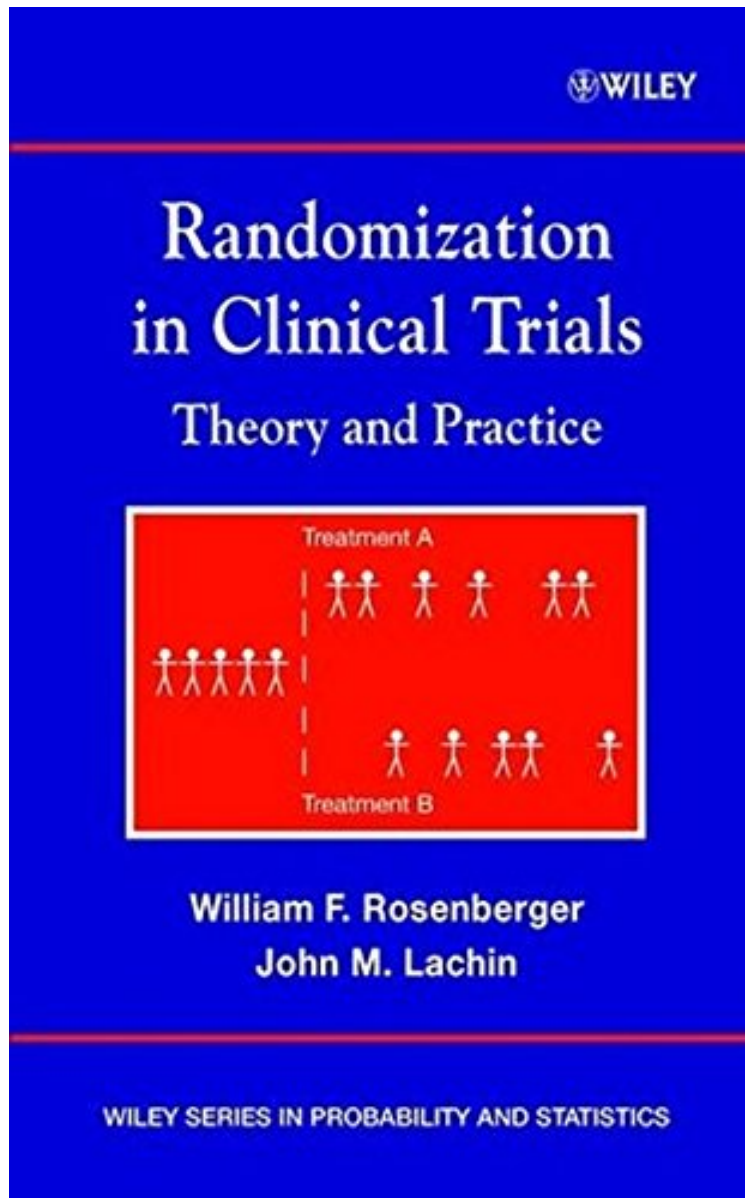


[FREE] Randomization in Clinical Trials: Theory and Practice

# Randomization in Clinical Trials: Theory and Practice

*William F. Rosenberger, John M. Lachin*  
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From the Back Cover Winner of the 2002 Association of American Publishers Professional/Scholarly Publishing Division Award. The role of randomization techniques in clinical trials has become increasingly important. This comprehensive guide combines both the applied aspects of randomization in clinical trials with a probabilistic treatment of properties of randomization. Taking an unabashedly non-Bayesian and nonparametric approach to inference, the book focuses on the linear rank test under a randomization model, with added discussion on likelihood-based inference as it relates to sufficiency and ancillarity. Developments in stochastic processes and applied probability are also given where appropriate. Intuition is stressed over mathematics, but not without a clear development of the latter in the context of the former. Providing a consolidated review of the field, the book includes relevant and practical discussions of: The benefits of randomization in terms of reduction of bias. Randomization as a basis for inference. Covariate-adaptive and response-adaptive randomization. Current philosophies, controversies, and new developments. With ample problem sets, theoretical exercises, and short computer simulations using SAS, *Randomization in Clinical Trials: Theory and Practice* is equally useful as a standard textbook in biostatistics graduate programs as well as a reliable reference for biostatisticians in practice.

About the Author WILLIAM F. ROSENBERGER is an associate professor (with tenure) of mathematics and statistics at The University of Maryland, Baltimore County. He is also an adjunct associate professor of epidemiology and preventive medicine at the University of Maryland School of Medicine. He serves as a biostatistical consultant on several clinical trials data and safety monitoring boards for the NIH, VA, and industry. He received his PhD in mathematical statistics from The George Washington University. JOHN M. LACHIN III is presently Professor of Biostatistics and Epidemiology, and of Statistics, at The George Washington University. He holds a ScD in biostatistics from the University of Pittsburgh. He also serves as Director of the Graduate Program in Biostatistics and as Director of the Coordinating Center for two nationwide studies in diabetes.