# Oropharynx\_p\_values

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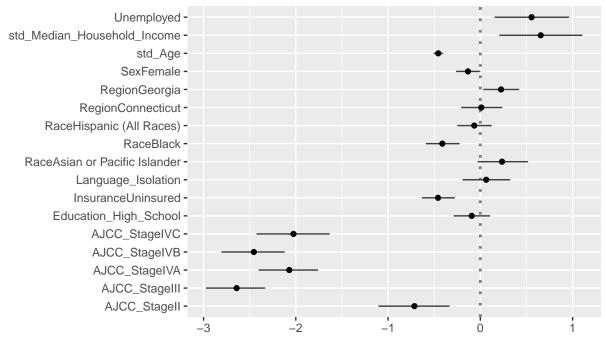
# 1/27/2022

### Regression - Standard Therapy

```
##
## Call:
  glm(formula = Standard_Therapy ~ AJCC_Stage + Sex + Region +
       Race + std_Age + Insurance + Education_High_School + Unemployed +
##
       std_Median_Household_Income + Language_Isolation, family = binomial(link = "logit"),
##
##
       data = oropharynx)
##
## Deviance Residuals:
##
       Min
                 1Q
                      Median
                                   3Q
                                           Max
   -3.2573
             0.2112
                      0.4023
                               0.5315
                                        1.4396
##
## Coefficients:
##
                                 Estimate Std. Error z value Pr(>|z|)
## (Intercept)
                                 -3.25573
                                             2.67326 -1.218 0.223268
## AJCC StageII
                                 -0.71420
                                             0.19450
                                                      -3.672 0.000241 ***
## AJCC_StageIII
                                 -2.64131
                                             0.16173 -16.331 < 2e-16 ***
## AJCC_StageIVA
                                 -2.07044
                                             0.16223 -12.762
## AJCC_StageIVB
                                 -2.45458
                                             0.17308 -14.182
                                                              < 2e-16 ***
                                 -2.02495
## AJCC_StageIVC
                                             0.19999 -10.125
                                                              < 2e-16 ***
                                             0.06533 -2.050 0.040371 *
## SexFemale
                                 -0.13392
## RegionGeorgia
                                  0.22455
                                             0.09764
                                                        2.300 0.021455 *
## RegionConnecticut
                                  0.01100
                                             0.11221
                                                        0.098 0.921902
## RaceBlack
                                 -0.41163
                                             0.09193
                                                      -4.478 7.55e-06 ***
## RaceAsian or Pacific Islander 0.23526
                                             0.13767
                                                        1.709 0.087486
## RaceHispanic (All Races)
                                 -0.06564
                                             0.09298
                                                      -0.706 0.480174
## std_Age
                                 -0.45591
                                             0.02500 -18.239 < 2e-16 ***
## InsuranceUninsured
                                 -0.45824
                                             0.08982
                                                      -5.101 3.37e-07 ***
## Education_High_School
                                 -0.09346
                                             0.09900
                                                      -0.944 0.345186
## Unemployed
                                             0.20455
                                                        2.717 0.006584 **
                                  0.55579
## std Median Household Income
                                  0.65512
                                             0.22818
                                                        2.871 0.004090 **
## Language_Isolation
                                  0.06373
                                             0.13096
                                                       0.487 0.626519
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
   (Dispersion parameter for binomial family taken to be 1)
##
       Null deviance: 10312.9
                               on 15023 degrees of freedom
## Residual deviance: 9281.3
                               on 15006 degrees of freedom
## AIC: 9317.3
##
```

#### ## Number of Fisher Scoring iterations: 6

# Regression – Standard Therapy



### Regression - Survival

```
##
## Call:
## glm(formula = Vital_Status ~ AJCC_Stage + Sex + Region + Race +
       std_Age + Insurance + Standard_Therapy + Education_High_School +
##
##
       Unemployed + std_Median_Household_Income + Language_Isolation,
##
       family = binomial, data = oropharynx)
##
## Deviance Residuals:
##
       Min
                 10
                      Median
                                   30
                                           Max
                      0.6276
##
  -2.5947
           -1.0024
                               0.8259
                                         2.4219
##
## Coefficients:
##
                                  Estimate Std. Error z value Pr(>|z|)
## (Intercept)
                                 -7.946383
                                              1.873553 -4.241 2.22e-05 ***
## AJCC_StageII
                                 -0.451589
                                              0.071296
                                                       -6.334 2.39e-10 ***
## AJCC_StageIII
                                 -0.063830
                                              0.066371
                                                        -0.962 0.336193
## AJCC_StageIVA
                                 -0.305894
                                              0.061512
                                                       -4.973 6.59e-07 ***
## AJCC_StageIVB
                                 -1.226920
                                              0.079530 -15.427 < 2e-16 ***
## AJCC_StageIVC
                                 -2.515955
                                              0.123896 -20.307 < 2e-16 ***
## SexFemale
                                 -0.149545
                                              0.044884
                                                       -3.332 0.000863 ***
                                                         1.625 0.104067
## RegionGeorgia
                                  0.109174
                                              0.067165
## RegionConnecticut
                                 -0.006648
                                              0.076209 -0.087 0.930485
## RaceBlack
                                 -0.698853
                                              0.068936 -10.138 < 2e-16 ***
## RaceAsian or Pacific Islander -0.116553
                                              0.084928 -1.372 0.169945
## RaceHispanic (All Races)
                                 -0.233814
                                             0.064104 -3.647 0.000265 ***
```

```
## std_Age
                                 -0.425031
                                            0.017377 -24.460 < 2e-16 ***
## InsuranceUninsured
                                 -0.929135
                                            0.057785 -16.079 < 2e-16 ***
## Standard TherapyStandard
                                 0.917601
                                            0.059168
                                                      15.508 < 2e-16 ***
## Education_High_School
                                                      -0.879 0.379669
                                 -0.061368
                                            0.069855
## Unemployed
                                  0.207099
                                            0.144191
                                                       1.436 0.150921
                                                       4.786 1.70e-06 ***
## std_Median_Household_Income
                                  0.765732
                                            0.159986
## Language_Isolation
                                 -0.045389
                                            0.091394 -0.497 0.619454
##
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
##
   (Dispersion parameter for binomial family taken to be 1)
##
       Null deviance: 19203
                            on 15023 degrees of freedom
##
## Residual deviance: 16731
                            on 15005 degrees of freedom
  AIC: 16769
##
## Number of Fisher Scoring iterations: 4
```

# Regression - Survival

