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		4.1 Statistical inference: tests and estimation4.2 Inferences from means; 4.3 Comparison of two means; 4.4 Inferences from proportions; 4.5 Comparison of two proportions; 4.6 Sample-size determination; 5 Analysing variances, counts and other measures; 5.1 Inferences from variances; 5.2 Inferences from counts; 5.3 Ratios and other functions; 5.4 Maximum likelihood estimation; 6 Bayesian methods; 6.1 Subjective and objective probability; 6.2 Bayesian inference for a mean; 6.3 Bayesian inference for proportions and counts; 6.4 Further comments

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7 Regression and correlation7.1 Association; 7.2 Linear regression; 7.3 Correlation; 7.4 Sampling errors in regression and correlation; 7.5 Regression to the mean; 8 Comparison of several groups; 8.1 One-way analysis of variance; 8.2 The method of weighting; 8.3 Components of variance; 8.4 Multiple comparisons; 8.5 Comparison of several proportions: the 2 x k contingency table; 8.6 General contingency tables; 8.7 Comparison of several variances; 8.8 Comparison of several counts: the Poisson heterogeneity test; 9 Experimental design; 9.1 General remarks

9.2 Two-way analysis of variance: randomized blocks9.3 Factorial designs; 9.4 Latin squares; 9.5 Other incomplete designs; 9.6 Split-unit designs; 10.1 Distribution-free methods; 10.2 One-sample tests for location; 10.3 Comparison of two independent groups; 10.4 Comparison of several groups; 10.5 Rank correlation; 10.6 Permutation and Monte Carlo tests; 10.7 The bootstrap and the jackknife; 10.8 Transformations; 10 Analysing non-normal data; 11.1 Analysis of variance applied to regression; 11.2 Errors in both variables; 11.3 Straight lines through the origin; 11.4 Regression in groups

11.5 Analysis of covariance11.6 Multiple regression; 11.7 Multiple regression in groups; 11.8 Multiple regression in the analysis of non-orthogonal data; 11.9 Checking the model; 11.10 More on data transformation; 12 Further regression models for a continuous response; 12.1 Polynomial regression; 12.2 Smoothing and non-parametric regression; 12.3 Reference ranges; 12.4 Non-linear regression; 12.5 Multilevel models; 12.6 Longitudinal data; 12.7 Time series; 13 Multivariate methods; 13.1 General; 13.2 Principal components; 13.3 Discriminant analysis; 13.4 Cluster analysis

13.5 Concluding remarks

Sommario/riassunto	The explanation and implementation of statistical methods for the medical researcher or statistician remains an integral part of modern medical research. This book explains the use of experimental and analytical biostatistics systems. Its accessible style allows it to be used by the non-mathematician as a fundamental component of successful research. Since the third edition, there have been many developments in statistical techniques. The fourth edition provides the medical statistician with an accessible guide to these techniques and to reflect the extent of their usage in medical resea