

PROPORTIONAL HAZARDS REGRESSION MODEL

RESULTS

```
resul0<-coxph(Surv(time,status)~x1+x2+x3+x4,datatm)

summary(resul0)

Call:
coxph(formula = Surv(time, status) ~ x1 + x2 + x3 + x4,
data = datatm)

n= 400, number of events= 298

      coef exp(coef)  se(coef)      z Pr(>|z| )
x1  0.08659  1.09045  0.12773  0.678  0.49782
x2  0.29946  1.34913  0.12048  2.486  0.01294 *
x3  1.63301  5.11924  0.12866 12.692 < 2e-16 ***
x4 -0.37200  0.68936  0.11728 -3.172  0.00151 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1
' 1

      exp(coef) exp(-coef) lower .95 upper .95
x1     1.0904     0.9171    0.8490    1.4006
x2     1.3491     0.7412    1.0654    1.7085
x3     5.1192     0.1953    3.9782    6.5875
x4     0.6894     1.4506    0.5478    0.8675

Concordance= 0.728  (se = 0.018 )
Rsquare= 0.385  (max possible= 1 )
Likelihood ratio test= 194.6 on 4 df,   p=0
Wald test           = 181.9 on 4 df,   p=0
Score (logrank) test = 213.9 on 4 df,   p=0

# here we test the proportional hazards assumption for a
Cox regression model

time.test<- cox.zph(resul0)

print(time.test)
      rho chisq      p
x1     0.0369 0.400 0.5272
x2    -0.0559 0.898 0.3432
x3    -0.1026 2.953 0.0857
x4     0.0723 1.565 0.2109
GLOBAL      NA 5.955 0.2025
```