Simulation 3

2025-06-03

Modèle de Cox

$\lambda_1 = 0.1$; $k_1 = 2$

$\lambda_2 = 0.12$; $k_2 = 1.7$

β = -3

t_censure = c(9,14,19)

τ = c(0,0)

Méthode IPCW

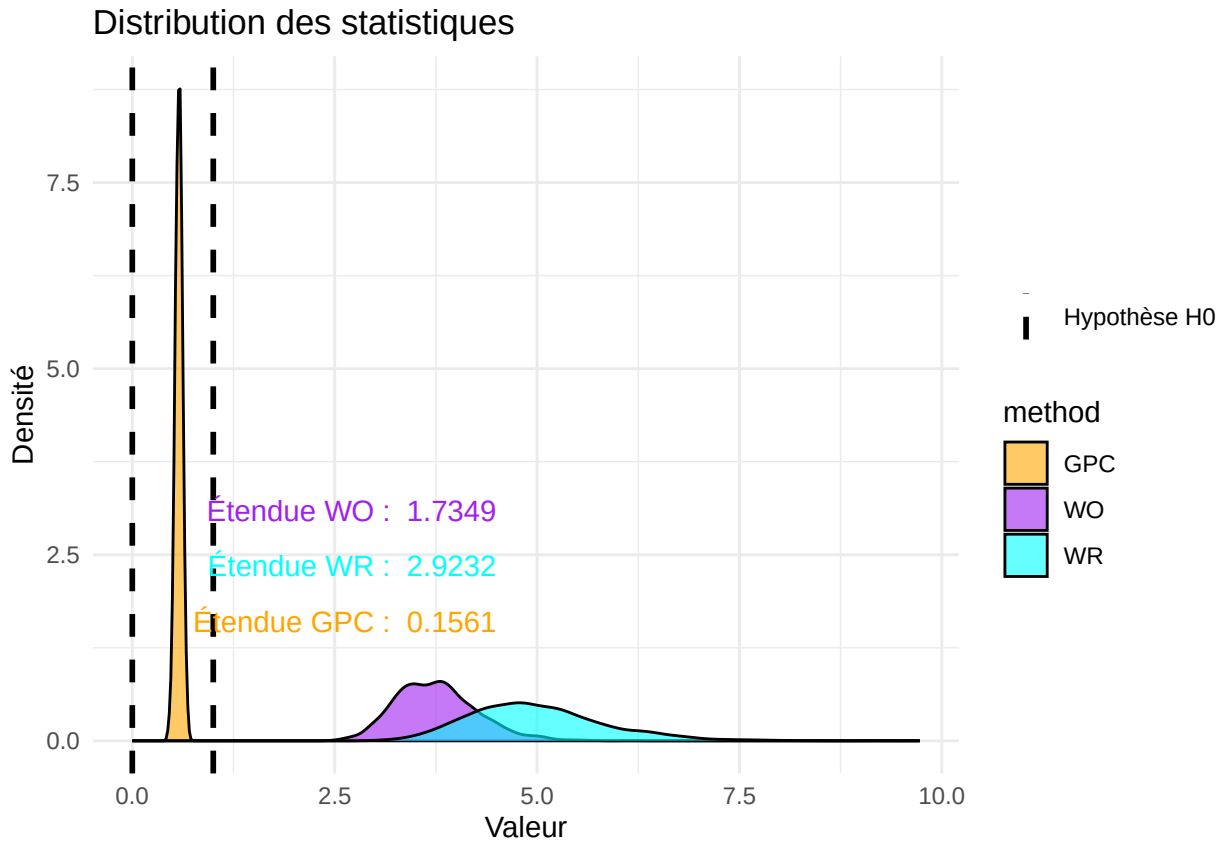
```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   3.034   4.398   4.896   4.995   5.461   9.729
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   2.521   3.393   3.726   3.755   4.054   6.153
```

```
## $Count
##            Win Loose  Tie      WR      WO     GPC
## endpoint1 4414   993 4593 4.44512 2.03998 0.34210
## endpoint2 2294   396 1902 5.79293 2.40906 0.41333
## overall   6708  1390 1902 4.82590 3.27168 0.53180
##
## $value_tte_cont_C
##        Y_1_C (tte) Y_2_C (tte)
## min       4.642900   0.0326235
## median    5.361705   4.6429005
## max       9.000000   9.0000000
##
## $value_tte_cont_T
##        Y_1_T (tte) Y_2_T (tte)
## min       0.095685      4.6429
## median    9.000000      9.0000
## max       9.000000      9.0000
##
## $censure
##   endpoint 1 endpoint2
## T   0.838740 0.8508125
## C   0.470355 0.4074150
##
## $p_val_GPC
```

```
## [1] "probabilité d'avoir des p-valeur < 0.05 pour la GPC:  1"
##
## $p_val_WR
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WR:  1"
##
## $p_val_WO
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WO:  1"
```

```
##     method              value
##  Length:6000        Min.   :0.4320
##  Class :character   1st Qu.:0.6043
##  Mode  :character   Median :3.6848
##                     Mean   :3.1085
##                     3rd Qu.:4.5377
##                     Max.   :9.7285
```

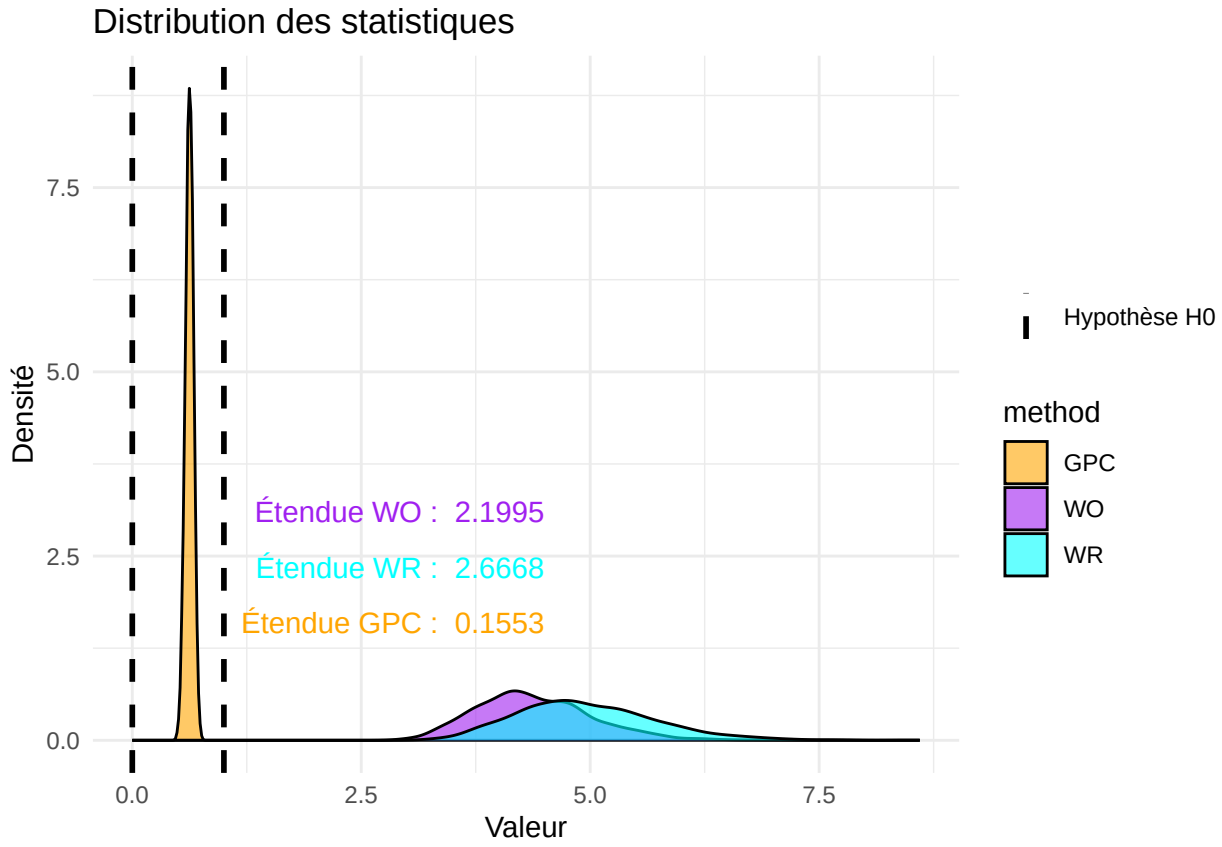



```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   3.126   4.414   4.882   4.963   5.426   8.599
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   2.867   3.941   4.326   4.384   4.773   7.126
```

```
## $Count
##            Win Loose  Tie      WR      WO     GPC
## endpoint1 5060  1131 3809 4.47392 2.29435 0.39290
```

```
## endpoint2 2138   369 1302 5.79404 2.73431 0.46443
## overall   7198  1500 1302 4.79867 3.64900 0.56980
##
## $value_tte_cont_C
##        Y_1_C (tte) Y_2_C (tte)
## min       4.646518    0.032192
## median    5.366321    4.646518
## max      14.000000   14.000000
##
## $value_tte_cont_T
##        Y_1_T (tte) Y_2_T (tte)
## min       0.093803    4.646518
## median   13.034481   13.302117
## max      14.000000   14.000000
##
## $censure
##   endpoint 1 endpoint2
## T  0.7784150 0.7930125
## C  0.3549475 0.2981350
##
## $p_val_GPC
## [1] "probabilité d'avoir des p-valeur < 0.05 pour la GPC:  1"
##
## $p_val_WR
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WR:  1"
##
## $p_val_WO
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WO:  1"
```

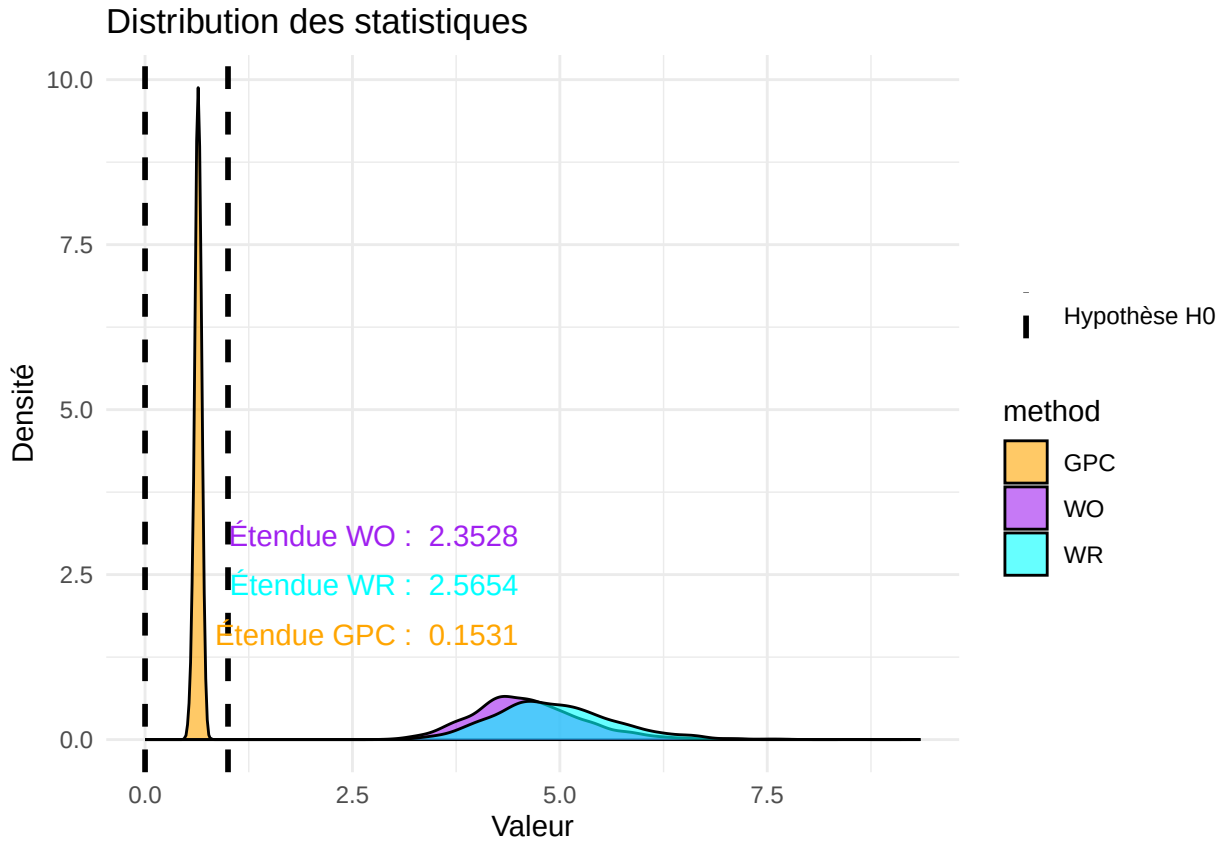



```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   2.979   4.439   4.864   4.936   5.372   9.346

##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   2.912   4.171   4.559   4.616   5.010   8.547

## $Count
##            Win Loose  Tie      WR      WO     GPC
## endpoint1 5308  1190 3502 4.46050 2.40020 0.41180
## endpoint2 2138   369 1103 5.79404 2.92178 0.49003
## overall   7355  1542 1103 4.76978 3.77669 0.58130
##
## $value_tte_cont_C
##        Y_1_C (tte) Y_2_C (tte)
## min       4.640848    0.032152
## median    5.366321    4.640848
## max      19.000000   19.000000
##
## $value_tte_cont_T
##        Y_1_T (tte) Y_2_T (tte)
## min       0.092429    4.646518
## median   13.282062   13.748615
## max      19.000000   19.000000
##
## $censure
```

```
##   endpoint 1 endpoint2
## T   0.778415 0.7491025
## C   0.296105 0.2981350
##
## $p_val_GPC
## [1] "probabilité d'avoir des p-valeur < 0.05 pour la GPC:  1"
##
## $p_val_WR
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WR:  1"
##
## $p_val_WO
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WO:  1"
```



Méthode unadjusted

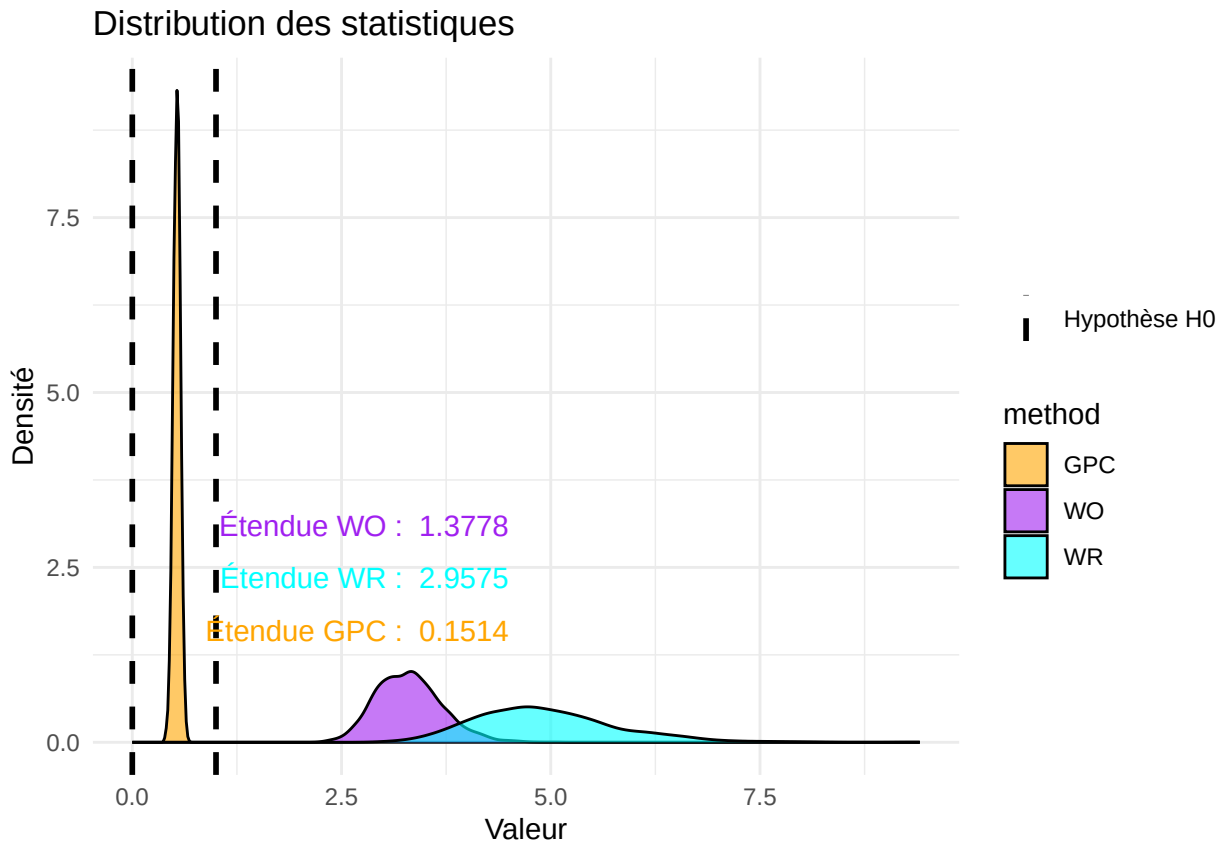
```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   2.977   4.334   4.844   4.938   5.422   9.410

##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   2.291   3.022   3.292   3.306   3.549   5.050

## $Count
##            Win Loose  Tie      WR      WO     GPC
## endpoint1 4414   993 4593 4.44512 2.03998 0.34210
```

```
## endpoint2 2294   396 1902 5.79293 2.40906 0.41333
## overall   6708  1390 1902 4.82590 3.27168 0.53180
##
## $value_tte_cont_C
##        Y_1_C (tte) Y_2_C (tte)
## min       4.642900   0.0326235
## median    5.361705   4.6429005
## max       9.000000   9.0000000
##
## $value_tte_cont_T
##        Y_1_T (tte) Y_2_T (tte)
## min       0.095685      4.6429
## median    9.000000      9.0000
## max       9.000000      9.0000
##
## $censure
##   endpoint 1 endpoint2
## T   0.838740 0.8508125
## C   0.470355 0.4074150
##
## $p_val_GPC
## [1] "probabilité d'avoir des p-valeur < 0.05 pour la GPC:  1"
##
## $p_val_WR
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WR:  1"
##
## $p_val_WO
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WO:  1"
```

```
##     method             value
##  Length:6000        Min.   :0.3922
##  Class :character   1st Qu.:0.5603
##  Mode  :character   Median :3.2845
##                     Mean   :2.9255
##                     3rd Qu.:4.3550
##                     Max.   :9.4095
```

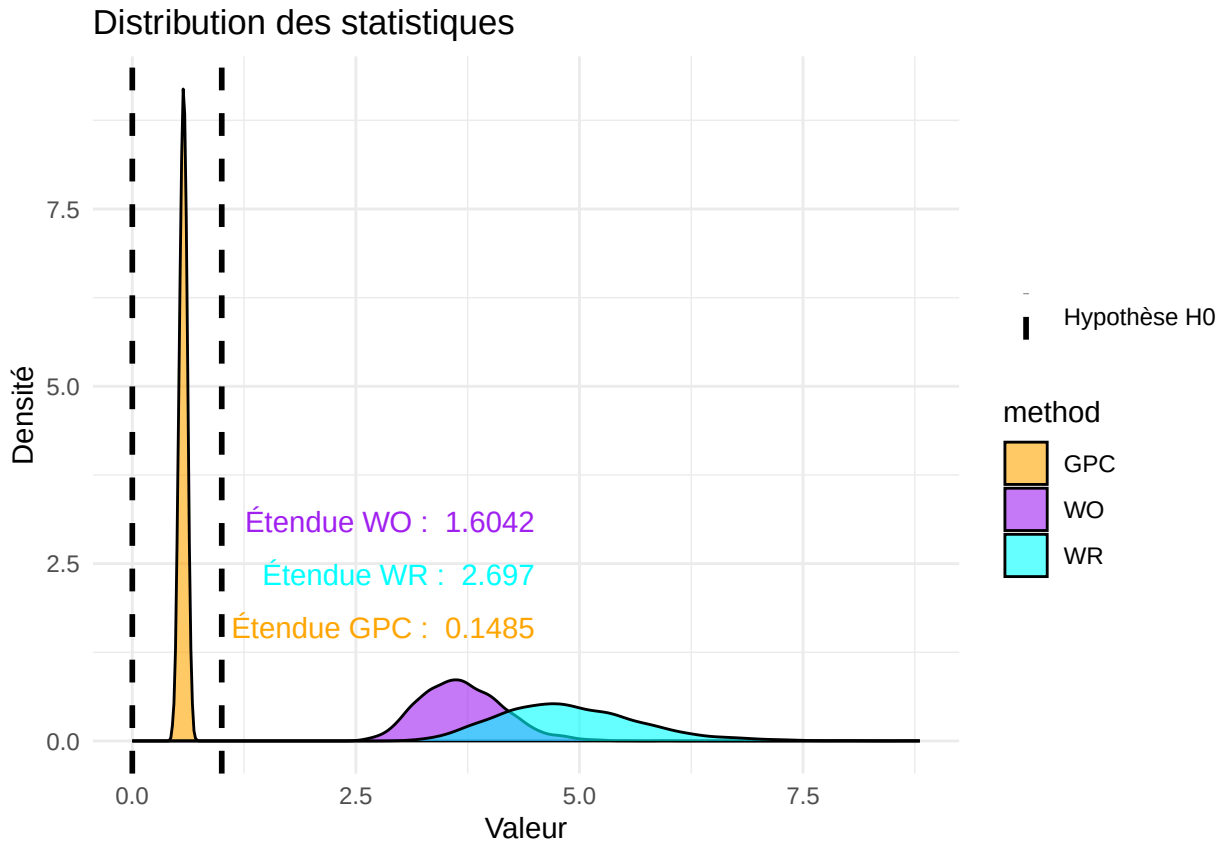



```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   3.052   4.326   4.816   4.896   5.366   8.806

##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   2.602   3.352   3.664   3.692   3.986   5.961

## $Count
##            Win Loose  Tie      WR      WO     GPC
## endpoint1 5060  1131 3809 4.47392 2.29435 0.39290
## endpoint2 2138   369 1302 5.79404 2.73431 0.46443
## overall   7198  1500 1302 4.79867 3.64900 0.56980
##
## $value_tte_cont_C
##        Y_1_C (tte) Y_2_C (tte)
## min       4.646518    0.032192
## median    5.366321    4.646518
## max      14.000000   14.000000
##
## $value_tte_cont_T
##        Y_1_T (tte) Y_2_T (tte)
## min       0.093803    4.646518
## median   13.034481   13.302117
## max      14.000000   14.000000
##
## $censure
```

```
##   endpoint 1 endpoint2
## T  0.7784150 0.7930125
## C  0.3549475 0.2981350
##
## $p_val_GPC
## [1] "probabilité d'avoir des p-valeur < 0.05 pour la GPC:  1"
##
## $p_val_WR
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WR:  1"
##
## $p_val_WO
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WO:  1"
```

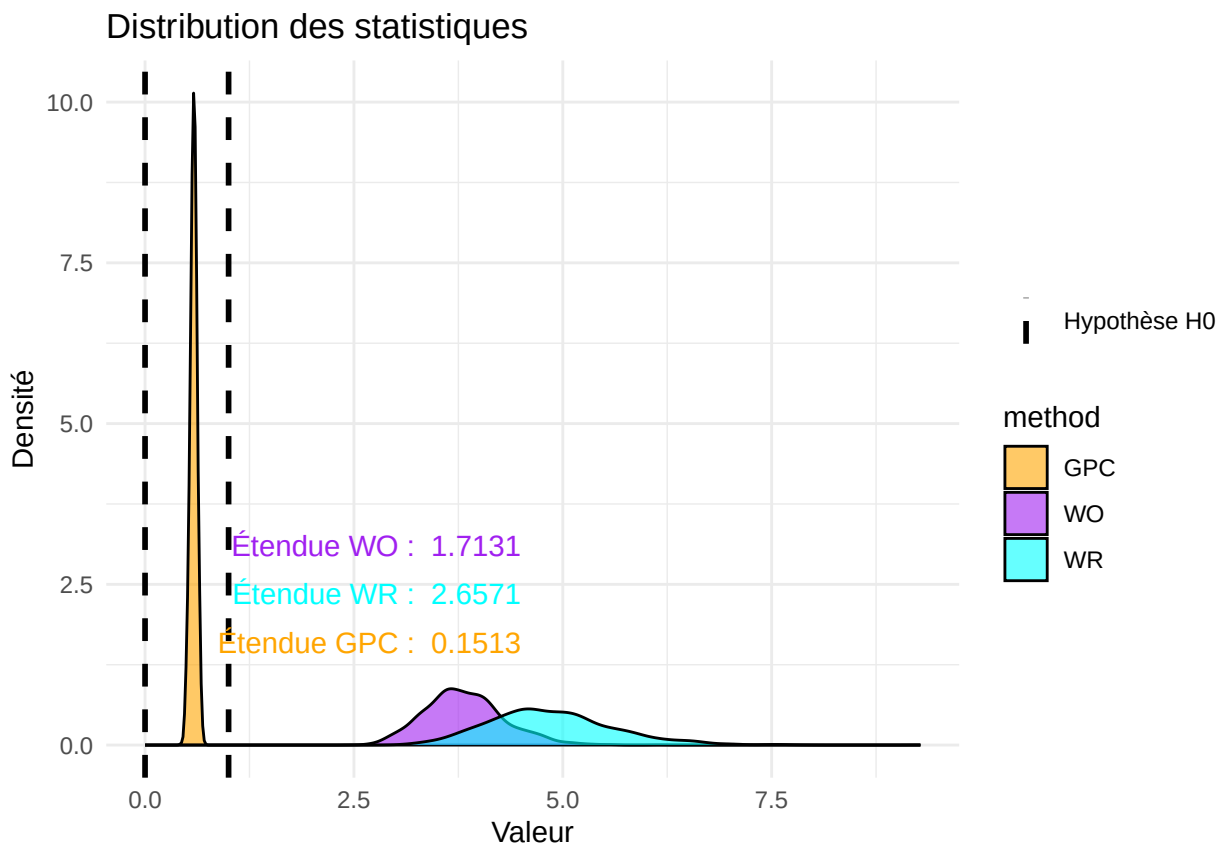



```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   2.822   4.343   4.795   4.861   5.286   9.280

##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   2.471   3.506   3.788   3.822   4.106   6.153

## $Count
##            Win Loose  Tie      WR      WO     GPC
## endpoint1 5308  1190 3502 4.46050 2.40020 0.41180
## endpoint2 2138   369 1103 5.79404 2.92178 0.49003
## overall   7355  1542 1103 4.76978 3.77669 0.58130
##
```

```
## $value_tte_cont_C
##        Y_1_C (tte) Y_2_C (tte)
## min       4.640848    0.032152
## median    5.366321    4.640848
## max      19.000000   19.000000
##
## $value_tte_cont_T
##        Y_1_T (tte) Y_2_T (tte)
## min       0.092429    4.646518
## median   13.282062   13.748615
## max      19.000000   19.000000
##
## $censure
##   endpoint 1 endpoint2
## T   0.778415 0.7491025
## C   0.296105 0.2981350
##
## $p_val_GPC
## [1] "probabilité d'avoir des p-valeur < 0.05 pour la GPC:  1"
##
## $p_val_WR
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WR:  1"
##
## $p_val_WO
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WO:  1"
```



Modèle AFT

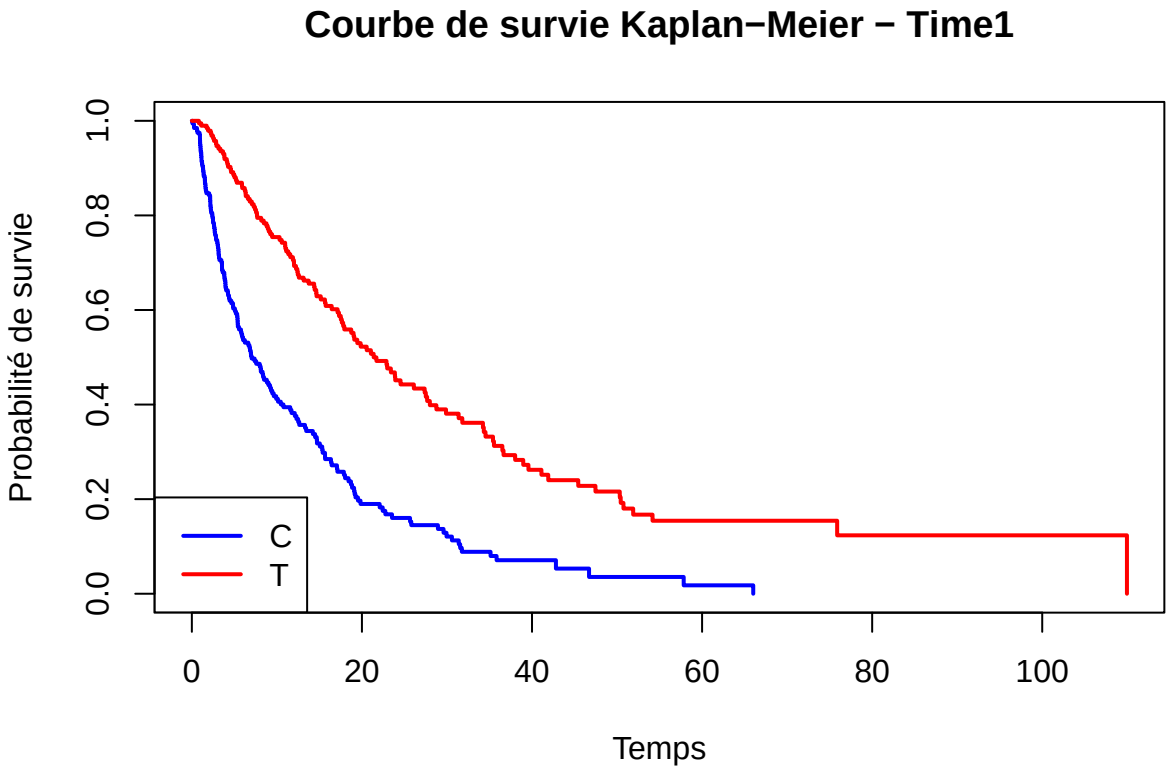
$\lambda_1 = 0.09$; $k_1 = 1.5$ $\lambda_2 = 0.1$; $k_2 = 1.5$ $\beta = 0.9$ t_censure = c(9,14,19)

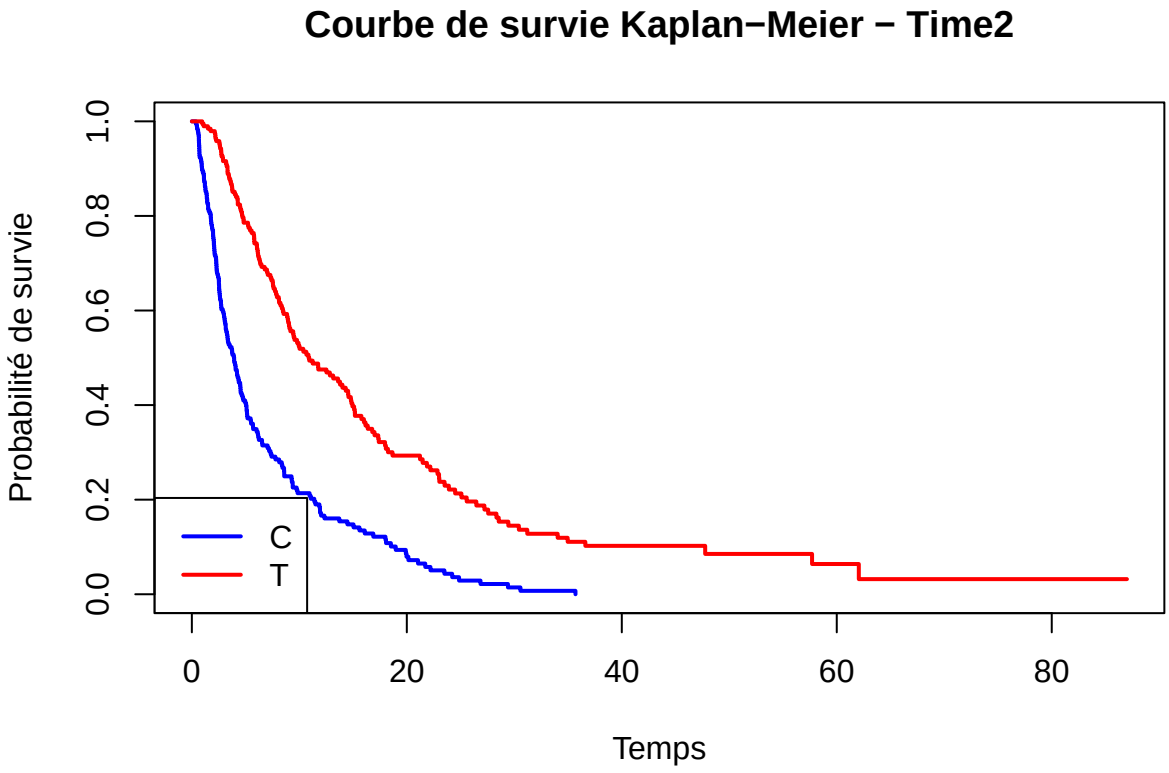
τ = c(0,0)

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    0.05   15.35   39.58   50.90   69.37  399.27
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   0.059   4.858  14.411  25.720  30.016 358.498
```

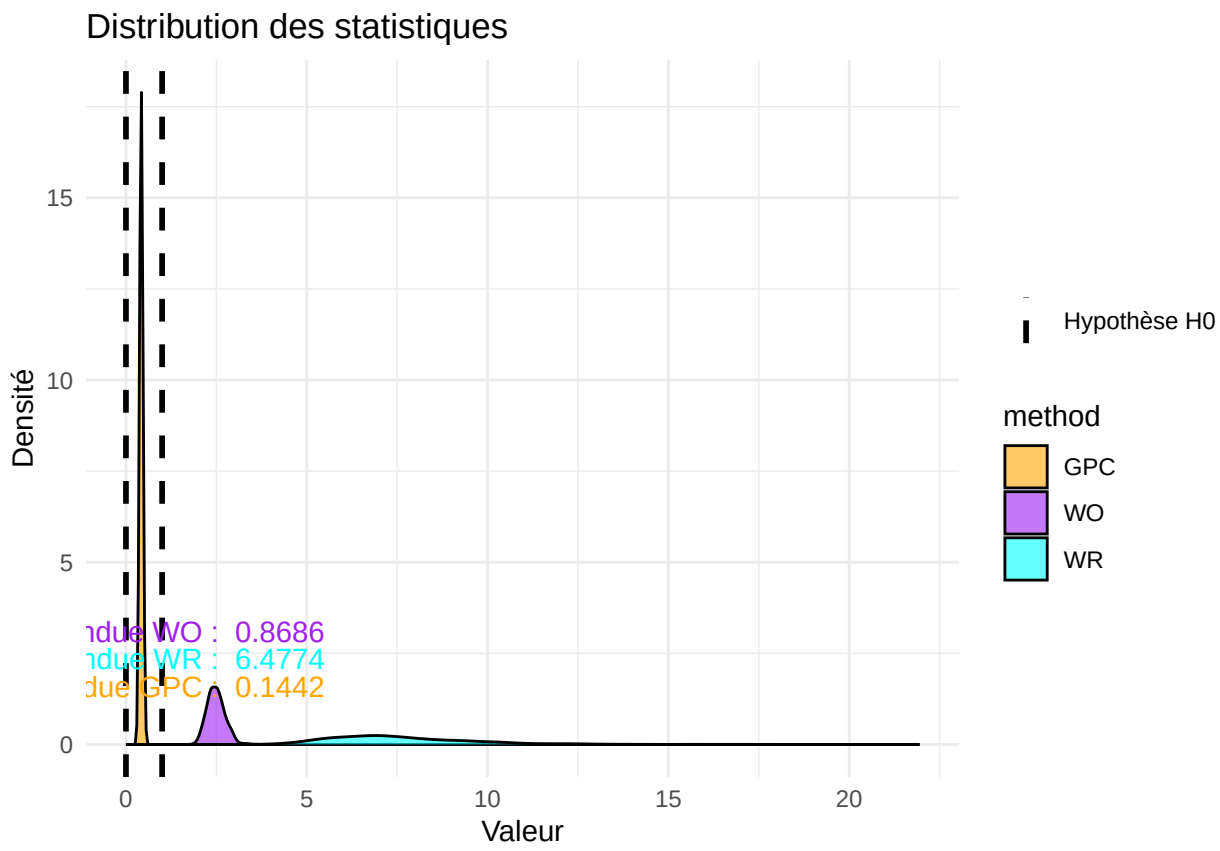
```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   0.381   3.151   7.122  13.290  16.029 132.945
```






```
## $Count
##            Win Loose  Tie       WR      WO     GPC
## endpoint1 4294   649 5058  6.61633 2.14695 0.36446
## endpoint2  390    23 4644 16.95652 1.15650 0.07257
## overall   4684   671 4644  6.98063 2.34080 0.40134
##
## $value_tte_cont_C
##        Y_1_C (tte) Y_2_C (tte)
## min       3.962193    0.156765
## median    5.631874    3.962193
## max       9.000000    9.000000
##
## $value_tte_cont_T
##        Y_1_T (tte) Y_2_T (tte)
## min      0.1708785    3.962193
## median   9.0000000    9.000000
## max      9.0000000    9.000000
##
## $censure
##   endpoint 1 endpoint2
## T  0.8810600 0.8682875
## C  0.4988175 0.2820875
##
## $p_val_GPC
## [1] "probabilité d'avoir des p-valeur < 0.05 pour la GPC:  1"
##
```

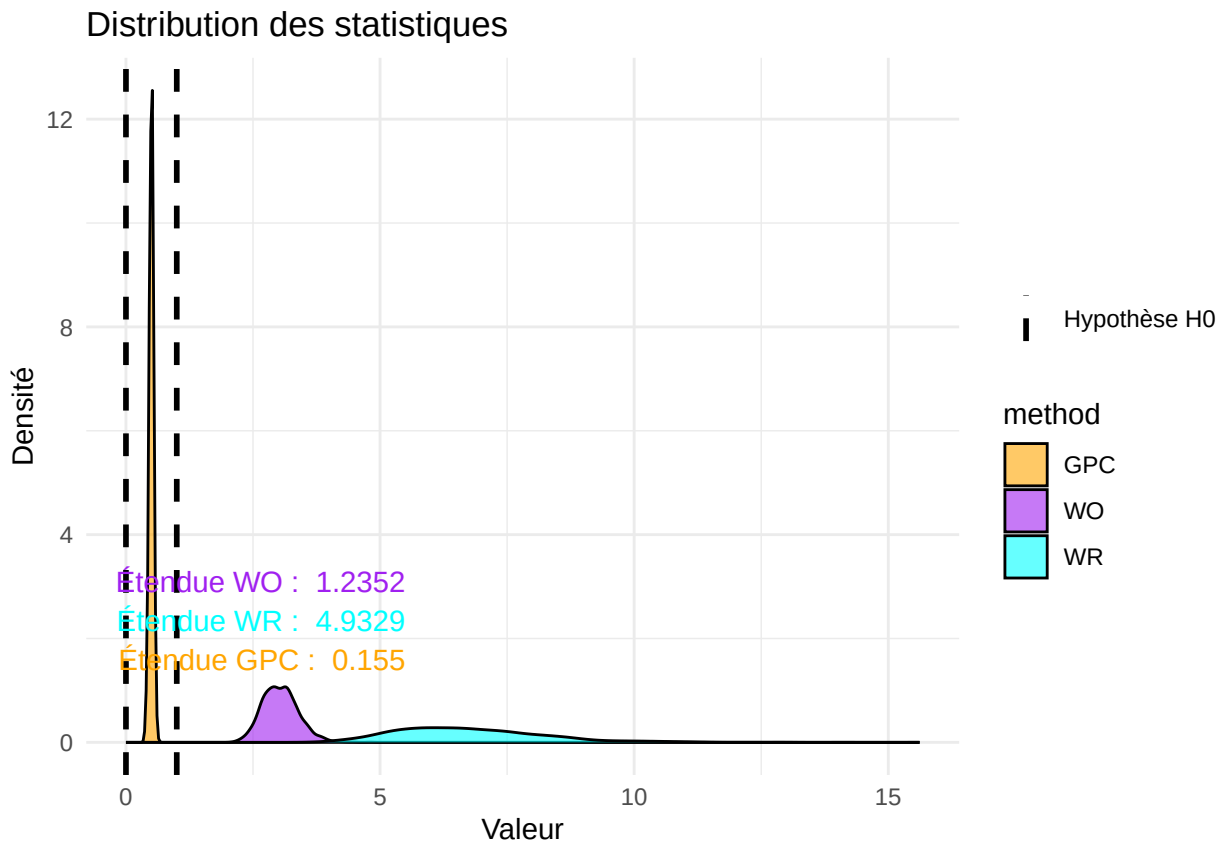
```
## $p_val_WR
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WR:  1"
##
## $p_val_WO
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WO:  1"
```




```
## Saving 6.5 x 4.5 in image
```

```
## $Count
##            Win Loose  Tie       WR      WO     GPC
## endpoint1 4877   827 5058  5.89722 2.20679 0.37632
## endpoint2  626    48 3622 13.04167 1.31092 0.13454
## overall   5503   875 3622  6.28914 2.72301 0.46280
##
## $value_tte_cont_C
##        Y_1_C (tte) Y_2_C (tte)
## min       3.961264    0.154444
## median    5.639033    3.961264
## max      14.000000   14.000000
##
## $value_tte_cont_T
##        Y_1_T (tte) Y_2_T (tte)
## min      0.1654005    3.961264
## median  13.5452415   12.434088
## max     14.0000000   14.000000
```

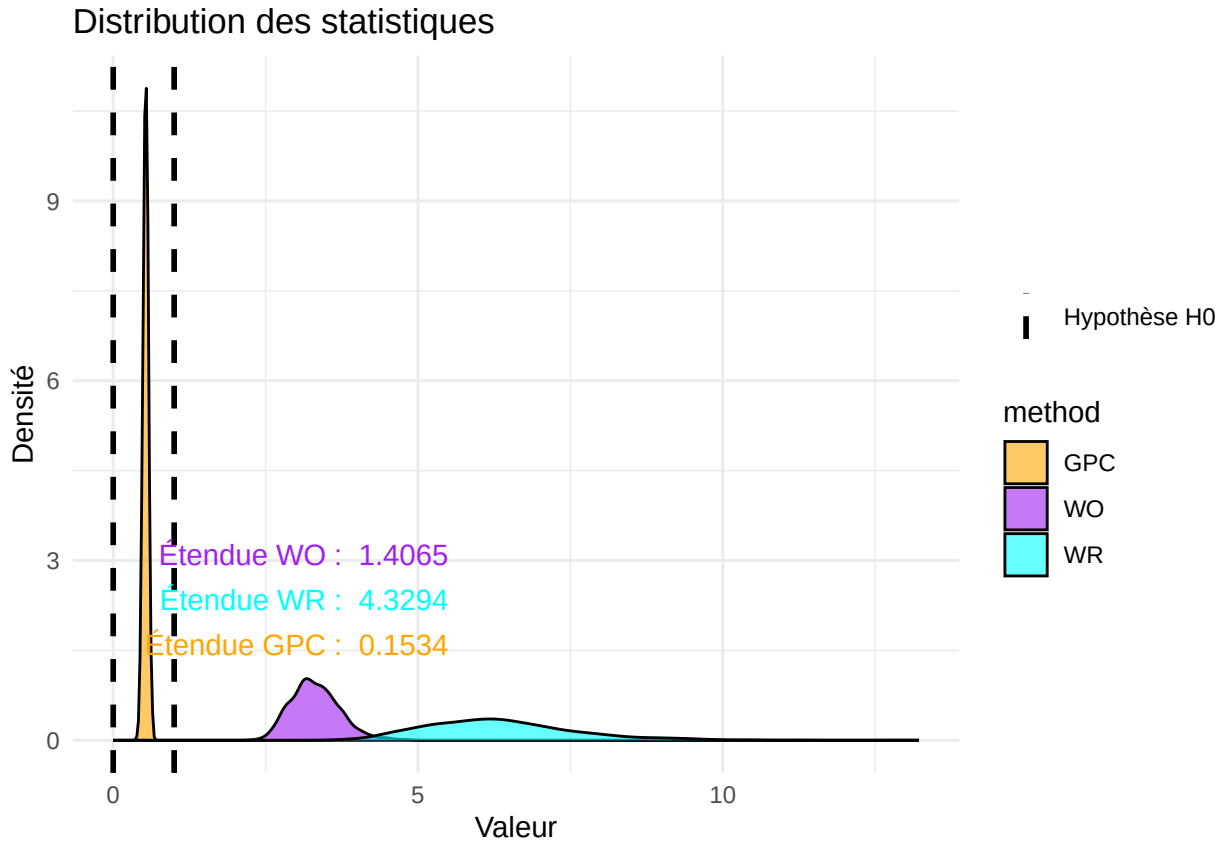
```
##
## $censure
##   endpoint 1 endpoint2
## T  0.8124025  0.748855
## C  0.3994825  0.200315
##
## $p_val_GPC
## [1] "probabilité d'avoir des p-valeur < 0.05 pour la GPC:  1"
##
## $p_val_WR
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WR:  1"
##
## $p_val_WO
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WO:  1"
```




```
## Saving 6.5 x 4.5 in image
```

```
## $Count
##            Win Loose  Tie       WR      WO      GPC
## endpoint1 5095   908 3998  5.61123 2.44032 0.41866
## endpoint2  772    71 3155 10.87324 1.42524 0.17534
## overall   5866   978 3155  5.99796 2.91274 0.48885
##
## $value_tte_cont_C
##        Y_1_C (tte) Y_2_C (tte)
```

```
## min       0.137571    0.155224
## median    5.620954    3.959329
## max      19.000000   18.983847
##
## $value_tte_cont_T
##        Y_1_T (tte) Y_2_T (tte)
## min      0.1595545    3.959329
## median  14.0868540   12.444608
## max     19.0000000   19.000000
##
## $censure
##   endpoint 1 endpoint2
## T  0.7601500 0.6596825
## C  0.3500525 0.1737525
##
## $p_val_GPC
## [1] "probabilité d'avoir des p-valeur < 0.05 pour la GPC:  1"
##
## $p_val_WR
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WR:  1"
##
## $p_val_WO
## [1] "probabilité d'avoir des p-valeur < 0.05 pour le WO:  1"
```



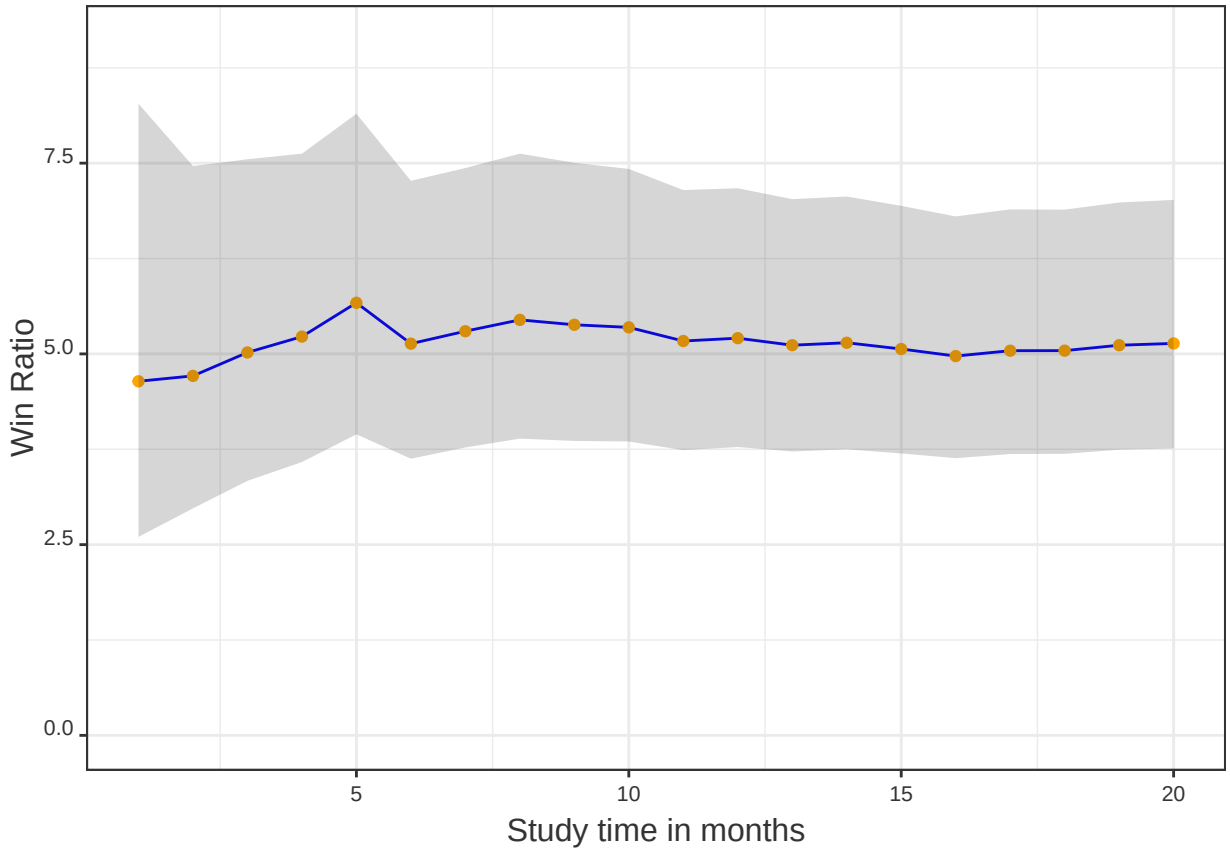

```
## Saving 6.5 x 4.5 in image
```

Plots packages

Cox

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   0.015  10.325  23.392  35.500  50.517 314.152
```

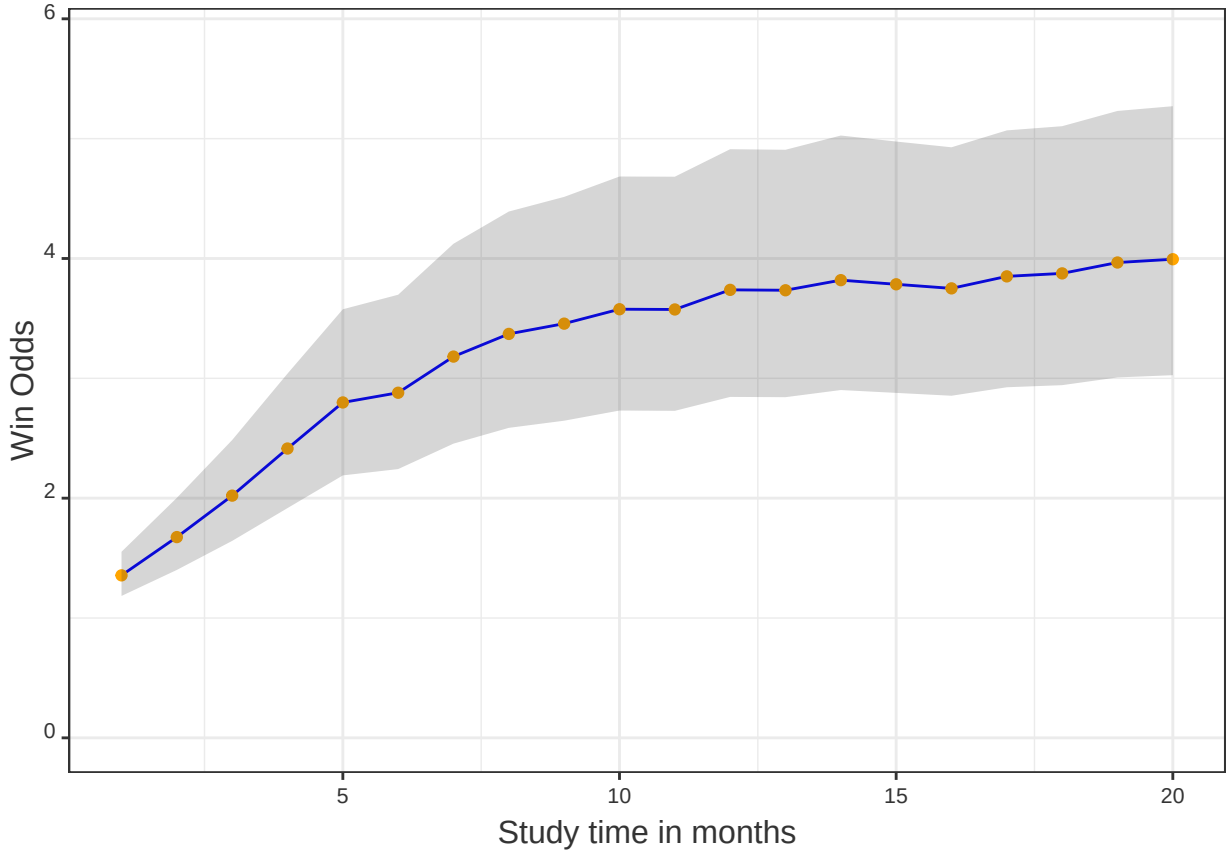
```
## Warning in stat_t.plot(data = data, Ctime = 1:20, arm.name = c("T", "C"), : The
## study entry time is missing, by default zero will be assigned to all subjects.
```




```
## $statistic
## [1] "WR"
##
## $values
##    time win_stat lower_ci upper_ci
## 1     1 4.640964 2.601554 8.279108
## 2     2 4.711765 2.975079 7.462231
## 3     3 5.019025 3.335963 7.551227
## 4     4 5.226531 3.582857 7.624256
## 5     5 5.669625 3.945405 8.147364
## 6     6 5.133959 3.625985 7.269069
## 7     7 5.297364 3.773952 7.435724
## 8     8 5.445902 3.889632 7.624846
## 9     9 5.381558 3.859085 7.504673
```

```
## 10   10 5.347490 3.851741 7.424086
## 11   11 5.168889 3.737771 7.147953
## 12   12 5.205968 3.779472 7.170871
## 13   13 5.113960 3.720924 7.028520
## 14   14 5.145996 3.749440 7.062728
## 15   15 5.064246 3.695332 6.940266
## 16   16 4.971193 3.633191 6.801944
## 17   17 5.041953 3.687398 6.894101
## 18   18 5.042495 3.690056 6.890614
## 19   19 5.113636 3.744026 6.984266
## 20   20 5.137336 3.760587 7.018112
```

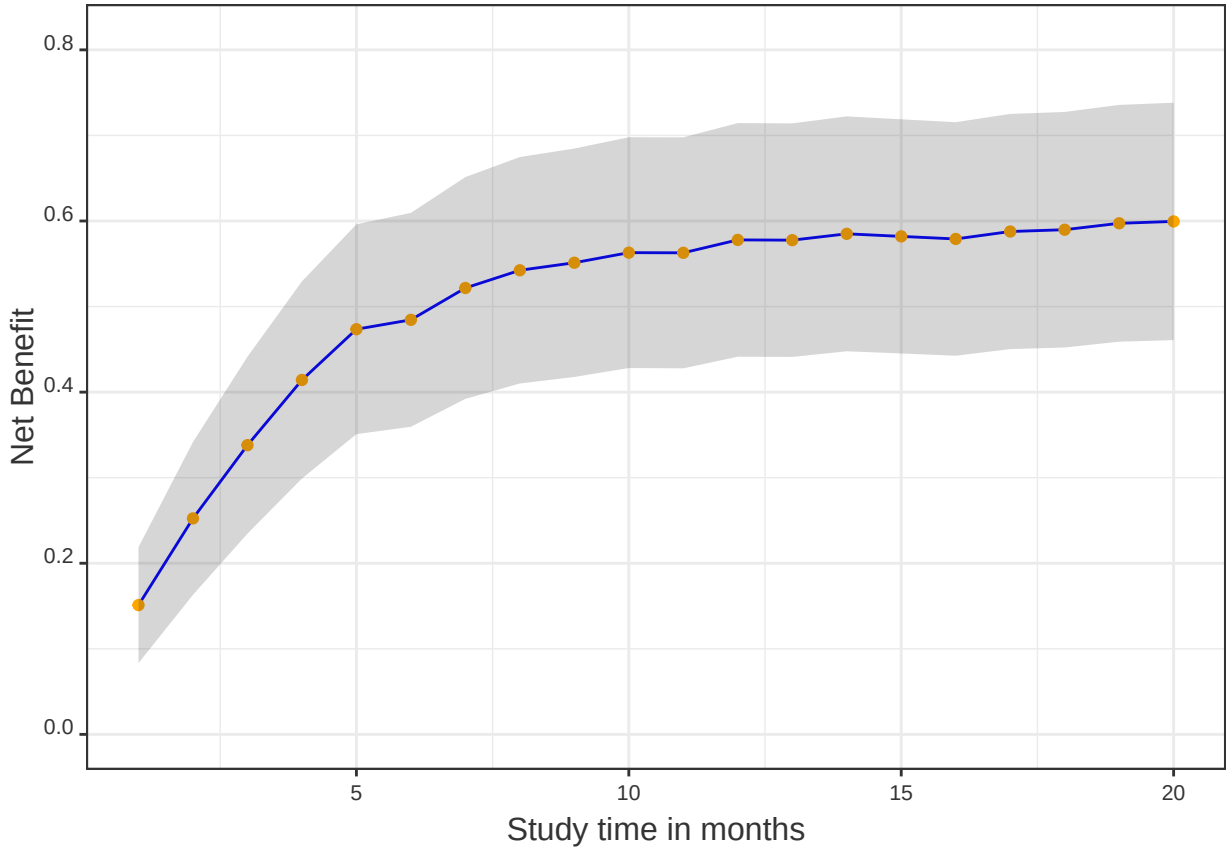
```
## Warning in stat_t.plot(data = data, Ctime = 1:20, arm.name = c("T", "C"), : The
## study entry time is missing, by default zero will be assigned to all subjects.
```




```
## $statistic
## [1] "WO"
##
## $values
##    time win_stat lower_ci upper_ci
## 1     1 1.355990 1.184158 1.552757
## 2     2 1.675227 1.401251 2.002772
## 3     3 2.021148 1.643612 2.485404
## 4     4 2.414135 1.917337 3.039656
## 5     5 2.798670 2.190078 3.576382
```

```
## 6     6 2.879728 2.242739 3.697638
## 7     7 3.181476 2.454968 4.122983
## 8     8 3.370629 2.586841 4.391898
## 9     9 3.456328 2.646498 4.513966
## 10   10 3.576659 2.731167 4.683891
## 11   11 3.574565 2.728839 4.682401
## 12   12 3.738214 2.844977 4.911899
## 13   13 3.734848 2.842643 4.907086
## 14   14 3.819277 2.902275 5.026015
## 15   15 3.784689 2.878590 4.976002
## 16   16 3.750594 2.854620 4.927784
## 17   17 3.850837 2.925402 5.069028
## 18   18 3.875670 2.943004 5.103908
## 19   19 3.966476 3.007588 5.231081
## 20   20 3.993758 3.026198 5.270674
```

```
## Warning in stat_t.plot(data = data, Ctime = 1:20, arm.name = c("T", "C"), : The
## study entry time is missing, by default zero will be assigned to all subjects.
```

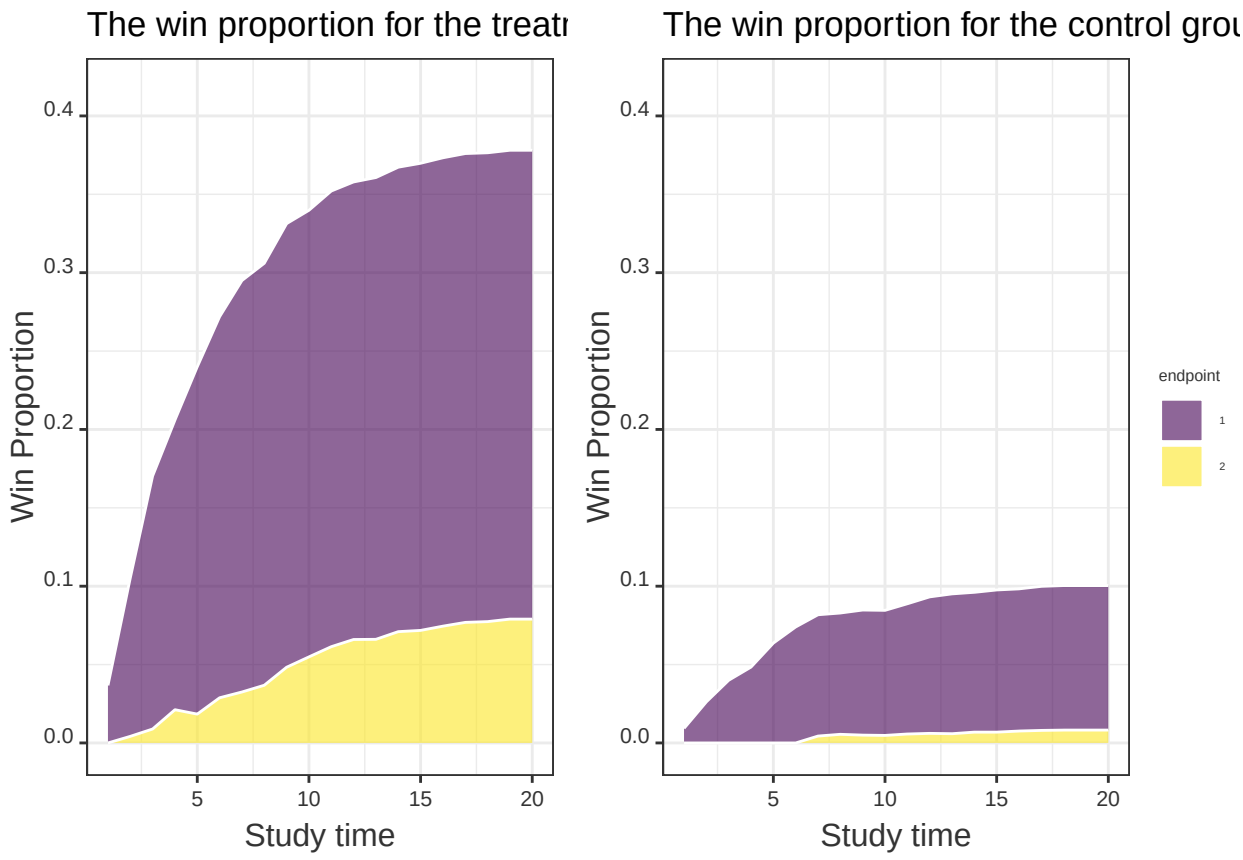



```
## $statistic
## [1] "NB"
##
## $values
##    time win_stat   lower_ci  upper_ci
## 1     1   0.1511 0.08334992 0.2188501
```

```
## 2     2   0.2524 0.16310842 0.3416916
## 3     3   0.3380 0.23461515 0.4413849
## 4     4   0.4142 0.29899819 0.5294018
## 5     5   0.4735 0.35089646 0.5961035
## 6     6   0.4845 0.35950088 0.6094991
## 7     7   0.5217 0.39208415 0.6513158
## 8     8   0.5424 0.41006903 0.6747310
## 9     9   0.5512 0.41771526 0.6846847
## 10   10   0.5630 0.42814999 0.6978500
## 11   11   0.5628 0.42781634 0.6977837
## 12   12   0.5779 0.44137358 0.7144264
## 13   13   0.5776 0.44111349 0.7140865
## 14   14   0.5850 0.44771684 0.7222832
## 15   15   0.5820 0.44516843 0.7188316
## 16   16   0.5790 0.44251234 0.7154877
## 17   17   0.5877 0.45027072 0.7251293
## 18   18   0.5898 0.45215611 0.7274439
## 19   19   0.5973 0.45893012 0.7356699
## 20   20   0.5995 0.46078720 0.7382128
```

AFT

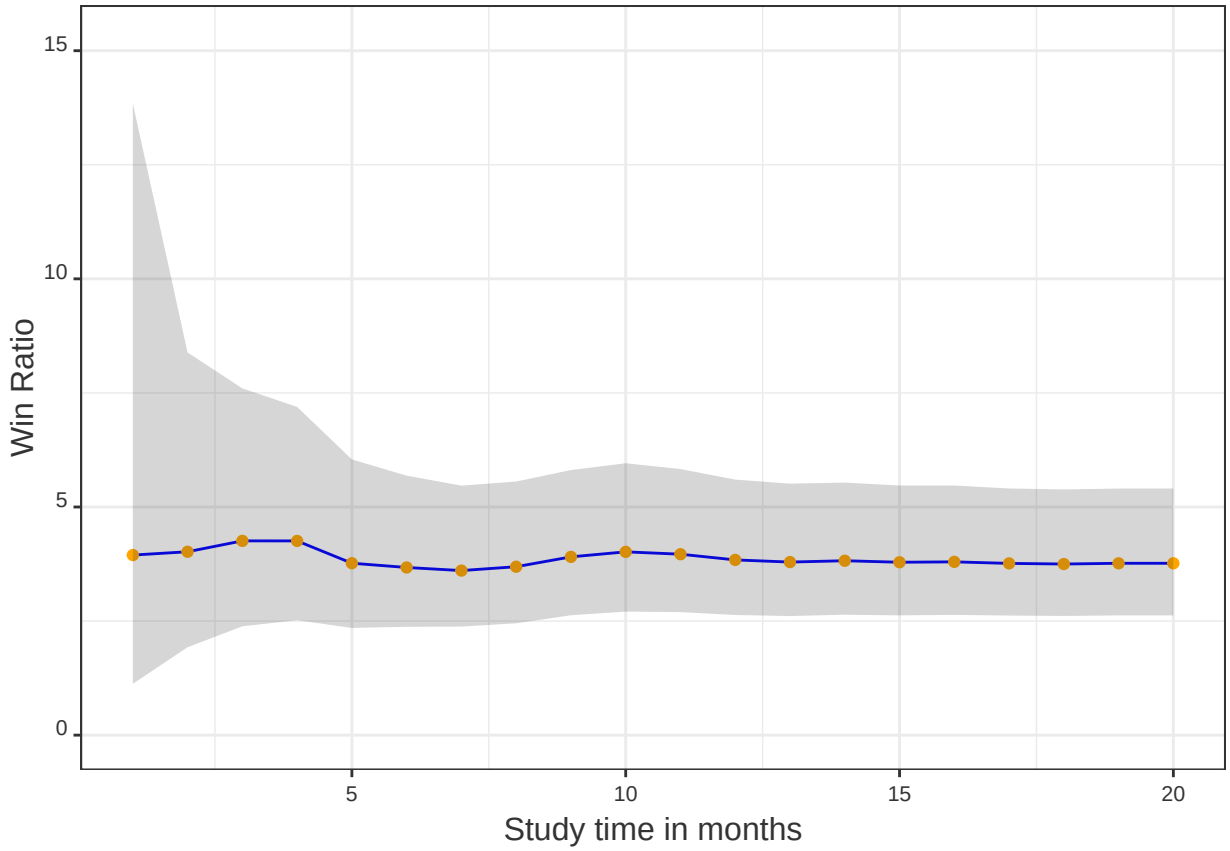
```
## Warning in partition_t.plot(data = data, Ctime = 1:20, arm.name = c("T", : The
## study entry time is missing, by default zero will be assigned to all subjects.
```



```
## $win_trt_t
##    time endpoint1 endpoint2
## 1     1    0.0367    0.0000
## 2     2    0.1011    0.0042
## 3     3    0.1614    0.0089
## 4     4    0.1848    0.0212
## 5     5    0.2216    0.0184
## 6     6    0.2431    0.0288
## 7     7    0.2625    0.0325
## 8     8    0.2692    0.0368
## 9     9    0.2830    0.0483
## 10   10    0.2849    0.0549
## 11   11    0.2907    0.0614
## 12   12    0.2919    0.0660
## 13   13    0.2946    0.0661
## 14   14    0.2963    0.0710
## 15   15    0.2980    0.0718
## 16   16    0.2988    0.0745
## 17   17    0.2991    0.0769
## 18   18    0.2991    0.0774
## 19   19    0.2991    0.0790
## 20   20    0.2991    0.0790
##
## $win_con_t
##    time endpoint1 endpoint2
## 1     1    0.0093    0.0000
## 2     2    0.0262    0.0000
## 3     3    0.0400    0.0000
## 4     4    0.0484    0.0000
## 5     5    0.0637    0.0000
## 6     6    0.0740    0.0000
## 7     7    0.0774    0.0044
## 8     8    0.0774    0.0055
## 9     9    0.0798    0.0050
## 10   10    0.0798    0.0048
## 11   11    0.0831    0.0057
## 12   12    0.0871    0.0061
## 13   13    0.0892    0.0059
## 14   14    0.0892    0.0069
## 15   15    0.0907    0.0069
## 16   16    0.0907    0.0076
## 17   17    0.0919    0.0080
## 18   18    0.0922    0.0082
## 19   19    0.0922    0.0082
## 20   20    0.0922    0.0082
##
## $win_tie_t
##    time proportion of ties
## 1     1             0.9540
## 2     2             0.8685
## 3     3             0.7897
## 4     4             0.7456
## 5     5             0.6963
## 6     6             0.6541
```

```
## 7     7             0.6232
## 8     8             0.6111
## 9     9             0.5839
## 10   10             0.5756
## 11   11             0.5591
## 12   12             0.5489
## 13   13             0.5442
## 14   14             0.5366
## 15   15             0.5326
## 16   16             0.5284
## 17   17             0.5241
## 18   18             0.5231
## 19   19             0.5215
## 20   20             0.5215
##
## $max_study_time
## [1] 61.112
```

```
## Warning in stat_t.plot(data = data, Ctime = 1:20, arm.name = c("T", "C"), : The
## study entry time is missing, by default zero will be assigned to all subjects.
```

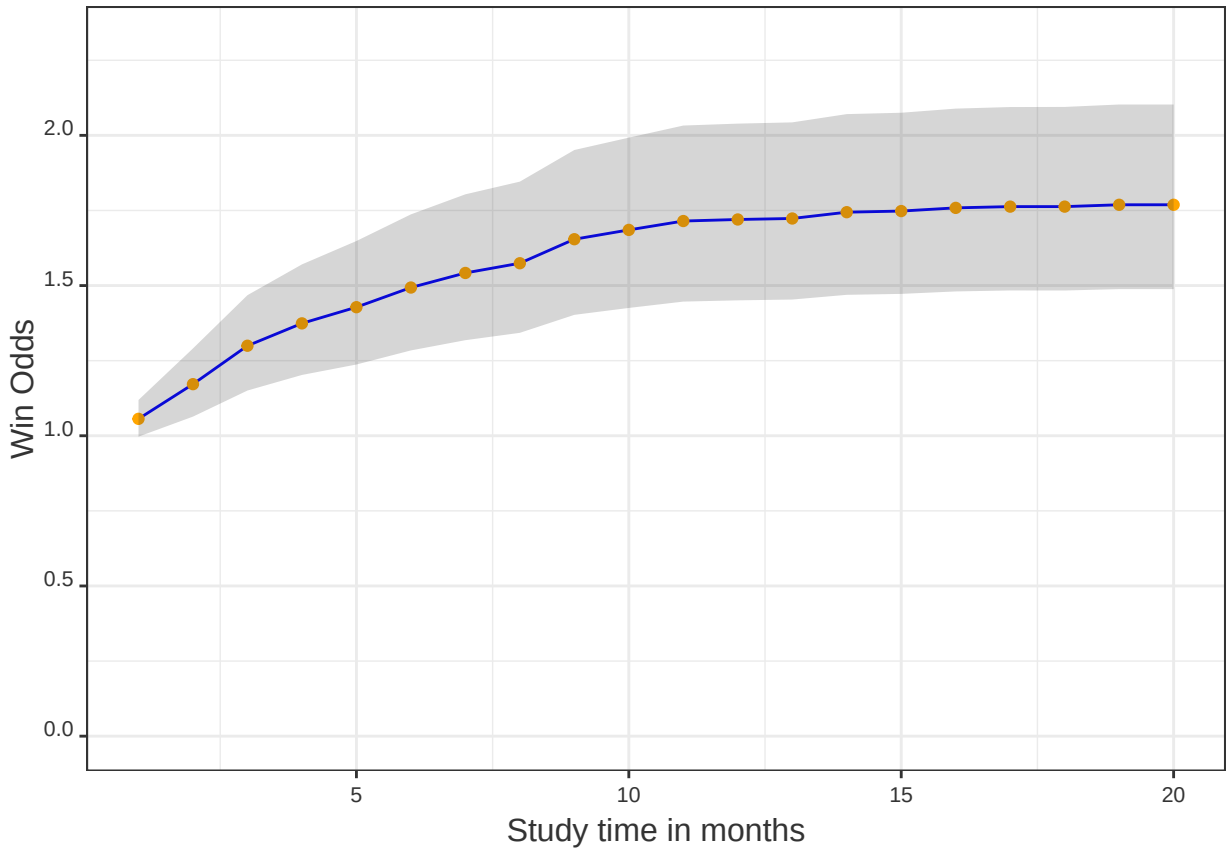



```
## $statistic
## [1] "WR"
##
## $values
```

```
##    time win_stat lower_ci  upper_ci
## 1     1 3.946237 1.124963 13.842931
## 2     2 4.019084 1.926191  8.385998
## 3     3 4.257500 2.385171  7.599584
## 4     4 4.256198 2.518304  7.193423
## 5     5 3.767661 2.349296  6.042349
## 6     6 3.674324 2.374089  5.686670
## 7     7 3.606357 2.378643  5.467744
## 8     8 3.691194 2.451401  5.558012
## 9     9 3.906840 2.627219  5.809715
## 10   10 4.016548 2.707264  5.959027
## 11   11 3.965090 2.696159  5.831236
## 12   12 3.840129 2.633162  5.600334
## 13   13 3.792850 2.610265  5.511207
## 14   14 3.822060 2.639203  5.535059
## 15   15 3.788934 2.624449  5.470109
## 16   16 3.797558 2.636019  5.470920
## 17   17 3.763764 2.620382  5.406051
## 18   18 3.750000 2.611836  5.384144
## 19   19 3.765936 2.624182  5.404457
## 20   20 3.765936 2.624182  5.404457
```

```
## Saving 6.5 x 4.5 in image
```

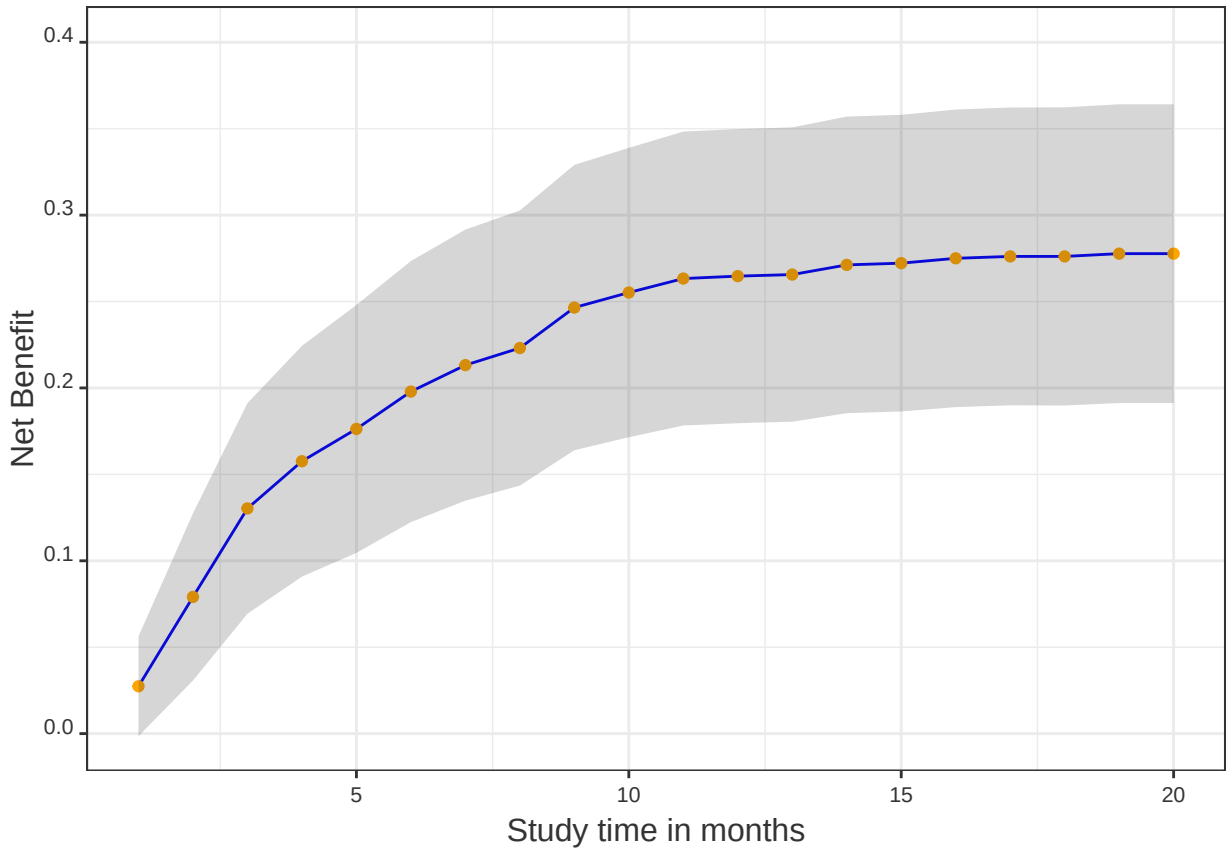
```
## Warning in stat_t.plot(data = data, Ctime = 1:20, arm.name = c("T", "C"), : The
## study entry time is missing, by default zero will be assigned to all subjects.
```



```
## $statistic
## [1] "WO"
##
## $values
##    time win_stat  lower_ci upper_ci
## 1     1 1.056344 0.9970874 1.119122
## 2     2 1.171788 1.0637620 1.290785
## 3     3 1.299644 1.1505497 1.468058
## 4     4 1.374169 1.2024275 1.570440
## 5     5 1.428068 1.2372283 1.648345
## 6     6 1.493455 1.2840488 1.737011
## 7     7 1.541942 1.3181518 1.803727
## 8     8 1.574334 1.3426687 1.845971
## 9     9 1.654280 1.4024999 1.951260
## 10   10 1.685285 1.4254896 1.992427
## 11   11 1.714809 1.4466442 2.032684
## 12   12 1.719978 1.4507815 2.039125
## 13   13 1.723312 1.4534365 2.043297
## 14   14 1.744237 1.4691947 2.070769
## 15   15 1.748008 1.4723223 2.075314
## 16   16 1.758621 1.4804619 2.089042
## 17   17 1.762813 1.4837719 2.094330
## 18   18 1.762813 1.4835156 2.094692
## 19   19 1.768933 1.4881429 2.102703
## 20   20 1.768933 1.4881429 2.102703

## Saving 6.5 x 4.5 in image

## Warning in stat_t.plot(data = data, Ctime = 1:20, arm.name = c("T", "C"), : The
## study entry time is missing, by default zero will be assigned to all subjects.
```




```
## $statistic
## [1] "NB"
##
## $values
##    time win_stat     lower_ci   upper_ci
## 1     1   0.0274 -0.001465283 0.05626528
## 2     2   0.0791  0.030740260 0.12745974
## 3     3   0.1303  0.069374895 0.19122510
## 4     4   0.1576  0.090846619 0.22435338
## 5     5   0.1763  0.104575395 0.24802460
## 6     6   0.1979  0.122363117 0.27343688
## 7     7   0.2132  0.134793941 0.29160606
## 8     8   0.2231  0.143513463 0.30268654
## 9     9   0.2465  0.163945190 0.32905481
## 10   10   0.2552  0.171490435 0.33890956
## 11   11   0.2633  0.178272335 0.34832767
## 12   12   0.2647  0.179595381 0.34980462
## 13   13   0.2656  0.180441508 0.35075849
## 14   14   0.2712  0.185398593 0.35700141
## 15   15   0.2722  0.186382148 0.35801785
## 16   16   0.2750  0.188912168 0.36108783
## 17   17   0.2761  0.189938436 0.36226156
## 18   18   0.2761  0.189852040 0.36234796
## 19   19   0.2777  0.191276333 0.36412367
## 20   20   0.2777  0.191276333 0.36412367
```

```
## Saving 6.5 x 4.5 in image
```