The fifth revised edition of this highly successful book presents the most extensive enhancement since *Using and Understanding Medical Statistics* was first published 30 years ago. Without question, the single greatest change has been the inclusion of source code, together with selected output, for the award-winning, open-source, statistical package known as R. This innovation has enabled the authors to de-emphasize formulae and calculations, and let software do all of the 'heavy lifting'.

This edition also introduces readers to several graphical statistical tools, such as Q-Q plots to check normality, residual plots for multiple regression models, funnel plots to detect publication bias in a meta-analysis, and Bland-Altman plots for assessing agreement in clinical measurements. New examples that better serve the expository goals have been added to a half-dozen chapters. In addition, there are new sections describing exact confidence bands for the Kaplan-Meier estimator, as well as negative binomial and zero-inflated Poisson regression models for over-dispersed count data.

The end result is not only an excellent introduction to medical statistics, but also an invaluable reference for every discerning reader of medical research literature.

**Contents**

Preface to the Fifth Edition
Prefaces to the Previous Editions

- Basic Concepts
- Tests of Significance
- Fisher's Test for $2 \times 2$ Contingency Tables
- Approximate Significance Tests for Contingency Tables
- Some Warnings concerning $2 \times 2$ Tables
- Kaplan-Meier or ‘Actuarial’ Survival Curves
- The Log-Rank or Mantel-Haenszel Test for Comparing Survival Curves
- An Introduction to the Normal Distribution
- Analyzing Normally Distributed Data
- Linear Regression Models for Medical Data
- Binary Logistic Regression
- Regression Models for Count Data
- Proportional Hazards Regression
- The Analysis of Longitudinal Data
- Analysis of Variance
- Data Analysis
- The Question of Sample Size
- The Design of Clinical Trials
- Further Comments regarding Clinical Trials
- Meta-Analysis
- Epidemiological Applications
- Diagnostic Tests
- Agreement and Reliability
- References
- Subject Index
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Contents

Introduction
• The Bacterial Phosphotransferase System: New Frontiers 50 Years After Its Discovery: Saier Jr., M.H.

Review Article
• PTS 50 Past, Present and Future, or Dauwies Revisited: Lengeler, J.W.

Research Articles
• PTS-Mediated Regulation of the Transcription Activator MtrR from Different Species: Surprising Differences Despite Strong Sequence Conservation: Joyet, P.; Derkaoui, M.; Bourouhi, H.; Deutscher, J.
• Fucose-Mediated Transcriptional Activation of the fcs Operon by FcrR in Streptococcus pneumonia: Manzoor, I.; Shaheeg, S.; Afzal, M.; Kuijpers, O.P.

Review Article
• The Phosphotransferase System in Solventogenic Clostridia: Mitchell, W.J.

Research Article
• A Search for Ribonucleic Antiterminator Sites in Bacterial Genomes: Not Only Antitermination? Gordon, N.; Rosenblum, R.; Nussbaum-Shochat, A.; Eliahoo, E.; Amster-Choder, O.

Review Article
• Regulation of the Utilization of Amino Sugars by Escherichia coli and Bacillus subtilis: Same Genes, Different Control: Plumbridge, J.

Research Articles
• Cross-Talk between the Canonical and the Nitrogen-Related Phosphotransferase Systems Modulates Synthesis of the KdpFABC Potassium Transporter in Escherichia coli: Lüttmann, D.; Göpel, Y.; Görke, B.
• Modeling the Interplay of Pseudomonas putida ERA™ with the Potassium Transporter KdpFABC: Wolf, S.; Pfüger-Grau, K.; Kremling, A.

Review Article
• Inactivation of the PTS as a Strategy to Engineer the Production of Aromatic Metabolites in Escherichia coli: Carmona, S.B.; Moreno, F.; Bolivar, F.; Gossel, G.; Escalante, A.

Research Article

Review Article
• Control of Transposon-Mediated Directed Mutation by the Escherichia coli Phosphotransferase System: Saier Jr., M.H.; Zhang, Z.

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Antimicrobial Section

Original Papers

249 Potential of Casiopeínas® Copper Complexes and Antituberculosis Drug Combination against Mycobacterium tuberculosis
Barbosa, A.R.; Caleffi-Ferracioli, K.R. (Maringá); Leite, C.Q.F. (São Paulo); García-Ramos, J.C.; Toledano-Magaña, Y.; Ruiz-Azuara, L. (Mexico D.F.); Siqueira, V.L.D. (Maringá); Pavan, F.R. (São Paulo); Cardoso, R.F. (Maringá)

275 Antibiotic Resistance Patterns and a Survey of Metallo-β-Lactamase Genes Including bla-IMP and bla-VIM Types in Acinetobacter baumannii Isolated from Hospital Patients in Tehran
Aghamiri, S. (Lahijan); Amirmozafari, N. (Tehran); Fallah Mehrabadi, J. (Qom); Fouladtan, B. (Lahijan); Hanafi Abdar, M. (Tehran)

Novel Insights from Clinical Practice

236 Gemcitabine-Induced Subacute Cutaneous Lupus Erythematosus: A Case Report
Ben Zvi, M.; Vaknine, H.; Menczer, J.; Peled, O.; Ben Shem, E.; Schreiber, L.; Levy, T. (Holon/Tel Aviv)

Anticancer Section

Review

223 Drug Resistance to EGFR Inhibitors in Lung Cancer
Tetsu, O.; Hangauer, M.J.; Phuchareon, J.; Eisele, D.W.; McCormick, F. (San Francisco, Calif.)

Original Papers

240 Second-Line Intraperitoneal Chemotherapy for Recurrent Epithelial Ovarian, Tubal and Peritoneal Cancer: A Propensity Score-Matching Study
Lu, C.-H.; Chang, Y.-H.; Lee, W.-H.; Chang, Y.; Peng, C.-W. (Taichung/Taipei); Chuang, C.-M. (Taipei); Task Force on Intraperitoneal Chemotherapy of Ovarian Cancer

256 Weight Loss Associated with Platinum-Based Chemotherapy in Patients with Advanced Lung Cancer

262 Efficacy and Safety Assessment of Paclitaxel in Patients with Docetaxel-Resistant Esophageal Squamous Cell Carcinoma

269 Clinical Impact of Bevacizumab in Patients with Relapsed Glioblastoma: Focus on a Real-Life Monocentric SurVey (SV1 Study)