A Few Tips for the Data Analysis Project

a) **Treatment Effects on Recurrence and Survival**

Kaplan-Meier plots

Log rank tests

Cox models: assessing PH

b) **Natural History Model**

Selection of relevant data set

Univariate analysis

Stepwise selection of variables

- $p = 0.01$ or 0.05 for selection criterion

- may include log and squared transformations, and interactions

Model checking

- functional forms of covariates: martingale residuals

- PH: score process

- influence points: score residuals

Model validation
Prediction