

Untitled

```
#install.packages("survival")
#install.packages("coin")
library(coin)
```

```
## Warning: package 'coin' was built under R version 3.4.3
## Loading required package: survival
## Warning: package 'survival' was built under R version 3.4.3
```

```
data(glioma)
summary(glioma)
```

```
##      no.      age      sex      histology      group
## Min.   : 1.000   Min.   :19.00   Female:16   GBM    :20   Control:18
## 1st Qu.: 5.000   1st Qu.:40.00   Male  :21   Grade3:17   RIT     :19
## Median :10.000   Median :47.00
## Mean   : 9.757   Mean   :48.49
## 3rd Qu.:14.000   3rd Qu.:57.00
## Max.   :19.000   Max.   :83.00
##      event      time
## Mode :logical   Min.   : 5.00
## FALSE:14        1st Qu.:13.00
## TRUE :23        Median :28.00
##                Mean   :30.84
##                3rd Qu.:50.00
##                Max.   :69.00
```

```
str(glioma)
```

```
## 'data.frame': 37 obs. of 7 variables:
## $ no. : int 1 2 3 4 5 6 7 8 9 10 ...
## $ age : int 41 45 48 54 40 31 53 49 36 52 ...
## $ sex : Factor w/ 2 levels "Female","Male": 1 1 2 2 1 2 2 2 2 2 ...
## $ histology: Factor w/ 2 levels "GBM","Grade3": 2 2 2 2 2 2 2 2 2 2 ...
## $ group : Factor w/ 2 levels "Control","RIT": 2 2 2 2 2 2 2 2 2 2 ...
## $ event : logi TRUE FALSE FALSE FALSE FALSE TRUE ...
## $ time : int 53 28 69 58 54 25 51 61 57 57 ...
```

```
survo<-Surv(time=glioma$time,event=glioma$event)
summary(survo)
```

```
##      time      status
## Min.   : 5.00   Min.   :0.0000
## 1st Qu.:13.00   1st Qu.:0.0000
## Median :28.00   Median :1.0000
## Mean   :30.84   Mean   :0.6216
## 3rd Qu.:50.00   3rd Qu.:1.0000
## Max.   :69.00   Max.   :1.0000
```

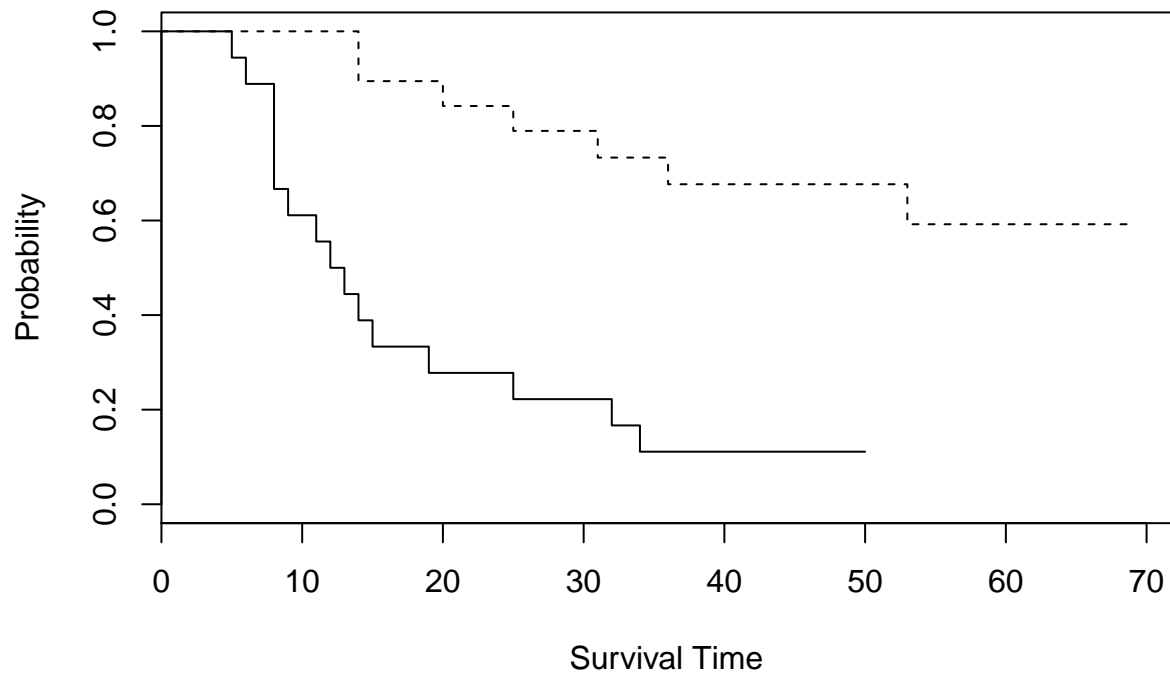
```
survf<-survfit(formula=survo~glioma$group,data=glioma)
summary(survfit)
```

```
## Call: survfit(formula = survo ~ glioma$group, data = glioma)
```

```
##
##           glioma$group=Control
##  time n.risk n.event survival std.err lower 95% CI upper 95% CI
##    5     18      1   0.944  0.0540   0.8443    1.000
##    6     17      1   0.889  0.0741   0.7549    1.000
##    8     16      4   0.667  0.1111   0.4809    0.924
##    9     12      1   0.611  0.1149   0.4227    0.883
##   11     11      1   0.556  0.1171   0.3675    0.840
##   12     10      1   0.500  0.1179   0.3150    0.794
##   13      9      1   0.444  0.1171   0.2652    0.745
##   14      8      1   0.389  0.1149   0.2179    0.694
##   15      7      1   0.333  0.1111   0.1734    0.641
##   19      6      1   0.278  0.1056   0.1319    0.585
##   25      5      1   0.222  0.0980   0.0936    0.527
##   32      4      1   0.167  0.0878   0.0593    0.468
##   34      3      1   0.111  0.0741   0.0301    0.410
##
##           glioma$group=RIT
##  time n.risk n.event survival std.err lower 95% CI upper 95% CI
##   14     19      2   0.895  0.0704   0.767    1.000
##   20     17      1   0.842  0.0837   0.693    1.000
##   25     16      1   0.789  0.0935   0.626    0.996
##   31     14      1   0.733  0.1024   0.557    0.964
##   36     13      1   0.677  0.1090   0.494    0.928
##   53      8      1   0.592  0.1239   0.393    0.892
```

```
plot(survfit, lty=1:2, main="Glioma", ylab="Probability", xlab="Survival Time")
```

Glioma

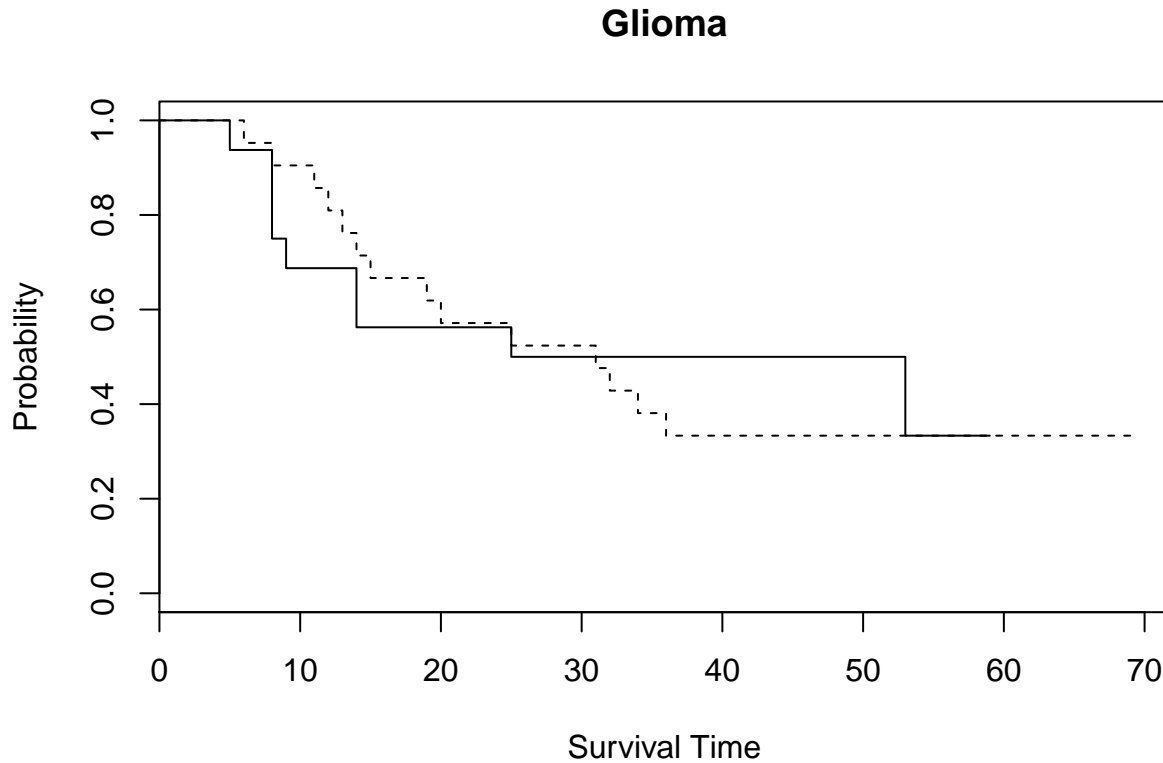


```
surv_sex<-survfit(formula=survo~glioma$sex,data=glioma)
summary(surv_sex)
```

```
## Call: survfit(formula = survo ~ glioma$sex, data = glioma)
##
##               glioma$sex=Female
##   time  n.risk  n.event  survival  std.err  lower 95% CI  upper 95% CI
##      5      16        1    0.938   0.0605    0.826    1.000
##      8      15        3    0.750   0.1083    0.565    0.995
##      9      12        1    0.688   0.1159    0.494    0.957
##     14      11        2    0.562   0.1240    0.365    0.867
##     25       9        1    0.500   0.1250    0.306    0.816
##     53       3        1    0.333   0.1596    0.130    0.852
##
##               glioma$sex=Male
##   time  n.risk  n.event  survival  std.err  lower 95% CI  upper 95% CI
##      6      21        1    0.952   0.0465    0.866    1.000
##      8      20        1    0.905   0.0641    0.788    1.000
##     11      19        1    0.857   0.0764    0.720    1.000
##     12      18        1    0.810   0.0857    0.658    0.996
##     13      17        1    0.762   0.0929    0.600    0.968
##     14      16        1    0.714   0.0986    0.545    0.936
##     15      15        1    0.667   0.1029    0.493    0.902
##     19      14        1    0.619   0.1060    0.443    0.866
##     20      13        1    0.571   0.1080    0.395    0.828
##     25      12        1    0.524   0.1090    0.348    0.788
```

```
##      31      11      1    0.476 0.1090      0.304      0.746
##      32      10      1    0.429 0.1080      0.262      0.702
##      34       9      1    0.381 0.1060      0.221      0.657
##      36       8      1    0.333 0.1029      0.182      0.610
```

```
plot(surv_sex,lty=1:2,main="Glioma",ylab="Probability",xlab="Survival Time")
```



```
surv_hist<-survfit(survo~glioma$histology,data=glioma)
summary(surv_hist)
```

```
## Call: survfit(formula = survo ~ glioma$histology, data = glioma)
```

```
##
```

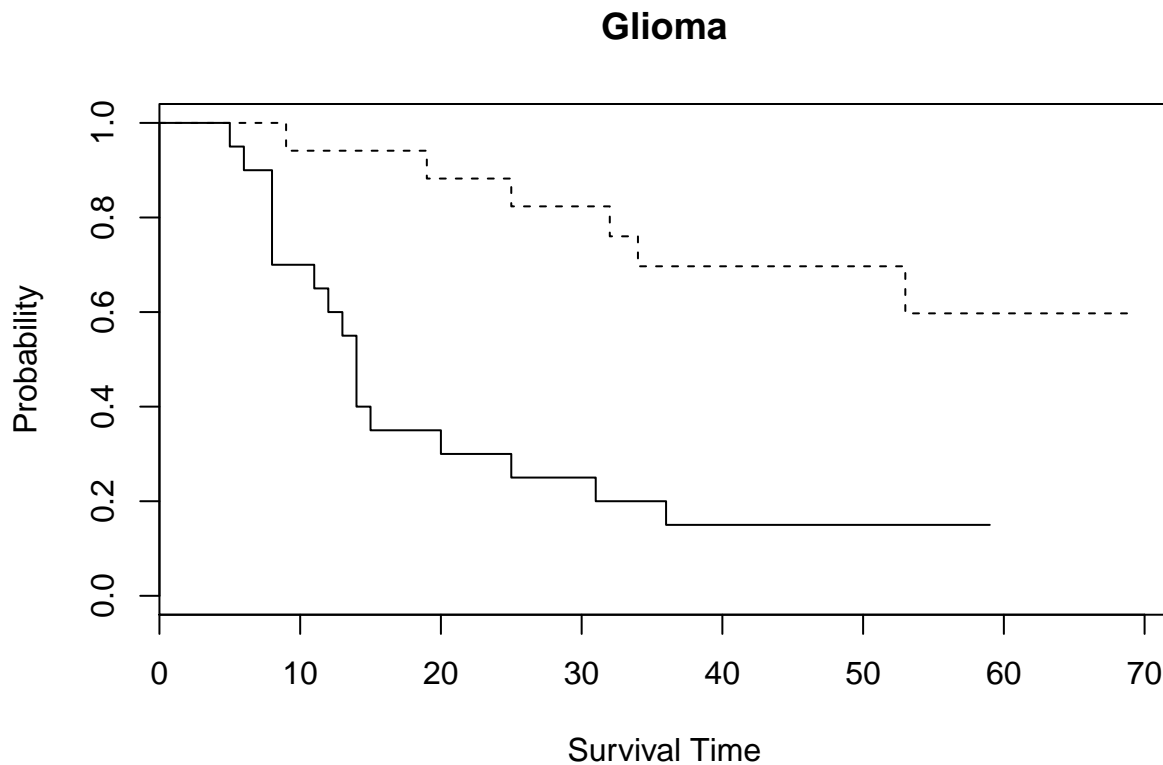
```
##      glioma$histology=GBM
```

##	time	n.risk	n.event	survival	std.err	lower	95% CI	upper	95% CI
##	5	20	1	0.95	0.0487	0.8591	1.000		
##	6	19	1	0.90	0.0671	0.7777	1.000		
##	8	18	4	0.70	0.1025	0.5254	0.933		
##	11	14	1	0.65	0.1067	0.4712	0.897		
##	12	13	1	0.60	0.1095	0.4195	0.858		
##	13	12	1	0.55	0.1112	0.3700	0.818		
##	14	11	3	0.40	0.1095	0.2339	0.684		
##	15	8	1	0.35	0.1067	0.1926	0.636		
##	20	7	1	0.30	0.1025	0.1536	0.586		
##	25	6	1	0.25	0.0968	0.1170	0.534		
##	31	5	1	0.20	0.0894	0.0832	0.481		
##	36	4	1	0.15	0.0798	0.0528	0.426		

```
##
```

```
##           glioma$histology=Grade3
## time n.risk n.event survival std.err lower 95% CI upper 95% CI
##    9    17     1   0.941  0.0571    0.836    1.000
##   19    16     1   0.882  0.0781    0.742    1.000
##   25    15     1   0.824  0.0925    0.661    1.000
##   32    13     1   0.760  0.1048    0.580    0.996
##   34    12     1   0.697  0.1136    0.506    0.959
##   53     7     1   0.597  0.1341    0.385    0.927
```

```
plot(surv_hist,lty=1:2,main="Glioma",ylab="Probability",xlab="Survival Time")
```



```
library(TH.data)
```

```
## Warning: package 'TH.data' was built under R version 3.4.3
```

```
## Loading required package: MASS
```

```
##
```

```
## Attaching package: 'TH.data'
```

```
## The following object is masked from 'package:MASS':
```

```
##
```

```
## geyser
```

```
data(GBSG2)
```

```
summary(GBSG2)
```

```
## horTh      age      menostat      tsize      tgrade
## no :440   Min.   :21.00   Pre :290   Min.    : 3.00   I  : 81
```

```
## yes:246    1st Qu.:46.00    Post:396    1st Qu.: 20.00    II :444
##           Median :53.00           Median : 25.00    III:161
##           Mean   :53.05           Mean   : 29.33
##           3rd Qu.:61.00           3rd Qu.: 35.00
##           Max.   :80.00           Max.   :120.00
##      pnodes      progrec      estrec      time
## Min.   : 1.00    Min.   : 0.0    Min.   : 0.00    Min.   : 8.0
## 1st Qu.: 1.00    1st Qu.: 7.0    1st Qu.: 8.00    1st Qu.: 567.8
## Median : 3.00    Median : 32.5    Median : 36.00    Median :1084.0
## Mean   : 5.01    Mean   :110.0    Mean   : 96.25    Mean   :1124.5
## 3rd Qu.: 7.00    3rd Qu.:131.8    3rd Qu.:114.00    3rd Qu.:1684.8
## Max.   :51.00    Max.   :2380.0    Max.   :1144.00    Max.   :2659.0
##      cens
## Min.   :0.0000
## 1st Qu.:0.0000
## Median :0.0000
## Mean   :0.4359
## 3rd Qu.:1.0000
## Max.   :1.0000
```

```
thf<-Surv(time=GBSG2$time,event=GBSG2$cens)
```

```
thf<-Surv(time=GBSG2$time,event=GBSG2$cens)
thf_fit<-survfit(thf~GBSG2$horTh,data=GBSG2)
summary(thf_fit)
```

```
## Call: survfit(formula = thf ~ GBSG2$horTh, data = GBSG2)
##
##           GBSG2$horTh=no
## time n.risk n.event survival std.err lower 95% CI upper 95% CI
##    72   430     1    0.998 0.00232    0.9931    1.000
##    98   429     1    0.995 0.00328    0.9889    1.000
##   113   428     1    0.993 0.00401    0.9852    1.000
##   120   427     1    0.991 0.00463    0.9817    1.000
##   160   425     1    0.988 0.00517    0.9783    0.999
##   171   424     1    0.986 0.00566    0.9750    0.997
##   173   423     1    0.984 0.00611    0.9718    0.996
##   175   422     1    0.981 0.00652    0.9687    0.994
##   181   420     1    0.979 0.00691    0.9656    0.993
##   191   419     1    0.977 0.00728    0.9625    0.991
##   195   418     1    0.974 0.00763    0.9595    0.989
##   205   416     1    0.972 0.00796    0.9565    0.988
##   223   415     1    0.970 0.00828    0.9536    0.986
##   233   414     1    0.967 0.00859    0.9507    0.984
##   241   413     1    0.965 0.00888    0.9477    0.983
##   242   412     1    0.963 0.00916    0.9449    0.981
##   247   411     1    0.960 0.00943    0.9420    0.979
##   249   410     1    0.958 0.00970    0.9391    0.977
##   251   409     1    0.956 0.00995    0.9363    0.975
##   272   408     1    0.953 0.01020    0.9335    0.973
##   281   405     2    0.949 0.01068    0.9279    0.970
##   285   403     2    0.944 0.01113    0.9223    0.966
##   288   401     1    0.942 0.01135    0.9195    0.964
##   293   400     1    0.939 0.01156    0.9168    0.962
##   305   399     1    0.937 0.01177    0.9140    0.960
```

##	307	398	1	0.934	0.01198	0.9113	0.958
##	308	397	1	0.932	0.01217	0.9085	0.956
##	316	395	1	0.930	0.01237	0.9058	0.954
##	329	393	1	0.927	0.01256	0.9031	0.952
##	336	392	1	0.925	0.01275	0.9004	0.950
##	338	391	3	0.918	0.01330	0.8922	0.944
##	343	388	1	0.916	0.01347	0.8895	0.942
##	344	387	1	0.913	0.01364	0.8868	0.940
##	348	386	1	0.911	0.01381	0.8841	0.938
##	350	385	1	0.908	0.01398	0.8815	0.936
##	353	384	1	0.906	0.01414	0.8788	0.934
##	358	383	1	0.904	0.01430	0.8761	0.932
##	359	382	2	0.899	0.01461	0.8708	0.928
##	360	380	1	0.897	0.01476	0.8682	0.926
##	370	379	2	0.892	0.01506	0.8629	0.922
##	371	377	1	0.890	0.01520	0.8602	0.920
##	372	376	1	0.887	0.01534	0.8576	0.918
##	375	375	1	0.885	0.01548	0.8550	0.916
##	379	374	1	0.882	0.01562	0.8523	0.914
##	385	373	1	0.880	0.01576	0.8497	0.911
##	403	372	1	0.878	0.01589	0.8471	0.909
##	415	371	1	0.875	0.01603	0.8445	0.907
##	417	370	1	0.873	0.01616	0.8419	0.905
##	420	369	2	0.868	0.01641	0.8367	0.901
##	426	366	1	0.866	0.01654	0.8340	0.899
##	436	365	1	0.863	0.01666	0.8314	0.897
##	438	364	1	0.861	0.01678	0.8288	0.895
##	446	363	1	0.859	0.01690	0.8262	0.893
##	448	362	1	0.856	0.01702	0.8236	0.890
##	449	361	1	0.854	0.01714	0.8211	0.888
##	455	360	1	0.852	0.01726	0.8185	0.886
##	456	359	1	0.849	0.01737	0.8159	0.884
##	460	358	1	0.847	0.01748	0.8133	0.882
##	465	356	1	0.845	0.01759	0.8107	0.880
##	471	355	1	0.842	0.01771	0.8081	0.878
##	476	354	2	0.837	0.01792	0.8030	0.873
##	481	352	1	0.835	0.01803	0.8004	0.871
##	486	351	1	0.833	0.01813	0.7978	0.869
##	490	349	1	0.830	0.01824	0.7952	0.867
##	491	348	2	0.825	0.01844	0.7901	0.862
##	495	346	1	0.823	0.01854	0.7875	0.860
##	503	345	1	0.821	0.01864	0.7849	0.858
##	518	344	1	0.818	0.01874	0.7824	0.856
##	525	343	1	0.816	0.01884	0.7798	0.854
##	529	341	1	0.814	0.01893	0.7772	0.851
##	530	339	1	0.811	0.01903	0.7747	0.849
##	535	338	1	0.809	0.01912	0.7721	0.847
##	536	337	1	0.806	0.01922	0.7695	0.845
##	537	336	1	0.804	0.01931	0.7670	0.843
##	544	334	1	0.802	0.01940	0.7644	0.840
##	545	333	1	0.799	0.01949	0.7618	0.838
##	547	331	1	0.797	0.01958	0.7592	0.836
##	548	330	1	0.794	0.01967	0.7566	0.834
##	550	329	2	0.789	0.01984	0.7515	0.829

##	552	327	1	0.787	0.01993	0.7489	0.827
##	554	325	1	0.785	0.02001	0.7463	0.825
##	563	324	1	0.782	0.02010	0.7438	0.823
##	571	321	1	0.780	0.02018	0.7412	0.820
##	575	320	1	0.777	0.02027	0.7386	0.818
##	578	319	1	0.775	0.02035	0.7360	0.816
##	579	318	1	0.772	0.02043	0.7334	0.814
##	586	317	1	0.770	0.02051	0.7308	0.811
##	594	316	2	0.765	0.02067	0.7257	0.807
##	595	314	1	0.763	0.02075	0.7231	0.804
##	600	312	1	0.760	0.02082	0.7205	0.802
##	612	311	1	0.758	0.02090	0.7179	0.800
##	622	309	1	0.755	0.02097	0.7153	0.798
##	624	306	2	0.750	0.02113	0.7101	0.793
##	629	303	1	0.748	0.02120	0.7075	0.791
##	637	300	1	0.745	0.02128	0.7049	0.788
##	646	298	1	0.743	0.02135	0.7023	0.786
##	650	297	1	0.740	0.02143	0.6996	0.784
##	670	291	1	0.738	0.02150	0.6969	0.781
##	679	289	1	0.735	0.02158	0.6942	0.779
##	687	288	1	0.733	0.02165	0.6916	0.776
##	707	286	1	0.730	0.02173	0.6889	0.774
##	714	285	1	0.728	0.02180	0.6862	0.772
##	727	282	1	0.725	0.02188	0.6834	0.769
##	731	281	1	0.723	0.02195	0.6807	0.767
##	732	280	1	0.720	0.02203	0.6780	0.764
##	742	274	1	0.717	0.02210	0.6753	0.762
##	745	273	1	0.715	0.02218	0.6725	0.759
##	747	272	1	0.712	0.02225	0.6697	0.757
##	748	271	1	0.709	0.02232	0.6670	0.755
##	754	270	1	0.707	0.02239	0.6642	0.752
##	762	267	1	0.704	0.02247	0.6615	0.750
##	769	264	1	0.701	0.02254	0.6587	0.747
##	772	263	1	0.699	0.02261	0.6559	0.745
##	776	261	1	0.696	0.02268	0.6531	0.742
##	790	259	1	0.693	0.02275	0.6503	0.740
##	795	257	1	0.691	0.02282	0.6474	0.737
##	797	256	1	0.688	0.02289	0.6446	0.734
##	801	254	1	0.685	0.02296	0.6418	0.732
##	805	253	1	0.683	0.02303	0.6389	0.729
##	819	252	1	0.680	0.02310	0.6361	0.727
##	838	251	1	0.677	0.02316	0.6333	0.724
##	842	249	1	0.674	0.02323	0.6305	0.722
##	855	246	1	0.672	0.02330	0.6276	0.719
##	857	245	1	0.669	0.02336	0.6247	0.716
##	859	243	1	0.666	0.02343	0.6219	0.714
##	861	241	1	0.663	0.02349	0.6190	0.711
##	865	240	1	0.661	0.02356	0.6161	0.709
##	866	239	1	0.658	0.02362	0.6133	0.706
##	867	238	1	0.655	0.02368	0.6104	0.703
##	876	236	1	0.652	0.02375	0.6075	0.701
##	883	234	1	0.650	0.02381	0.6046	0.698
##	889	233	1	0.647	0.02387	0.6017	0.695
##	891	232	1	0.644	0.02393	0.5988	0.693

##	945	225	1	0.641	0.02399	0.5959	0.690
##	956	224	1	0.638	0.02405	0.5929	0.687
##	959	223	1	0.635	0.02412	0.5899	0.685
##	960	222	1	0.633	0.02418	0.5870	0.682
##	981	216	1	0.630	0.02424	0.5839	0.679
##	982	215	1	0.627	0.02430	0.5809	0.676
##	983	214	1	0.624	0.02437	0.5778	0.673
##	991	212	1	0.621	0.02443	0.5748	0.671
##	1002	210	1	0.618	0.02449	0.5717	0.668
##	1080	207	1	0.615	0.02455	0.5686	0.665
##	1090	203	1	0.612	0.02462	0.5655	0.662
##	1093	201	1	0.609	0.02468	0.5624	0.659
##	1094	199	1	0.606	0.02475	0.5592	0.656
##	1105	195	2	0.600	0.02488	0.5528	0.650
##	1108	193	1	0.596	0.02495	0.5495	0.647
##	1157	188	1	0.593	0.02501	0.5463	0.644
##	1162	187	1	0.590	0.02508	0.5430	0.641
##	1164	186	1	0.587	0.02515	0.5397	0.638
##	1170	184	1	0.584	0.02521	0.5364	0.635
##	1174	182	1	0.581	0.02528	0.5331	0.632
##	1192	178	1	0.577	0.02534	0.5297	0.629
##	1193	176	1	0.574	0.02541	0.5263	0.626
##	1207	173	1	0.571	0.02548	0.5229	0.623
##	1218	170	1	0.567	0.02555	0.5194	0.620
##	1219	169	1	0.564	0.02562	0.5160	0.617
##	1225	167	1	0.561	0.02569	0.5125	0.613
##	1253	159	1	0.557	0.02577	0.5088	0.610
##	1279	157	1	0.554	0.02585	0.5051	0.607
##	1280	156	1	0.550	0.02592	0.5015	0.603
##	1296	155	1	0.546	0.02600	0.4978	0.600
##	1306	153	1	0.543	0.02607	0.4941	0.596
##	1329	151	1	0.539	0.02614	0.4904	0.593
##	1337	149	1	0.536	0.02622	0.4867	0.590
##	1366	139	1	0.532	0.02631	0.4827	0.586
##	1371	138	1	0.528	0.02640	0.4787	0.582
##	1387	137	1	0.524	0.02649	0.4747	0.579
##	1388	136	1	0.520	0.02657	0.4707	0.575
##	1420	134	1	0.516	0.02666	0.4667	0.571
##	1449	127	1	0.512	0.02675	0.4625	0.568
##	1460	125	1	0.508	0.02685	0.4582	0.564
##	1525	116	1	0.504	0.02698	0.4536	0.560
##	1528	114	1	0.499	0.02710	0.4490	0.555
##	1587	109	1	0.495	0.02724	0.4442	0.551
##	1589	108	1	0.490	0.02737	0.4394	0.547
##	1601	106	1	0.486	0.02750	0.4346	0.543
##	1675	94	1	0.480	0.02768	0.4291	0.538
##	1684	91	1	0.475	0.02788	0.4235	0.533
##	1701	89	1	0.470	0.02807	0.4179	0.528
##	1730	77	1	0.464	0.02836	0.4113	0.523
##	1753	72	1	0.457	0.02869	0.4044	0.517
##	1806	67	1	0.450	0.02906	0.3969	0.511
##	1814	66	2	0.437	0.02974	0.3822	0.499
##	1990	39	1	0.426	0.03102	0.3690	0.491
##	2034	36	1	0.414	0.03233	0.3550	0.482

##	2039	35	1	0.402	0.03350		0.3414		0.473
##	2093	27	1	0.387	0.03541		0.3235		0.463
##	2286	10	1	0.348	0.04862		0.2650		0.458
##	2456	3	1	0.232	0.10020		0.0997		0.541
##									
##	GBSG2\$horTh=yes								
##	time	n.risk	n.event	survival	std.err	lower	95% CI	upper	95% CI
##	169	240	1	0.996	0.00416		0.988		1.000
##	177	239	2	0.988	0.00717		0.974		1.000
##	180	237	1	0.983	0.00826		0.967		1.000
##	184	236	1	0.979	0.00922		0.961		0.997
##	227	233	1	0.975	0.01009		0.955		0.995
##	238	231	1	0.971	0.01090		0.950		0.992
##	272	230	1	0.967	0.01164		0.944		0.990
##	275	229	1	0.962	0.01233		0.938		0.987
##	286	228	1	0.958	0.01298		0.933		0.984
##	308	226	1	0.954	0.01359		0.928		0.981
##	357	224	1	0.950	0.01418		0.922		0.978
##	369	222	1	0.945	0.01475		0.917		0.975
##	374	221	1	0.941	0.01529		0.912		0.971
##	377	220	1	0.937	0.01581		0.906		0.968
##	392	219	1	0.932	0.01631		0.901		0.965
##	394	218	1	0.928	0.01678		0.896		0.962
##	410	217	1	0.924	0.01724		0.891		0.958
##	426	216	1	0.920	0.01768		0.886		0.955
##	473	212	1	0.915	0.01813		0.880		0.952
##	475	211	1	0.911	0.01855		0.875		0.948
##	491	210	1	0.907	0.01896		0.870		0.945
##	498	209	1	0.902	0.01936		0.865		0.941
##	500	208	1	0.898	0.01975		0.860		0.938
##	502	207	1	0.894	0.02012		0.855		0.934
##	504	206	1	0.889	0.02049		0.850		0.930
##	515	205	1	0.885	0.02084		0.845		0.927
##	533	204	1	0.881	0.02119		0.840		0.923
##	540	203	1	0.876	0.02152		0.835		0.919
##	542	202	1	0.872	0.02185		0.830		0.916
##	544	201	1	0.868	0.02217		0.825		0.912
##	548	200	2	0.859	0.02278		0.815		0.905
##	552	198	1	0.855	0.02307		0.811		0.901
##	554	197	1	0.850	0.02336		0.806		0.897
##	557	196	1	0.846	0.02364		0.801		0.894
##	559	195	1	0.842	0.02391		0.796		0.890
##	564	194	1	0.837	0.02418		0.791		0.886
##	573	192	1	0.833	0.02444		0.786		0.882
##	577	191	1	0.829	0.02470		0.781		0.878
##	598	190	1	0.824	0.02495		0.777		0.875
##	632	189	1	0.820	0.02520		0.772		0.871
##	648	188	1	0.815	0.02544		0.767		0.867
##	662	187	1	0.811	0.02568		0.762		0.863
##	675	186	1	0.807	0.02591		0.757		0.859
##	698	184	1	0.802	0.02613		0.753		0.855
##	712	183	1	0.798					

##	730	178	1	0.785	0.02701	0.733	0.839
##	755	172	1	0.780	0.02723	0.729	0.835
##	784	169	1	0.775	0.02746	0.723	0.831
##	797	168	1	0.771	0.02768	0.718	0.827
##	799	167	1	0.766	0.02790	0.713	0.823
##	827	164	1	0.762	0.02812	0.708	0.819
##	836	162	1	0.757	0.02833	0.703	0.814
##	855	161	1	0.752	0.02855	0.698	0.810
##	859	158	1	0.747	0.02876	0.693	0.806
##	890	155	1	0.743	0.02897	0.688	0.802
##	893	154	1	0.738	0.02919	0.683	0.797
##	918	152	1	0.733	0.02939	0.678	0.793
##	956	148	1	0.728	0.02961	0.672	0.788
##	964	147	1	0.723	0.02982	0.667	0.784
##	1036	142	1	0.718	0.03004	0.661	0.779
##	1043	141	1	0.713	0.03026	0.656	0.775
##	1059	140	1	0.708	0.03047	0.650	0.770
##	1120	132	1	0.702	0.03070	0.645	0.765
##	1140	131	1	0.697	0.03093	0.639	0.760
##	1146	130	1	0.692	0.03116	0.633	0.755
##	1150	129	1	0.686	0.03137	0.627	0.751
##	1183	125	1	0.681	0.03160	0.622	0.746
##	1246	122	1	0.675	0.03183	0.616	0.741
##	1280	120	1	0.670	0.03206	0.610	0.735
##	1343	113	1	0.664	0.03232	0.603	0.730
##	1352	111	1	0.658	0.03257	0.597	0.725
##	1363	108	1	0.652	0.03284	0.590	0.719
##	1459	105	1	0.645	0.03310	0.584	0.714
##	1463	104	1	0.639	0.03336	0.577	0.708
##	1481	103	1	0.633	0.03361	0.570	0.702
##	1493	98	1	0.627	0.03388	0.564	0.697
##	1502	96	1	0.620	0.03415	0.557	0.691
##	1521	93	1	0.613	0.03443	0.549	0.685
##	1641	87	1	0.606	0.03475	0.542	0.678
##	1679	83	1	0.599	0.03509	0.534	0.672
##	1763	69	1	0.590	0.03564	0.524	0.664
##	1807	65	1	0.581	0.03623	0.514	0.657
##	1918	44	1	0.568	0.03774	0.499	0.647
##	1975	41	1	0.554	0.03928	0.482	0.637
##	1977	40	1	0.540	0.04066	0.466	0.626
##	1989	38	1	0.526	0.04201	0.450	0.615
##	2015	32	1	0.510	0.04379	0.431	0.603
##	2018	30	1	0.493	0.04551	0.411	0.590
##	2030	27	1	0.474	0.04734	0.390	0.577
##	2372	13	1	0.438	0.05603	0.341	0.563

```
plot(thf_fit,lty=1:2,main="GBSG2",ylab="Probability",xlab="Survival Time")
```

GBSG2

