

Department Seminars



Estimating Treatment Difference for Binary Responses in the Presence of Surrogate End-Points

Atanu Biswas, PhD
Applied Statistics Unit
Indian Statistical Institute

Abstract:

Surrogate end-point is chosen as a measure or indicator of a biological process that is obtained sooner, at less cost or less invasive way than a true end-point of health outcome, and is used to make conclusions about the effect of intervention on the true end-point. Following the seminal work of Prentice (1989), lots of validation conditions have been recommended by different authors, and several questions have been raised about the validity of these validation criteria. Following the work of Begg and Leung (2000), we introduce a new motivation to analyze the surrogate and true end-points together to have a better estimate of the treatment difference where both the end-points are binary. Several estimators are studied and compared. Some real data sets are analyzed.

Joint work with Buddhananda Banerjee, Indian Statistical Institute

Keywords: delayed response, Prentice criterion, surrogate end-point, treatment difference, true end-point.

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12:00-1:00 p.m.