Kaplan-Meier

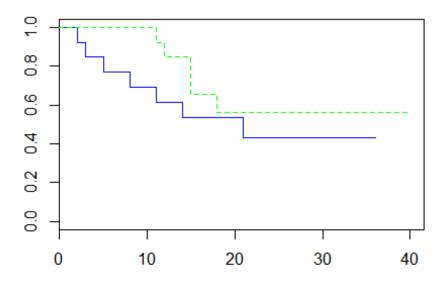
필요한 라이브러리 및 함수 등록

자료 입력 및 관찰

```
library(survival)
survivaldata = read.csv("7 ovrian cancer survival data.csv")
attach(survivaldata)
survivaldata[(1:20),]
##
      id treatment month death age residual condition
                                                             time
## 1
                         2
                                   72
                                              2
                                                               59
       1
                  1
                                1
## 2
       2
                  1
                         3
                                1
                                   74
                                              2
                                                         1
                                                              115
## 3
       3
                  1
                         5
                                1
                                   66
                                              2
                                                         2
                                                              156
## 4
       4
                  2
                        14
                                0
                                   53
                                              2
                                                         1
                                                              421
## 5
       5
                  1
                        14
                                1
                                  50
                                              2
                                                         1
                                                              431
                                                         2
                  1
                                              1
                                                              448
## 6
       6
                        14
                                0
                                   56
                  2
                                              2
                                                         2
## 7
       7
                        15
                                1
                                   57
                                                              464
       8
                  2
                        15
                                              2
                                                         2
                                                              475
## 8
                                1
                                   60
       9
                  1
                                              2
                                                         1
                                                              477
## 9
                        15
                                0
                                  64
## 10 10
                  2
                        18
                                1
                                  55
                                              1
                                                         2
                                                              563
                                              1
                                                         2
## 11 11
                  1
                        21
                                1
                                  57
                                                              638
## 12 12
                  2
                        24
                                0
                                   50
                                              1
                                                         1
                                                              744
                  2
                                              2
                                                         2
## 13 13
                        25
                                0
                                   60
                                                              769
                  2
                        25
                                              2
                                                         1
## 14 14
                                0 57
                                                              770
                                   39
## 15 15
                  1
                        26
                                0
                                              1
                                                         1
                                                              803
                  1
                        28
                                0
                                  43
                                              1
                                                         2
                                                              855
## 16 16
## 17 17
                  1
                        34
                                0
                                   39
                                              2
                                                         2 1,040
## 18 18
                  1
                                0
                                   45
                                              1
                        36
                                                         1 1,106
## 19 19
                  2
                        37
                                0
                                   54
                                              1
                                                         1 1,129
## 20 20
                  2
                        40
                                              2
                                   44
                                                         1 1,206
```

Kaplan-Meier 생존분석 수행

```
result = survfit(Surv(month, death == 1) ~ treatment)
plot(result, lty = 1:2, col = c("blue", "green"))
```



로그순위법 수행

```
survdiff((Surv(month, death == 1) ~ treatment))
## Call:
## survdiff(formula = (Surv(month, death == 1) ~ treatment))
##
                N Observed Expected (0-E)^2/E (0-E)^2/V
##
## treatment=1 13
                         7
                               5.21
                                        0.617
                                                    1.12
                         5
## treatment=2 13
                               6.79
                                        0.473
                                                    1.12
##
  Chisq= 1.1 on 1 degrees of freedom, p= 0.291
detach(survivaldata)
```