

Survival Exam

Survival Probabilities, Failure Probabilities, Hazard Rate, Hazard Probability

Right, Left, Interval censoring

How the response variable is specified in a Survival analysis

What we mean by "Tenure"

Calculate K-M Survival probability

Properties of a survival curve

Calculate hazard probability

Type I and Type II censoring

What is meant by a risk set

MTTF

Half-life

Logrank test (hypotheses and conclusions)

Wilcoxon test (how is this different than Logrank test)

Cumulative hazard function

AFT model (what is being modeled; how to interpret coefficients; distributions)

How to check assumption of correct distribution

Interpret statistical test for distributions (nested distributions)

With AFT's, we can get survival curves for every individual in study (and predict whole survival curves for new observations)

Cox PH models

What is being modeled

What do we mean by proportional hazards

Baseline hazard not estimated

Relationship between PH models and AFT Weibull

Interpret coefficients from model

Concordant, discordant, incomparable

Test assumption for PH; test assumption for linearity

Time dependent coefficient

Time dependent variable

Competing Risk

Cause-specific hazard

Cumulative Incidence Function (Fine-Gray model)

Repeated Events

Andersen-Gill model

Marginal means model

Stratified models