**ADA Homework 11**

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Problem Set (Due Dec 5, 2014)

Consider the Mayo Clinic Lung Cancer Data in R package survival : data(lung) or data(cancer): including the variables

inst: Institution code

time: Survival time in days

status:censoring status 1=censored, 2=dead

age: Age in years

sex: Male=1 Female=2 ,  etc.

Define ‘AGE GROUP’ as ‘YOUNG” if ‘age < 65”, and OLD, otherwise.

1. Using a Cox proportional hazards model, estimate the hazard rate for old relative to young

2. Assess the validity of the proportional hazards assumption in (1)

3. Repeat 1, adjusting “Sex”.