

Division of Biostatistics, IHE
Medical College of Wisconsin presents

Statistical methods for multivariate survival and competing risks data in case-cohort design

By: Soyoung Kim, PhD

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Tuesday, April 5th | 3:30PM - 4:30PM

Multivariate survival time data arise when each subject may experience several types of events. In multivariate survival data, multiple occurrences for each subject can be observed. Unlike multivariate survival data, only one occurrence of failure can be observed in competing risks data because it hinders the occurrence of failure from the other causes. The traditional case-cohort study design is widely used to reduce cost when collecting expensive covariates in large cohort studies with survival or competing risks outcomes. A case-cohort study dataset consists of two parts: a random sample and all cases or failures from a specific cause of interest. In this talk, we introduce the proposed statistical methods for both multivariate survival and competing risks data in the traditional case-cohort design. We extend the proposed methods to generalized case-cohort design by selecting a portion of all cases or failures. We show simulation studies and apply the proposed methods to real dataset.



Soyoung Kim, PhD
Associate Professor; Division of Biostatistics, MCW

Dr. Soyoung Kim joined the Division of Biostatistics in Fall 2015. Her research interests include survival analysis, causal inference, biomarker evaluation, missing data, case-cohort studies, and multivariate failure time. She is serving as PhD statistician of two working committees including Primary Immune Deficiency and Infection and Immune Reconstitution in Center for International Blood & Marrow Transplant Research.

Location: WebEx | <https://mcw.webex.com/mcw/j.php?MTID=m12d117d51ea0f6d0cd6dc0511781922a>

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