Record Nr. UNINA9910974646803321 Autore Betthäuser Andreas Titolo Muscle Injuries in Sports / / by: Mueller-Wohlfahrt, Hans-Wilhelm, Ueblacker, Peter, Haensel, Lutz, Garrett, William E. Pubbl/distr/stampa Stuttgart:,: Thieme,, [2013] ©2013 **ISBN** 9783131696618 3131696613 Edizione [1st ed.] Descrizione fisica 1 online resource : illustrations (some color) Disciplina 617.4/7044 Muscles - Wounds and injuries Soggetti Sports injuries Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Functional anatomy of skeletal muscle / D. Blottner -- Basic physiology and aspects of exercise / B. Brenner, N. Maassen -- Molecular and cell biology of muscle regeneration / M. Flueck -- Muscle healing: physiology and adverse factors / W. Bloch -- Epidemiology of muscle injuries in soccer / J. Ekstrand -- Terminology, classification, patient history, and clinical examination / H.-W. Muller-Wohlfahrt ... [and others] -- Ultrasonography / L. Haensel, P. Ueblacker, A. Betthaeuser -- Magnetic resonance imaging / J. Boeck, P. Mundinger, G. Luttke --Differential diagnosis of muscle pain / B. Schoser -- Behavioral neurology and neuropsychology in sports / J.M. Hufnagl --Conservative treatment of muscle injuries / H.-W. Muller-Wohlfahrt ... [and others] -- Role of the spine in muscle injuries and muscle disorders / B. Schoser ... [and others] -- Operative treatment of muscle injuries / W.E. Garrett, Jr. -- Physical therapy and rehabilitation / K. Eder, H. Hoffmann -- Prevention of muscle injuries / A. Schlumberger -- Special case reports from high-performance athletics / P. Ueblacker, L. Haensel, H.-W Muller-Wohlfahrt. The first book to focus exclusively on muscle injuries in sports! Sommario/riassunto

Accounting for the majority of sports-related disorders, injuries of the skeletal muscles have been difficult to define, classify, and treat mainly

due to a lack of scientific background and missing guidelines. Now, for the first time, readers will find full coverage of muscle anatomy, physiology, diagnosis, imaging, treatment, rehabilitation, and prevention in one comprehensive volume. It includes a standardized terminology and new classification system, both based on a consensus conferencethat took place in 2011 in Munich. Special Features: Written by top international sports medicine physicians who have more than 35 years of experience treating competitive athletes, including the German national soccer team * Emphasizes practice-oriented content with a scientific foundation * Shares dozens of case studies that highlight injury assessment, pitfalls, and complications * Provides more than 500 vivid, full-color illustrations and photographs, including detailed anatomic diagrams and tables At a time when athletic muscle injuries have increasingly become the focus of research and clinical studies, especially due to their frequency and impact on player absence, this book makes an enormous contribution to the field. It is essential reading for all sports medicine physicians, residents and fellows, physical therapists, coaches, and other practitioners involved in caring for athletes.

Record Nr. UNINA9911020255603321 Autore Saleh A. K. Md. Ehsanes **Titolo** Theory of preliminary test and Stein-type estimation with applications / / A.K. Md. Ehsanes Saleh Hoboken, NJ,: Wiley-Interscience, c2006 Pubbl/distr/stampa **ISBN** 9786610448012 9781280448010 1280448016 9780470360552 0470360550 9780471773757 0471773751 9780471773740 0471773743 Descrizione fisica 1 online resource (656 p.) Wiley Series in Probability and Statistics;; v.517 Collana Disciplina 519.5/44 519.544 Soggetti Parameter estimation Regression analysis Bayesian statistical decision theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references (p. 601-612) and indexes. Nota di bibliografia Theory of Preliminary Test and Stein-Type Estimation with Applications; Nota di contenuto Contents; List of Figures; List of Figures; List of Tables; Preface: 1 Introduction: 1.1.1 Batting averages of 18 players: 1.1 Display of predicted batting averages based on Stein's formula: 1.1 Objective of This Book; 1.2 Statistical Decision Principle; 1.3 Quadratic Loss Function; 1.4 Some Statistical Models with Preliminaries; 1.4.1 Mean and Simple Linear Models; 1.4.2 One-Sample Multivariate Model; 1.4.3 ANOVA Models; 1.4.4 Parallelism Models

1.4.5 Multiple Regression Model and General Linear Hypothesis1.4.6 Simple Multivariate Linear Model; 1.4.7 Discrete Data Models; 1.5

Organization of the Book; 1.6 Conclusions; 1.7 Problems; 2

Preliminaries; 2.1 Normal Distribution; 2.2 Chi-square Distribution and Properties; 2.3 Some Results from Multivariate Normal Theory; 2.4 Beta Distribution and Applications; 2.5 Discrete Distributions; 2.5.1 Binomial Distribution; 2.5.2 Multinomial Distribution; 2.6 Matrix Results; 2.7 Large Sample Theory; 2.7.1 Four Types of Convergence; 2.7.2 Law of Large Numbers; 2.7.3 Central Limit Theorems 2.8 Nonparametric Theory: Preliminaries2.8.1 Order-Statistics, Ranks, and Sign Statistics; 2.8.2 Linear rank-statistics (LRS); 2.8.3 Rank Estimators of the Parameters of Various Models; 2.9 Problems; 3 Preliminary Test Estimation; 3.1 Simple Linear Model, Estimators, and Tests; 3.1.1 Simple Linear Model; 3.1.2 Estimation of the Intercept and Slope Parameter; 3.1.3 Test for the Slope Parameter; 3.2 PTE of the Intercept Parameter; 3.2.1 UE, RE and PTE of the Intercept Parameter; 3.2.2 Bias and MSE Expressions; 3.2.3 Comparison of bias and mse functions

3.2.1 Graph of quadratic bias functions of the estimators3.2.4 Optimum Level of Significance of Preliminary Test; 3.2.2 Graph of MRE (tn; tn) and MRE(tPTn; tn); 3.2.1 Maximum and Minimum Guaranteed Efficiencies for n = 8; 3.2.2 Maximum and Minimum Guaranteed Efficiencies for n = 12 and x2/Q = 0.1(0.2)0.9; 3.3 Two-Sample Problem and Pooling of Means; 3.3.1 Model; 3.3.2 Estimation and Test of the Difference between Two Means; 3.3.3 Bias and mse Expression of the Three Estimators of a Mean; 3.3.1 Maximum and Minimum Guaranteed Efficiencies; 3.3.2 Maximum and Minimum Guaranteed Efficiencies

3.3.3 Maximum and Minimum Guaranteed Efficiencies 3.4 One-Sample Problem: Estimation of Mean; 3.4.1 Model; 3.4.2 Unrestricted, Restricted, and Preliminary Test Estimators; 3.3.1 Graph of MRE (m1; m1) and MRE(mPT1; m1); 3.4.3 Bias, mse, and Analysis of Efficiency; 3.5 An Alternative Approach; 3.5.1 Introduction; 3.4.1 Minimum and Maximum Efficiency of PTE; 3.5.2 One-Sample Problem; 3.5.3 Comparison of PTE, tPTn and SE tSn; 3.5.1 Maximum and Minimum Efficiencies of SE and Efficiency of PTE at D0 for Selected a; 3.5.4 Simple Linear Model and Shrinkage Estimation 3.5.1 Graph of the relative efficiency of SE and PTE for different values of a

Sommario/riassunto

Theory of Preliminary Test and Stein-Type Estimation with Applications provides a com-prehensive account of the theory and methods of estimation in a variety of standard models used in applied statistical inference. It is an in-depth introduction to the estimation theory for graduate students, practitioners, and researchers in various fields, such as statistics, engineering, social sciences, and medical sciences. Coverage of the material is designed as a first step in improving the estimates before applying full Bayesian methodology, while problems at the end of each chapter enlarge the scope