A Modified Partial Likelihood Score Method for Cox Regression with Covariate Error Under the Internal Validation Design

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ABSTRACT
We develop a new method for covariate error correction in the Cox survival regression model, given a modest sample of internal validation data. Unlike most previous methods for this setting, our method can handle covariate error of arbitrary form. Asymptotic properties of the estimator are derived. In a simulation study, the method was found to perform very well in terms of bias reduction and confidence interval coverage. The method is applied to data from Health Professionals Follow-Up Study (HPFS) on the effect of diet on the incidence of Type 2 diabetes.

12:00 Noon, Thursday, September 27, 2018
60 College Street, LEPH 103
11:45 AM - Lunch