Record Nr. UNINA9910830255103321 Autore Jiang Jingmei <1958-> Titolo Applied medical statistics / / Jingmei Jiang Pubbl/distr/stampa Hoboken, NJ:,: Wiley Blackwell,, 2022 **ISBN** 1-119-71682-9 1-119-71677-2 Descrizione fisica 1 online resource (585 pages): illustrations Disciplina 570.15195 Soggetti **Biometry** Medical statistics Medicine - Research - Statistical methods Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto What is biostatistics -- Descriptive statistics -- Fundamentals of probability -- Discrete random variable -- Continuous random variable -- Sampling distribution and parameter estimation -- Hypothesis testing for one parameter -- Hypothesis testing for two population parameters -- One-way analysis of variance -- Analysis of variance in different experimental -- X2 test -- Nonparametric tests based on rank -- Simple linear regression -- Simple linear correlation -- Multiple linear regression -- Logistic regression -- Survival analysis --Evaluation of diagnostic tests -- Observational study design --Experimental study design. Sommario/riassunto "Over the past few decades, biomedical data have proliferated rapidly, and opportunities have arisen to use this data to improve human

"Over the past few decades, biomedical data have proliferated rapidly, and opportunities have arisen to use this data to improve human health. Burgeoning methods, such as machine learning techniques, have emerged to respond to the fast growth of the volume of data, and to exploit data in an effective and efficient manner. These methods were founded on statistical learning theory, which is an expansion of traditional statistics. Therefore, cultivating basic statistical thinking capability plays an important and fundamental role in mastering these state-of-the-art methods and embracing the upcoming big data era, which makes a course of introductory biostatistics an indispensable part of the curriculum for medical students. However, as a branch of

mathematics, statistics is characterized by hierarchically organized concepts, but a conceptual understanding of statistics is not always intuitive, which makes biostatistics an obstacle that is regarded as a burden for most medical students"--