Wiley Encyclopedia of Clinical Trials
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Clinical trials represent major research endeavors. The planning, conduct, and analysis of clinical trials require not only subject knowledge but also expertise in epidemiology, biostatistics, and data management, as well as in ethical, safety, and regulatory issues. One way of capturing the enormously multifaceted topic of clinical trials is by creating an encyclopedia. An encyclopedia is, by definition, a compendium of knowledge and usually comprises a series of alphabetically ordered articles, each of which address a specific topic. These days, publication of an encyclopedia or any textbook faces fierce competition from online and more dynamic resources, such as wikis, Internet forums, and the Web sites of academic institutions. These resources have become true alternatives to classic textbooks, particularly because they can be updated more readily to reflect up-to-date knowledge. The editors of the Wiley Encyclopedia of Clinical Trials, together with 300 contributors, have now provided an encyclopedia with the ambitious aim of covering all aspects of clinical trials.

For a single person or even a small group, it would be an enormous if not impossible task to review an encyclopedia. Therefore, we decided to review the Wiley Encyclopedia of Clinical Trials as a joint effort of faculty and students in the Center for Clinical Trials, housed within the Department of Epidemiology at the Johns Hopkins Bloomberg School of Public Health. Faculty members teamed up with students and identified the topic entries (articles) that covered topics and extensive reference lists for further reading. The authors with different backgrounds and perspectives. We believe that a considerable proportion of the readership will not be able to fully appreciate them as written. Might be informative for statisticians, but we expect that require substantial statistical knowledge. These articles on outcomes are quite technical and important outcomes. There is no discussion about the common used measures are adequate surrogates for clinically important outcomes. There is no discussion about the controversial use of composite outcomes, which can, as many recent examples show, mislead clinical practice. Furthermore, some articles on outcomes are quite technical and require substantial statistical knowledge. These articles might be informative for statisticians, but we expect that a considerable proportion of the readership will not be able to fully appreciate them as written.

We observed variability, such as that described for the example above, in balance and required background knowledge for most topics. A potential reason for this may be that the majority of the articles were written by single authors, which negates to some extent the potential benefits presumed when contributors are from many different institutions representing different views and experiences. We believe that the first edition of the Wiley Encyclopedia of Clinical Trials would have benefited from somewhat larger groups of authors with different backgrounds and perspectives.

Articles were often silent in areas where there has been public discussion about opportunities for manipulation of study analyses and findings. The pharmaceutical industry has been
accused of taking such opportunities, for example, through the use of run-ins, randomization following initial treatment, and multiple (surrogate) outcomes. While the editors may have been appropriately sensitive in not wishing to make unfair accusations, it also seems odd not to mention areas where certain approaches are used more frequently by industry.

It is surprising that an encyclopedia on clinical trials has no section on systematic reviews (meta-analysis was included in the index, but the section itself was absent). Systematic reviews are indispensable for assessing and justifying the need for additional trials and for embedding a trial into the meta-epidemiologic context. Systematic reviews also represent an opportunity for trialists to learn from previous trial findings and to make their own trials as robust as possible. It is unlikely that the omission was without discussion among the editors, given the substantial relevance of systematic reviews to clinical trials as individual entities and as a field. The Cochrane Collaboration, an organization devoted to producing systematic reviews of health-care interventions, is covered, and 10 pages are devoted to the closely related and pertinent topic of publication bias. However, both topics are critically linked to systematic reviews.

We are fully aware that very substantial resources are required in order to write an encyclopedia with consistently well-balanced articles that also point to current debates. The Wiley Encyclopedia of Clinical Trials often provides a welcome addition to available resources on many relevant topics in clinical trials. However, this first edition comprises quite a few chapters that are not well balanced and/or do not mention current debates. Fewer articles written by larger groups of authors with different perspectives might have made this encyclopedia a more easily recommended resource.

ACKNOWLEDGMENTS
Conflict of interest: none declared.

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DOI: 10.1093/aje/kwp241; Advance Access publication July 23, 2009