## (32) Peter Armitage (1975) Sequential Medical Trials Second edition Oxford: Blackwell

## Preamble

The book is dedicated to Sir Austin Bradford Hill pioneer of medical trials; for the first edition see no. (6) above.

#### Aims

In the second edition I have tried to preserve the basic character of the book, for example by omitting as much mathematics from the text as possible. Although mathematical proofs are not included, I have tried to give adequate references to relevant publications. As before, some of the theoretical points are discussed briefly in the appendix. My main aim in this edition has been to take account of some of the theoretical advances which have been made since 1960. As in the first edition, I have deliberately selected for discussion those techniques which seem most likely to be useful in practical applications. For the most part the topics discussed in Chapters 1-7 are similar to those of the first edition, although there is some re-arrangement of material. I have amplified the general description of clinical trials to provide a more solid background for subsequent discussions, and for the same reason certain topics in statistical inference and decision receive fuller treatment. Chapter 7, on follow-up studies, has been considerably enlarged by the inclusion of more efficient methods than were described previously. In the sections describing closed sequential plans specified by probabilities of error, I have placed a good deal of emphasis on plans formed by repeated significance tests, which, although very similar to the previously described restricted plans, seem rather less arbitrary than the earlier type. During the last 10 - 12 years the design of sequential trials has been the subject of much theoretical research. This interest was stimulated largely by an important review article by FJ Anscombe published in 1963, which suggested that a trial should be regarded as primarily a decision procedure, the object being to select the best of a number of medical treatments for use on as many patients as possible. I have added a new chapter 8 devoted to this approach (Preface, pages ix and x).

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