1. Record Nr. UNINA9910830688603321

Autore	Daly Leslie E
Titolo	Interpretation and uses of medical statistics [[electronic resource] /] / Leslie E. Daly, Geoffrey J. Bourke
Pubbl/distr/stampa	Oxford ; ; Malden, Mass., : Blackwell Science, 2000
ISBN	0-470-69525-0 1-282-34171-5 9786612341717 0-470-69675-3
Edizione	[5th ed.]
Descrizione fisica	1 online resource (586 p.)
Altri autori (Persone)	BourkeGeoffrey J (Geoffrey Joseph) BourkeGeoffrey J (Geoffrey Joseph)
Disciplina	519.502461 610.21
Soggetti	Medical statistics Medicine - Research - Methodology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous editions entered under: Bourke, Geoffrey J.
Nota di bibliografia	Includes bibliographical references (p. 554-557) and index.
Nota di contenuto	Interpretation and Uses of Medical Statistics; Contents; Preface; Structure of the Book; 1 Describing Data -A Single Variable; 1.1 Introduction; 1.2 Types of data; 1.3 Qualitative data -simple tables and bar charts; 1.4 Picturing quantitative data; 1.5 Shapes of distributions; 1.6 Measures of central value; 1.7 Other measures of location - quantiles; 1.8 Measures of dispersion; 1.9 Summary; 2 Probability, Populations and Samples; 2.1 Introduction; 2.2 Probability; 2.3 Populations and samples; 2.4 Sample surveys; 2.5 Summary; 3 Associations: Chance, Confounded or Causal?; 3.1 Introduction 3.2 Examining associations3.3 Interpreting associations; 3.4 Associations due to chance; 3.5 Associations due to bias or confounding; 3.6 Causal associations; 3.7 Summary; 4 Confidence Intervals: General Principles; Proportions, Means, Medians, Counts and Rates; 4.1 Introduction; 4.2 The normal distribution; 4.3 Sampling variation - proportions; 4.4 Confidence intervals for a proportion; 4.5 Sampling variation - means; 4.6 Confidence intervals for a mean; 4.7 Confidence intervals for a geometric mean [!]; 4.8 Confidence intervals

for a median [!]

4.9 Confidence intervals for a count or rate [!]4.10 Summary; 5 Hypothesis Testing: General Principles and One-sample Tests for Means, Proportions, Counts and Rates; 5.1 Introduction; 5.2 The null and alternative hypotheses; 5.3 The significance test; 5.4 Relationship with confidence intervals; 5.5 One-sided and two-sided tests; 5.6 General structure of a significance test: the one sample z test for a mean; 5.7 Non-significant results and power: type I errors, type II errors and sample size; 5.8 The one-sample t test for a mean; 5.9 The one-sample z test for a proportion

5.10 The one-sample x2 test for many proportions [!]5.11 The one-sample z test for counts or rates; 5.12 Small sample sizes and the validity of assumptions [!]; 5.13 Summary; 6 Epidemiological and Clinical Research Methods; 6.1 Introduction; 6.2 Observational and experimental studies; 6.3 The cross-sectional study or survey; 6.4 The cohort study; 6.5 Measures of association in cohort studies; 6.6 Risk with variable-time follow-up [!]; 6.7 The case-control study; 6.8 Measures of association in case-control studies - the odds ratio; 6.9 The analysis of cohort and case-control studies [!]

6.10 Comparisons of cohort and case-control studies6.11 The randomized controlled trial; 6.12 Applicability versus validity of trial results; 6.13 Alternative trial designs; 6.14 Ethical considerations for trials; 6.15 Summary; 7 Confidence Intervals and Hypothesis Tests: Two-group Comparisons; 7.1 Introduction; 7.2 Independent and paired comparisons; 7.3 Parametric and non-parametric significance tests; 7.4 Comparison of two independent means; 7.5 Inferring significance from confidence intervals; 7.6 Comparison of two independent geometric means [!]; 7.7 Comparison of two independent medians

7.8 Comparison of paired means

Sommario/riassunto

In 1969 the first edition of this book introduced the concepts of statistics and their medical application to readers with no formal training in this area. While retaining this basic aim, the authors have expanded the coverage in each subsequent edition to keep pace with the increasing use and sophistication of statistics in medical research. This fifth edition has undergone major restructuring, with some sections completely rewritten; it is now more logically organized and more user friendly (with the addition of 'summary boxes' throughout the text). It incorporates new statistical techniq