dependence. Chapter 7 discusses various important and interesting aspects of frailty modeling, such as the independence assumption between the observed covariates and the frailty variable; nested frailty models; tests for heterogeneity; and time-dependent frailty models.

Overall, Frailty Models in Survival Analysis is extremely well-written and a useful collection of frailty-based survival models and estimation techniques that are of interest to statisticians. The book also contains practical important information regarding software implementation, pointing out for each models considered whether it can be applied in R, SAS and STATA. The book would make a good supplementary text for an applied graduate level course, although it lacks sufficient theory for more theoretical courses. While there are no exercises in the book, there are many enlightening examples comparing various models.

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REFERENCES
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The first edition of Fundamentals of Clinical Trials came out in 1981, with two more editions in 1995 and 1998. The fourth edition continues adding improvements to this comprehensive guide on clinical trials. Unlike reviews of previous editions in statistics journals, which were written by biostatisticians and clinical trials experts (Pocock 1982; George 1987), this reviewer has no experience in clinical trials and is not a biostatistician. My review will therefore most likely be of interest to those intending to become familiar with clinical trials, or to expand their knowledge of how statistics is used in this domain. Before getting into detail, I would like to commend the authors for creating such a readable book and to recommend it to applied and theoretical statisticians, academics and practitioners, as well as to students as an eye opener into the important field of clinical trials, which relies heavily on statistical methods.

This book offers a holistic view of how and where statistical thinking and methods are integrated into the particular scientific domain of clinical trials, from design through implementation, analysis, and reporting. In particular, the statistical approaches are presented as solutions to particular issues that arise within practical constraints, challenges and requirements. Plenty of sections are focused on nonstatistical issues such as challenges of recruitment, regulatory aspects of adverse events, and reasons for participant non- adherence. Yet understanding the contextual issues is clearly important for a statistician involved in clinical trial design and analysis. Understanding this context is also useful for researchers interested in developing new statistical methods that can effectively address practical problems in clinical trials, as well as for choosing the methodologies to teach in biostatistics courses. For example, procedures such as blinding and recruitment challenges require going beyond standard statistical sampling and randomization methods.

The authors also raise ethical questions related to sharing versus hiding information from participants, physicians, and researchers and how such dynamics should be dealt with from a statistical point. Dealing with lives, health, and humans-patients, physicians and clinical staff, investigators, their sponsors and competitors creates environments, and dynamics that are far from classic experimental design or even survey settings. Chapter 2 on “ethical issues” is new to this edition.

The book consists of 20 chapters, and the chapter titles and ordering well reflect the process of carrying out clinical trials, from design stage to implementation, data analysis and reporting (with the exception of chapter 18 on “closeout”), which should have preceded chapter 17 on “issues in data analy-