I. Record Nr. UNINA9910877365003321

Titolo Tutorials in biostatistics . Volume 2 Statistical modelling of complex

medical data / / edited by R.B. D'Agostino

Pubbl/distr/stampa Chichester, West Sussex; ; Hoboken, N.J., : John Wiley & Sons, c2004

ISBN 1-280-28755-1

9786610287550 0-470-02372-4 0-470-02371-6

Descrizione fisica 1 online resource (498 p.)

Altri autori (Persone) D'AgostinoRalph B

Disciplina 519.502461

610.727 610/.7/27

Soggetti Medicine - Research - Statistical methods

Medical statistics

Biometry

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Description based upon print version of record.

Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Tutorials in Biostatistics; Contents; Preface; Preface to Volume 2; Part I

MODELLING A SINGLE DATA SET; 1.1 Clustered Data; Extending the Simple Linear Regression Model to Account for Correlated Responses: An Introduction to Generalized Estimating Equations and Multi-Level Mixed Modelling.; 1.2 Hierarchical Modelling; An Introduction to Hierarchical Linear Modelling.; Multilevel Modelling of Medical Data.; Hierarchical Linear Models for the Development of Growth Curves: An Example with Body Mass Index in Overweight /Obese Adults.; 1.3

Mixed Models

Using the General Linear Mixed Model to Analyse Unbalanced Repeated Measures and Longitudinal Data. Modelling Covariance Structure in the Analysis of Repeated Measures Data.; Covariance Models for Nested Repeated Measures Data: Analysis of Ovarian Steroid Secretion Data.; 1.4 Likelihood Modelling; Likelihood Methods for Measuring Statistical Evidence.; Part II MODELLING MULTIPLE DATA SETS: META-ANALYSIS;

Meta-Analysis: Formulating, Evaluating, Combining, and Reporting.;

Advanced Methods in Meta-Analysis: Multivariate Approach and Meta-Regression.

Part III MODELLING GENETIC DATA: STATISTICAL GENETICSGenetic Epidemiology: A Review of the Statistical Basis.; Genetic Mapping of Complex Traits.; A Statistical Perspective on Gene Expression Data Analysis.; Part IV DATA REDUCTION OF COMPLEX DATA SETS; Statistical Approaches to Human Brain Mapping by Functional Magnetic Resonance Imaging.; Disease Map Reconstruction.; PART V SIMPLIFIED PRESENTATION OF MULTIVARIATE DATA; Presentation of Multivariate Data for Clinical Use: The Framingham Study Risk Score Functions.; Index

Sommario/riassunto

The Tutorials in Biostatistics have become a very popular feature of the prestigious Wiley journal, Statistics in Medicine (SIM). The introductory style and practical focus make them accessible to a wide audience including medical practitioners with limited statistical knowledge. This book represents the second of two volumes presenting the best tutorials published in SIM, focusing on statistical modeling of complex data. Topics include clustered data, hierarchical models, mixed models, genetic modeling, and meta-analysis. Each tutorial is focused on a medical problem, has been