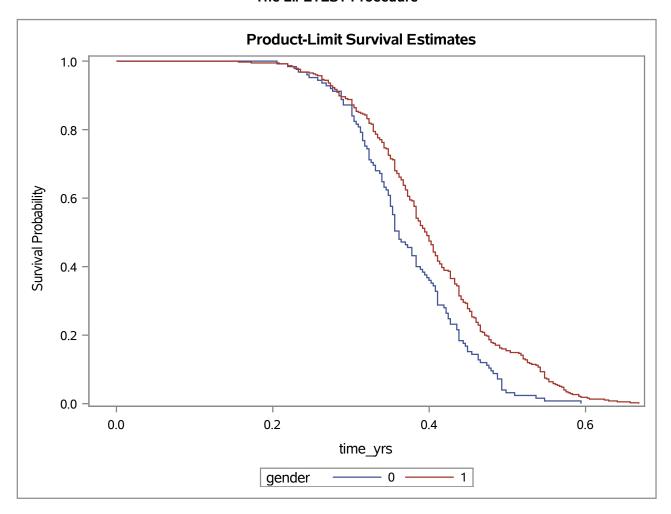
Rank Statistics					
gender Log-Rank Wilcoxon					
0	33.042	9186.0			
1	-33.042	-9186.0			

Covariance Matrix for the Log-Rank Statistics				
gender	ler 0 1			
0	71.3652	-71.3652		
1	-71.3652	71.3652		

Covariance Matrix for the Wilcoxon Statistics				
gender	0	1		
0	7262383	-7262383		
1	-7262383	7262383		

Test of Equality over Strata					
Test	t Chi-Square DF Chi-Square				
Log-Rank	15.2987	1	<.0001		
Wilcoxon	11.6191	1	0.0007		
-2Log(LR)	0.5691	1	0.4506		

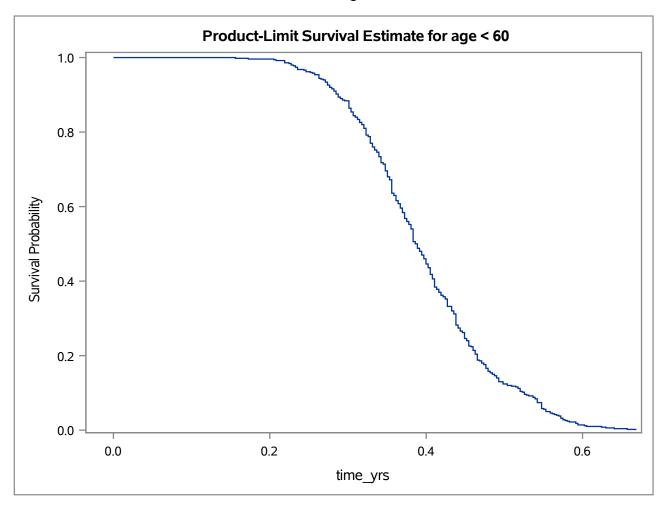
# Comparison of survival for gender for WHAS500 data



# Comparison of survival for age groups for WHAS500 data

#### The LIFETEST Procedure

Stratum 1: age < 60



Summary of the Number of Censored and Uncensored Values					
Stratum	age	Total	Failed	Censored	Percent Censored
1	<60	500	500	0	0.00