Clinical Trial Data Analysis Using R (Chapman Hall/CRC Biostatistics Series)

Ding-Geng (Din) Chen, Karl E. Peace
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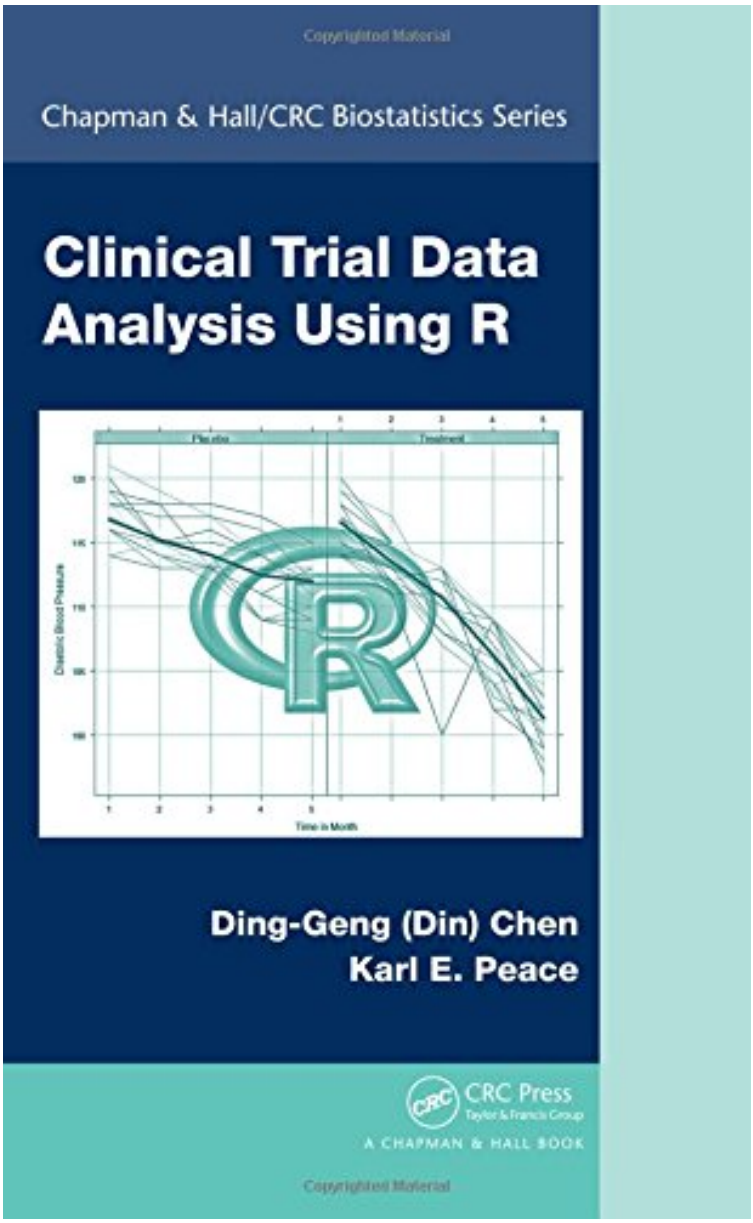

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Ding-Geng (Din) Chen, Karl E. Peace : Clinical Trial Data Analysis Using R (Chapman Hall/CRC Biostatistics Series) before purchasing it in order to gage whether or not it would be worth my time, and all praised Clinical Trial

Data Analysis Using R (Chapman Hall/CRC Biostatistics Series):

Too often in biostatistical research and clinical trials, a knowledge gap exists between developed statistical methods and the applications of these methods. Filling this gap, Clinical Trial Data Analysis Using R provides a thorough presentation of biostatistical analyses of clinical trial data and shows step by step how to implement the statistical methods using R. The books practical, detailed approach draws on the authors 30 years of real-world experience in biostatistical research and clinical development. Each chapter presents examples of clinical trials based on the authors actual experiences in clinical drug development. Various biostatistical methods for analyzing the data are then identified. The authors develop analysis code step by step using appropriate R packages and functions. This approach enables readers to gain an understanding of the analysis methods and R implementation so that they can use R to analyze their own clinical trial data. With step-by-step illustrations of R implementations, this book shows how to easily use R to simulate and analyze data from a clinical trial. It describes numerous up-to-date statistical methods and offers sound guidance on the processes involved in clinical trials.

"The book is well written and R-code is clearly commented in most cases. The chapters provide very useful material for practical clinical trial data analyses. For example, the chapter on sample size determination and power calculations is quite comprehensive. The results of the analyses are illustrated with excellent graphical presentations. Bootstrap and simulations are utilised extensively."Tapio Nummi, School of Health Sciences, University of Tampere, Finland, in International Statistical "[The book] is a good primer to the most commonly used methods and their utilisation in R this book can certainly stand on any biostatisticians shelf as a useful text. For the seasoned methodologist, it provides a helpful introduction to the R environment. For R proponents, it delivers a simple overview of the established clinical biostatistics methodology."Michael Grayling, PhD, Department of Applied Mathematics and Theoretical Physics, University of Cambridge "The overview of clinical trials is a short chapter, but concise and complete enough to make sense of the phases of clinical trials, their objectives and the statistical aspects of the protocol: plan of study, design considerations, statistical hypothesis, endpoints, methods of analysis and statistical monitoring procedures In summary, the book is very well written and includes an up-to-date, comprehensive and carefully selected topics for the analysis of clinical trials and their step-by-step implementation in R." Mizanur Khondoker, PhD, Department of Biostatistics, Institute of Psychiatry, Kings College London, UK, in Statistical Methods in Medical Research "The goal of this book, as stated by the authors, is to fill the knowledge gap that exists between developed statistical methods and the applications of these methods. Overall, this book achieves the goal successfully and does a nice job covering most, if not all, major aspects of clinical trial statistics. For those who are well versed in R, this book can serve as a good reference to the established clinical biostatistics methodology; for veteran biostatisticians, this book provides a gentle introduction to the use of R in clinical trial analysis. a great introductory book for clinical biostatistics with an emphasis on R implementations. I would highly recommend it The example-based approach is easy to follow and makes the book a very helpful desktop reference for many biostatistics methods."Journal of Statistical Software, Vol. 43, July 2011About the AuthorDing-Geng (Din) Chen is the Karl E. Peace Endowed Eminent Scholar Chair in Biostatistics and professor of biostatistics in the Jiann-Ping Hsu College of Public Health at Georgia Southern University. Dr. Chens research interests include microarray, genetics, clinical trials, environmental, and toxicological applications as well as biostatistical methodological development in Bayesian models, survival analysis, and statistics in biological assays. Karl E. Peace is the Georgia Cancer Coalition Distinguished Cancer Scholar, founding director of the Center for Biostatistics, and professor of biostatistics in the Jiann-Ping Hsu College of Public Health at Georgia Southern University. Dr. Peace has made pivotal contributions in the development and approval of drugs to treat numerous diseases and disorders. A fellow of the ASA, he has been a recipient of many honors, including the Drug Information Association Outstanding Service Award, the American Public Health Association Statistics Section Award, and recognition by the Georgia and US Houses of Representatives. Drs. Chen and Peace previously collaborated on the book Clinical Trial Methodology (CRC Press, July 2010.)