Meta–analysis of Survival Curves

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3:00–4:00pm, New PI 6th Floor Multipurpose Room (6602)

Light refreshments provided

Abstract

The increasing demand for timely, yet evidence-based decisions in health care and public health, synthesis of evidence or meta-analysis, has gained popularity over the last decade. While there are numerous methods/models for performing meta-analysis on various types of outcomes, in this talk I will focus on meta-analysis of survival outcomes. For survival outcomes (e.g. time to event) the standard method employed in meta-analysis studies involves combining log-hazard ratios in a linear, fixed or random effects, model. However, such methods are not suitable for meta-analysis of multiple time-dependent survival estimates (generally, survival curves). I will present the conceptual basis of meta-analysis of survival curves and propose some extensions to existing methods. Two real data applications will also be presented: the first obtains data from registries regarding orthopedic surgeries, and the second would be a conceptual application to the treatment of depression. Results from a few simulation studies will also be presented.

Biographical Note

Samprit Banerjee is an Assistant Professor in the Division of Biostatistics and Epidemiology of the Department of Healthcare Policy and Research in the Weill Medical College of Cornell University, New York. He is also an Adjunct Assistant Professor in the Department of Statistical Science of Cornell University at Ithaca, NY. His research interests in statistical methodology involves multivariate statistics and high dimensional data analysis especially estimation of covariance matrices in high dimensions. In the applied sphere, his research interests lie in the fields of geriatric psychiatry and comparative effectiveness research.

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[1] The PI Biostatistics Seminar Series is held on Tuesdays at New York State Psychiatric Institute. If you are interested in receiving regular announcements for our seminars in the future, or if you need further information, please contact Jina James (jamesji@nyspi.columbia.edu, (646) 774-7929).