Absolute Risk: Methods and Applications in Clinical Management and Public Health

Course Schedule

1. Introduction 9:00-9:45am
   a. Topics in course; define absolute risk; types of models; types of data for estimating absolute risk; counseling; public health applications
2. Survival analysis and competing risks without covariates 9:45-10:30am
   a. Survival ideas including hazard, Kaplan Meyer; time scale
   b. Define cause-specific hazard and absolute risk without covariates
   c. Gaynor formula
3. Break 10:30-11:00am
4. Estimating absolute risk from cohorts 11:00-11:30am
   a. Fine Gray
   b. Cause-specific models
   c. Nested cc and case-cohort
5. Estimation by combining cohort or case-control data with registry data 11:30am-12:00pm
6. Lunch 12:00-1:00pm
7. Software for model building 1:00-1:30pm
8. Criteria for evaluation 1:30-2:30pm
   a. Calibration
   b. Accuracy
   c. AUC
   d. PCF/PNF
   e. Loss
9. Comparing two models 2:30-3:15pm
10. Break 3:15-3:45pm
11. Applications 3:45-4:45pm
    a. Counseling
    b. Public health
    c. How good do models need to be: implications for prevention
12. Questions/review or special topic (family studies) 4:45-5:30pm