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Deviation; 4.8. The Chi-square Distribution; 4.9. Confidence Interval on a Variance or Standard Deviation; 4.10. Other Frequently Seen Confidence Intervals and Probabilities; Chapter 5. Hypothesis Testing: Concept and Practice; 5.1. Hypotheses in Inference; 5.2. Error Probabilities; 5.3. Two Policies of Testing
5.4. Organizing Data for Inference; 5.5. Evolving a Way to Answer Your Data Question; Chapter 6. Statistical Testing, Risks, and Odds in Medical Decisions; 6.1. Overview; 6.2. Categorical Data: Basics; 6.3. Categorical Data: Tests on 2 x 2 Tables; 6.4. Categorical Data: Risks and Odds; 6.5. Rank Data: Basics; 6.6. Rank Data: The Rank-Sum Test to Compare Two Samples; 6.7. Continuous Data: Basics of Means; 6.8. Continuous Data: Normal (z) and t Tests to Compare Two Sample Means; 6.9. Other Tests of Hypotheses; Chapter 7. Sample Size Required for a Study; 7.1. Overview
7.2. Is the Estimate of Minimum Required Sample Size Adequate? 7.3. Sample Size in Means Testing; 7.4. Minimum Sample Size Estimation for a Test of Two Means; 7.5. Other Situations in Which Minimum Sample Size Estimation Is Used; Chapter 8. Statistical Prediction; 8.1. What Is a "Model"?; 8.2. Straight-Line Models; 8.3. What Is "Regression" (and Its Relation to Correlation)?; 8.4. Assessing and Predicting Relationships by Regression; 8.5. Other Questions That Can Be Answered by Regression; 8.6. Clinical Decisions and Outcomes Analysis; Chapter 9. Epidemiology
9.1. The Nature of Epidemiology

Sommario/riassunto

Medicine deals with treatments that work often but not always, so treatment success must be based on probability. Statistical methods lift medical research from the anecdotal to measured levels of probability. This book presents the common statistical methods used in 90% of medical research, along with the underlying basics, in two parts: a textbook section for use by students in health care training programs, e.g., medical schools or residency training, and a reference section for use by practicing clinicians in reading medical literature and performing their own research. The book does no
