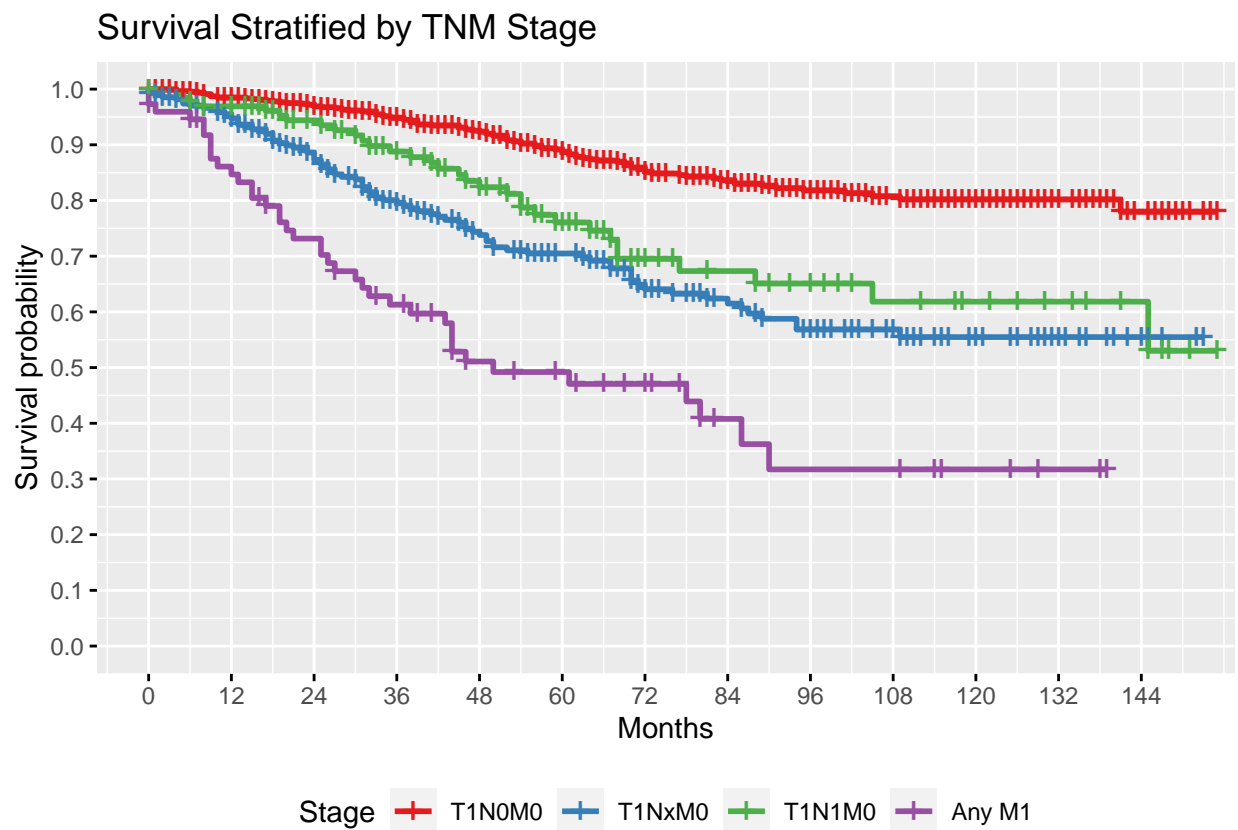


# Survival Outcomes of Early-Stage High Grade Serous Ovarian Cancer Using the SEER Cancer Database

Kevin Kremer

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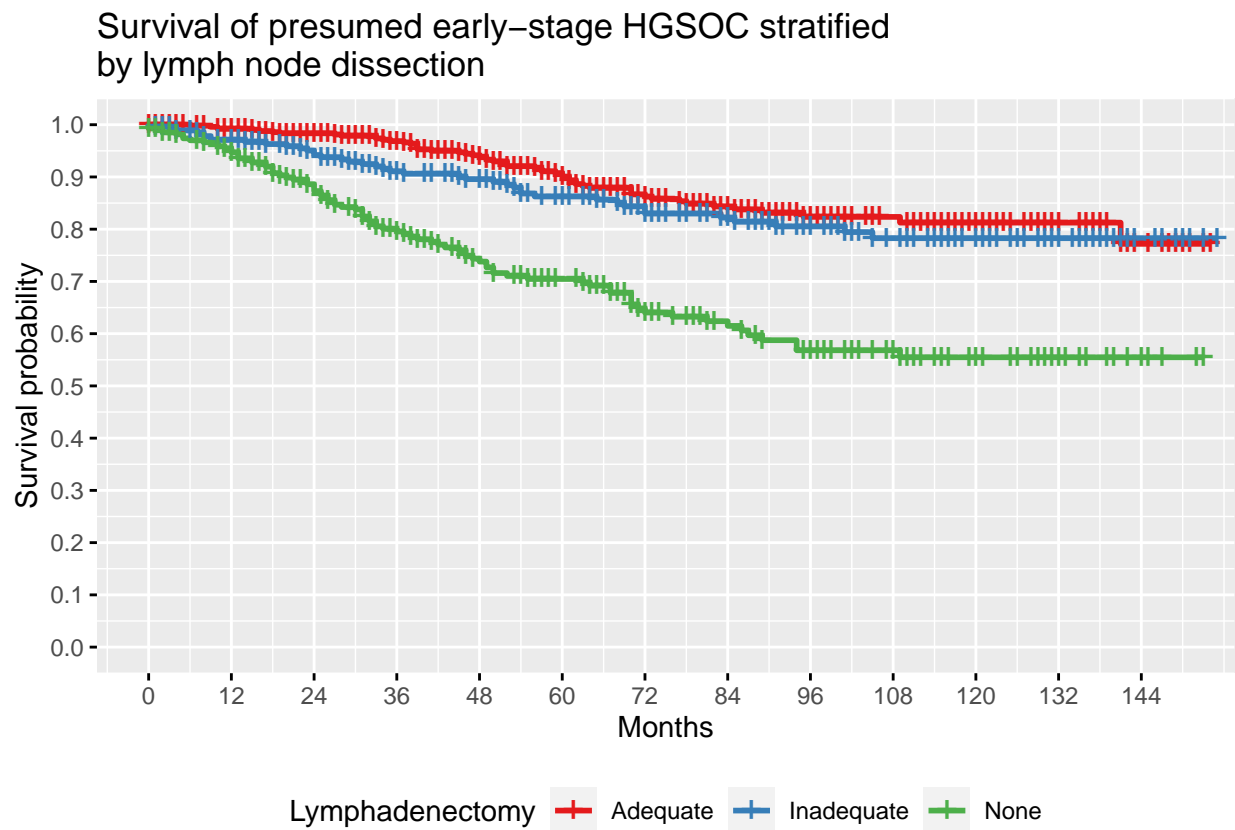
OS based on stage



```
##
## Pairwise comparisons using Log-Rank test
##
## data: HGS and TNM.Stage
##
##      T1N0M0  T1NxM0  T1N1M0
## T1NxM0 1.2e-13 -      -
## T1N1M0 7.8e-05 0.16627 -
```

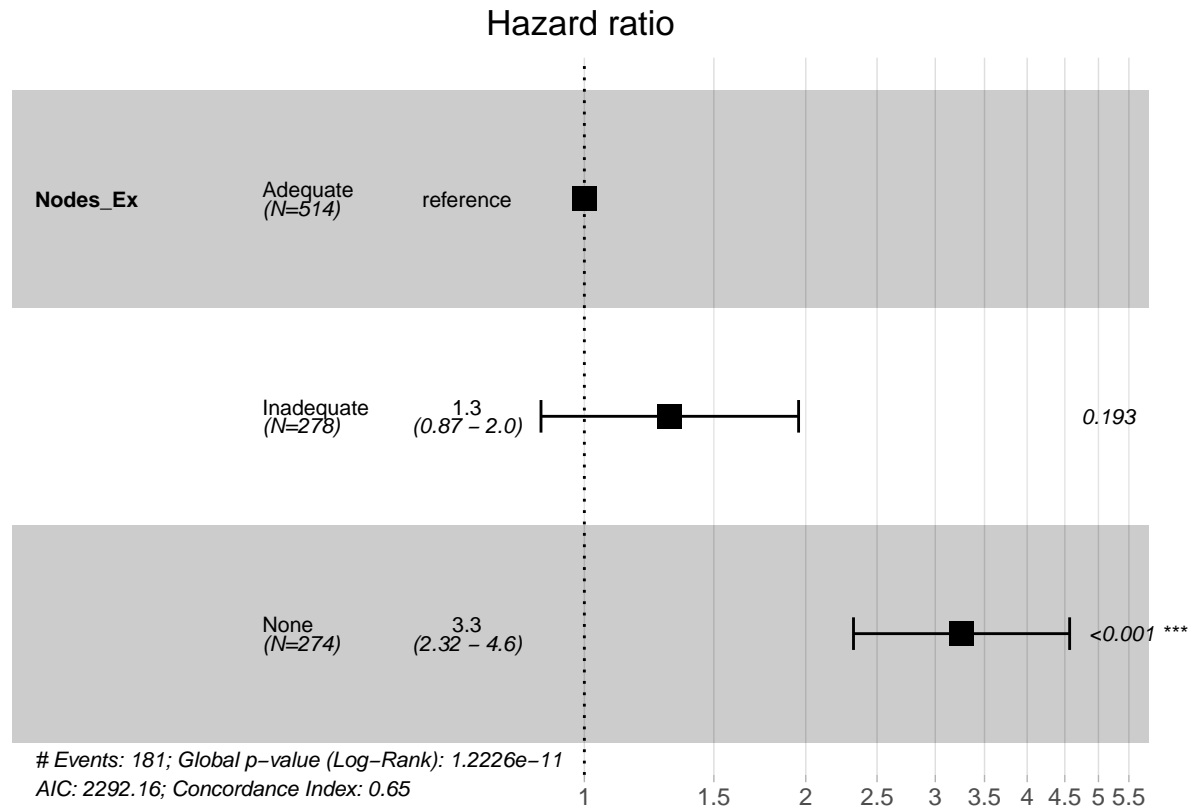
```
## Any M1 < 2e-16 0.00019 1.6e-05
##
## P value adjustment method: BH
```

For presumed early-stage HGSOc, does adequacy of LN evaluation matter?



```
##
## Pairwise comparisons using Log-Rank test
##
## data:  HGS.ES and Nodes_Ex
##
##           Adequate Inadequate
## Inadequate 0.2      -
## None      1.1e-12  1.9e-06
##
## P value adjustment method: BH
```

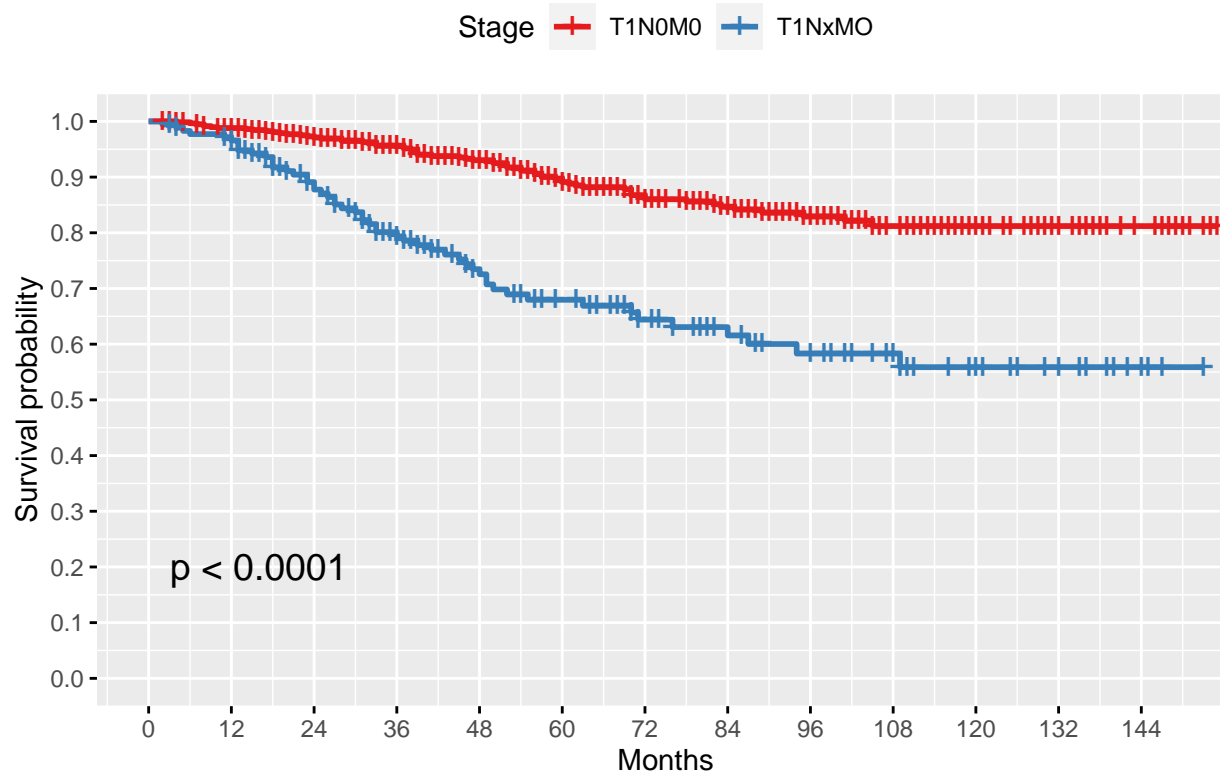
| Lymphadenectomy | Count |
|-----------------|-------|
| Adequate        | 514   |
| Inadequate      | 278   |
| None            | 274   |



```
## Call:
## coxph(formula = Surv(SurvMonths, COD) ~ Nodes_Ex, data = HGS.ES)
##
## n= 1066, number of events= 181
##
##              coef exp(coef) se(coef)      z Pr(>|z|)
## Nodes_ExInadequate 0.2675    1.3067  0.2057  1.300    0.193
## Nodes_ExNone       1.1809    3.2574  0.1726  6.841 7.85e-12 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##              exp(coef) exp(-coef) lower .95 upper .95
## Nodes_ExInadequate    1.307    0.7653    0.8731    1.956
## Nodes_ExNone          3.257    0.3070    2.3224    4.569
##
## Concordance= 0.652 (se = 0.02 )
## Likelihood ratio test= 50.25 on 2 df,  p=1e-11
## Wald test               = 52.95 on 2 df,  p=3e-12
## Score (logrank) test = 58.48 on 2 df,  p=2e-13
```

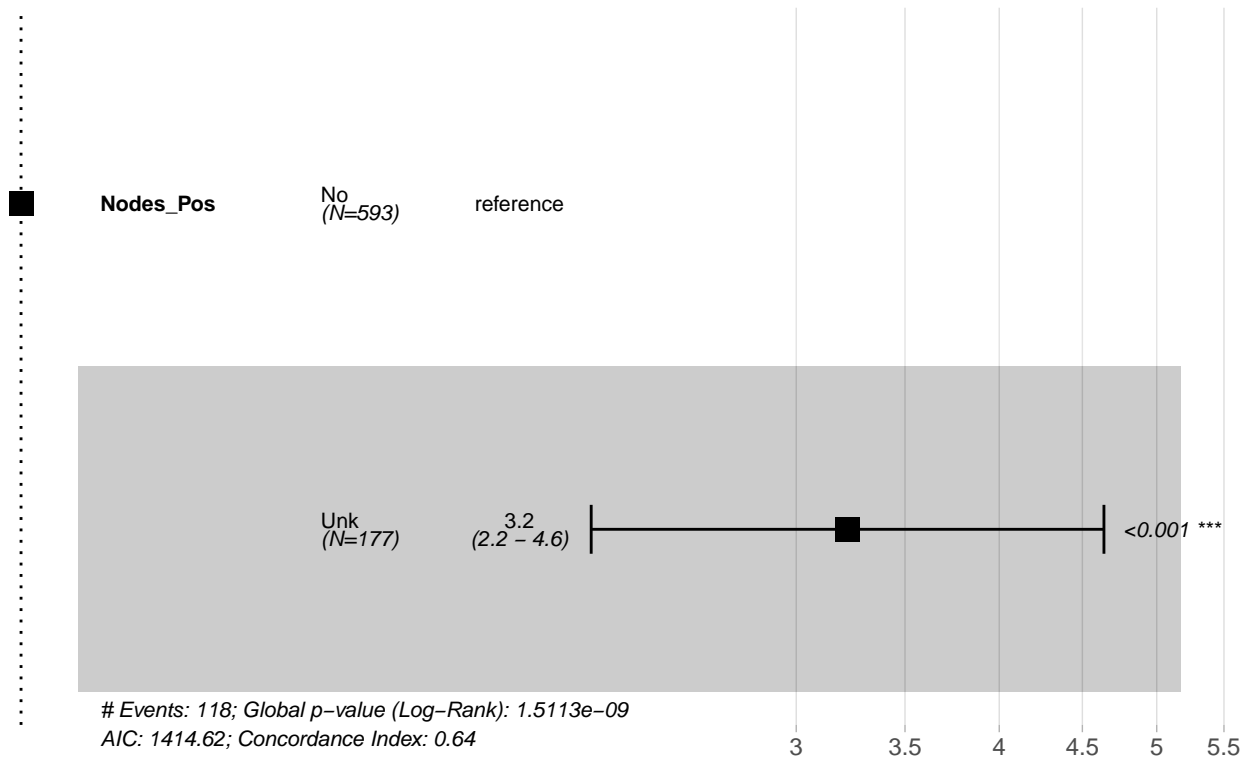
In patient's without LND, does adding chemo change their survival?

Survival of presumed early-stage HGSOc with chemotherapy



| Positive Nodes | Count |
|----------------|-------|
| No             | 593   |
| Unk            | 177   |

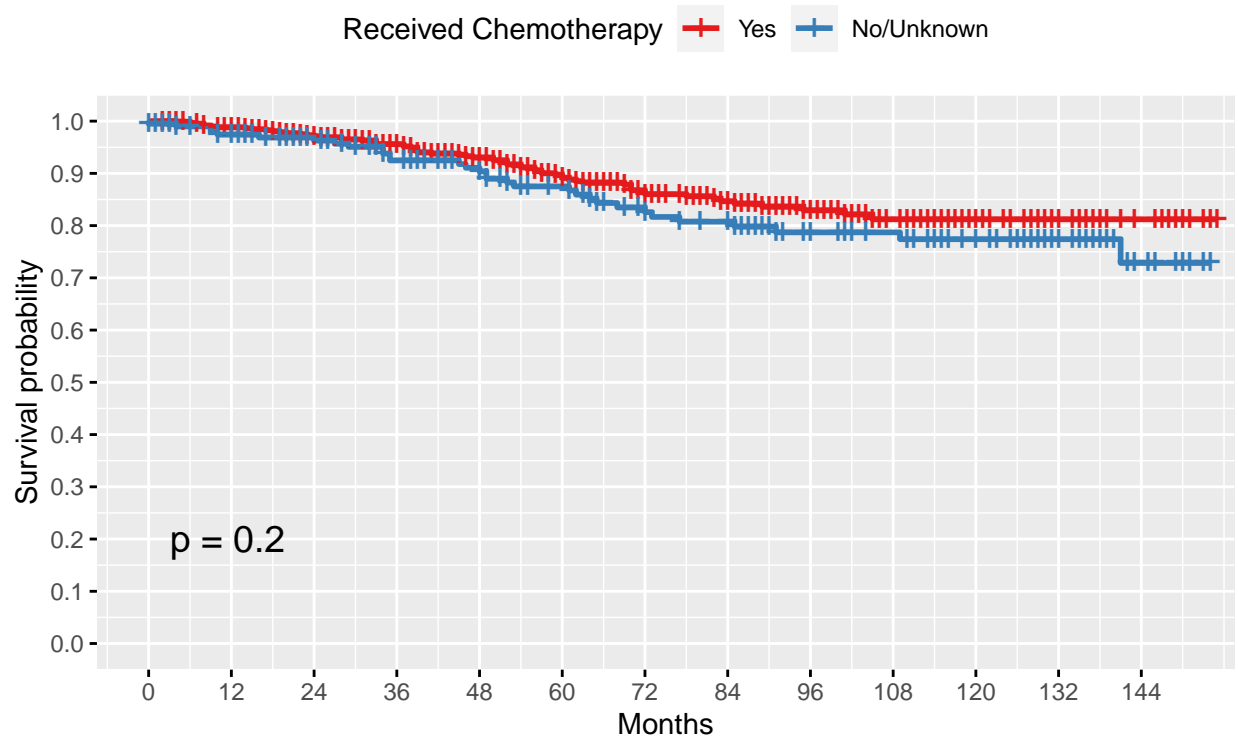
## Hazard ratio



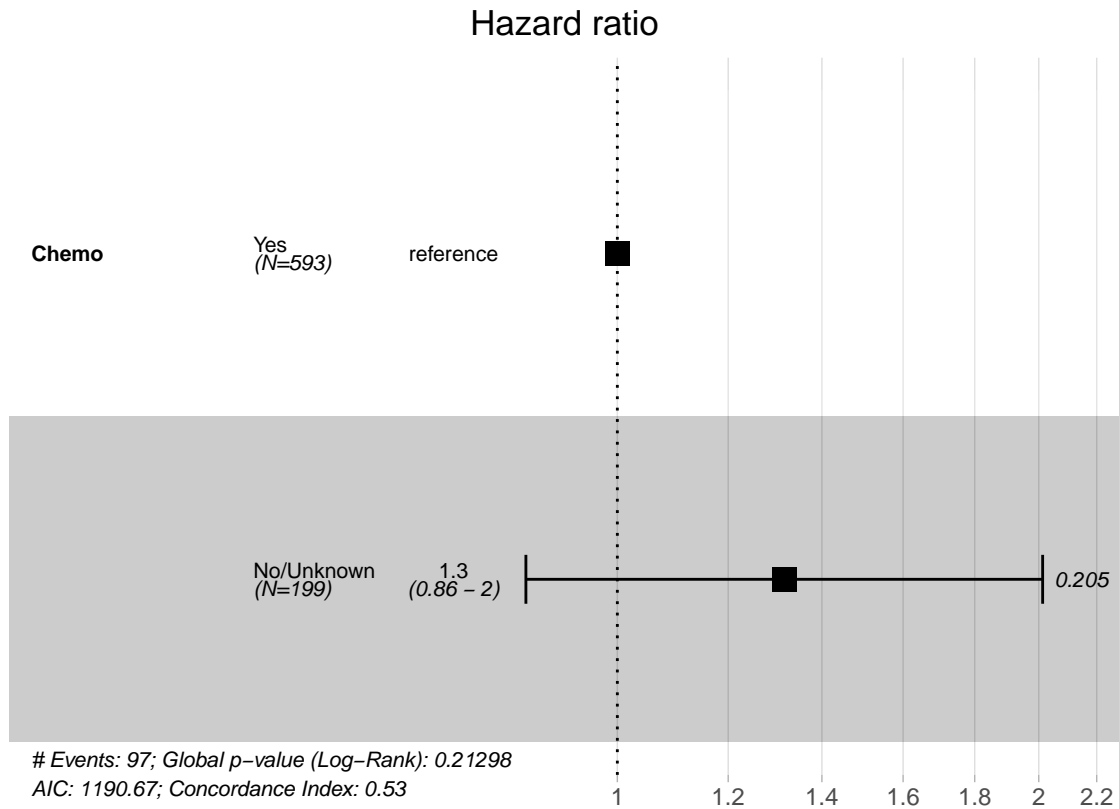
```
## Call:
## coxph(formula = Surv(SurvMonths, COD) ~ Nodes_Pos, data = HGS.ES.chemo)
##
## n= 770, number of events= 118
##
##              coef exp(coef) se(coef)      z Pr(>|z|)
## Nodes_PosUnk 1.1713    3.2263  0.1854  6.319 2.63e-10 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##              exp(coef) exp(-coef) lower .95 upper .95
## Nodes_PosUnk    3.226      0.31    2.243    4.64
##
## Concordance= 0.639 (se = 0.024 )
## Likelihood ratio test= 36.52 on 1 df,  p=2e-09
## Wald test            = 39.93 on 1 df,  p=3e-10
## Score (logrank) test = 44.67 on 1 df,  p=2e-11
```

## Survival difference between N0 patients with and without chemotherapy

Survival of T1N0M0 patients stratified by receipt of chemotherapy



| Received Chemotherapy | Count |
|-----------------------|-------|
| Yes                   | 593   |
| No/Unknown            | 199   |



```
## Call:
## coxph(formula = Surv(SurvMonths, COD) ~ Chemo, data = HGS.NO)
##
##      n= 792, number of events= 97
##
##              coef exp(coef) se(coef)      z Pr(>|z|)
## ChemoNo/Unknown 0.2746    1.3160  0.2168 1.266   0.205
##
##              exp(coef) exp(-coef) lower .95 upper .95
## ChemoNo/Unknown    1.316    0.7599  0.8603    2.013
##
## Concordance= 0.53 (se = 0.025 )
## Likelihood ratio test= 1.55 on 1 df,  p=0.2
## Wald test               = 1.6 on 1 df,  p=0.2
## Score (logrank) test = 1.61 on 1 df,  p=0.2
```