中央研究院 ACADEMIA SINICA 1928

統計科學研究所
INSTITUTE OF STATISTICAL SCIENCE

學　術　演　講

講　題：Factorial survival analysis for treatment effects under dependent censoring

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時　間：2024年3月20日(星期三)，10:30-12:00

地　點：統計所B1演講廳

Abstract

Factorial analyses offer a powerful nonparametric means to detect main or interaction effects among multiple treatments. For survival outcomes, for example, from clinical trials, such techniques can be adopted for comparing reasonable quantifications of treatment effects. The key difficulty to solve in survival analysis concerns the proper handling of censoring. So far, all existing factorial analyses for survival data have been developed under the independent censoring assumption, which is too strong for many applications. As a solution, the central aim of this article is to develop new methods for factorial survival analyses under quite general dependent censoring regimes. This will be accomplished by combining existing nonparametric methods for factorial survival analyses with techniques developed for survival copula models. As a result, we will present an appealing F-test that exhibits sound performance in our simulation study. The new methods are illustrated in a real data analysis. We implement the proposed method in an R function surv.factorial(.) in the R package compound.Cox.

※ 茶　會：上午10：10。

※ 實體與線上視訊同步進行。