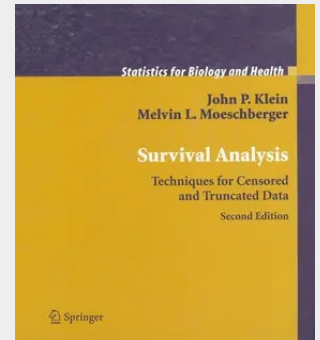


Survival Analysis

Techniques for Censored and Truncated Data

Applied statisticians in many fields must frequently analyze time to event data. While the statistical tools presented in this book are applicable to data from medicine, biology, public health, epidemiology, engineering, economics, and demography, the focus here is on applications of the techniques to biology and medicine. The analysis of survival experiments is complicated by issues of censoring, where an individual's life length is known to occur only in a certain period of time, and by truncation, where individuals enter the study only if they survive a sufficient length of time or individuals are included in the study only if the event has occurred by a given date. The use of counting process methodology has allowed for substantial advances in the statistical theory to account for censoring and truncation in survival experiments. This book makes these complex methods more accessible to applied researchers without an advanced mathematical background. The authors present the essence of these techniques, as well as classical techniques not based on counting processes, and apply them to data. Practical suggestions for implementing the various methods are set off in a series of Practical Notes at the end of each section. Technical details of the derivation of the techniques are sketched in a series of Technical Notes. This book will be useful for investigators who need to analyze censored or truncated life time data, and as a textbook for a graduate course in survival analysis. The prerequisite is a standard course in statistical methodology.

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