Yale SCHOOL OF PUBLIC HEALTH
Biostatistics

Rank-based and risk-based measures to evaluate biomarkers as predictors of incident cases and connection to information theory

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ABSTRACT

In many biomedical applications a primary goal is to predict incident or future cases and appropriate descriptive measures that characterize predictive potential or incremental value are needed. We first review non-parametric methods proposed for incident time-dependent accuracy (Zheng and Heagerty, 2005; Saha and Heagerty, 2013) and then overview extensions of integrated discrimination index (IDI) that are appropriate for hazard models (Liang and Heagerty, 2017). New methods are connected to information theory based criteria for model choice. Non-parametric estimation is outlined and application to benchmark data sets is presented to illustrate the methodology.

12:00 Noon, **Tuesday, October 22, 2019**
47 College Street, Room 106B
11:45 AM - Lunch served outside Room 106B