Handbook of survival analysis

Abstrak

This handbook focuses on the analysis of lifetime data arising from the biological and medical sciences. It deals with semiparametric and nonparametric methods. For investigators new to this field, the book provides an overview of the topic along with examples of the methods discussed. It presents both classical methods and modern Bayesian approaches to the analysis of data"--
"Preface This volume examines modern techniques and research problems in the analysis of life time data analysis. This area of statistics deals with time to event data which is complicated not only by the dynamic nature of events occurring in time but by censoring where some events are not observed directly but rather they are known to fall in some interval or range. Historically survival analysis is one of the oldest areas of statistics dating its origin to classic life table construction begun in the 1600's. Much of the early work in this area involved constructing better life tables and long tedious extensions of non-censored nonparametric estimators. Modern survival analysis began in the late 1980's with pioneering work by Odd Aalen on adapting classical Martingale theory to these more applied problems. Theory based on these counting process martingales made the development of techniques for censored and truncated data in most cases easier and opened the door to both Bayesian and classical statistics for a wide range of problems and applications. In this volume we present a series of papers which provide an introduction to the advances in survival analysis techniques in the past thirty years. These papers can serve four complimentary purposes. First, they provide an introduction to various areas in survival analysis for graduates students and other new researchers to this eld. Second, they provide a reference to more established investigators in this area of modern investigations into survival analysis. Third, with a bit of supplementation on counting process theory this volume is useful as a text for a second or advanced course in survival analysis. We have found that the instructor of such a course can pick and chose papers in areas he/she deem most useful to the