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Statistical Analysis of Clinical Data on a Pocket Calculator, Part 2

Statistics on a Pocket Calculator, Part 2

Springer

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Preface

The small book "Statistical Analysis of Clinical Data on a Pocket Calculator" edited in 2011 presented 20 chapters of cookbook-like step-by-step analyses of clinical data, and was written for clinical investigators and medical students as a basic approach to the understanding and carrying out of medical statistics. It addressed the following subjects:

(1) statistical tests for continuous/binary data,
(2) power and samples size assessments,
(3) the calculation of confidence intervals,
(4) calculating variabilities,
(5) adjustments for multiple testing,
(6) reliability assessments of qualitative and quantitative diagnostic tests.

This book is a logical continuation and reviews additional pocket calculator methods that are important to data analysis, such as

(1) logarithmic and invert logarithmic transformations,
(2) binary partitioning,
(3) propensity score matching,
(4) mean and hot deck imputations,
(5) precision assessments of diagnostic tests,
(6) robust variabilities.

These methods are, generally, difficult on a statistical software program and easy on a pocket calculator. We should add that pocket calculators work faster, because summary statistics are used. Also, you understand better what you are doing. Pocket calculators are wonderful: they enable you to test instantly without the need to download a statistical software program.

The methods can also help you make use of methodologies for which there is little software, like Bhattacharya modeling, fuzzy models, Markov models, binary partitioning, etc.

We do hope that "Statistical Analysis of Clinical Data on a Pocket Calculator 1 and 2 " will enhance your understanding and carrying out of medical statistics, and

help you dig deeper into the fascinating world of statistical data analysis. We recommend to those completing the current books, to study, as a next step, the two books entitled “SPSS for Starters 1 and 2” by the same authors.

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