Record Nr. UNINA9910877897903321 Prodrugs and targeted delivery: towards better ADME properties // **Titolo** edited by Jarkko Rautio Pubbl/distr/stampa Weinheim, Germany,: Wiley-VCH, 2011 **ISBN** 1-283-14057-8 9786613140579 3-527-63318-9 3-527-63316-2 3-527-63317-0 Descrizione fisica 1 online resource (522 p.) Collana Methods and principles in medicinal chemistry;; v. 47 Altri autori (Persone) RautioJarkko Disciplina 615.19 615.191 Soggetti **Prodrugs** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Prodrugs and Targeted Delivery: Towards Better ADME Properties; Contents; List of Contributors; Preface; A Personal Foreword; Part One: Prodrug Design and Intellectual Property; 1 Prodrug Strategies in Drug Design: 2 The Molecular Design of Prodrugs by Functional Group: 3 Intellectual Property Primer on Pharmaceutical Patents with a Special Emphasis on Prodrugs and Metabolites; Part Two: Prodrugs Addressing ADMET Issues: 4 Increasing Lipophilicity for Oral Drug Delivery: 5 Modulating Solubility Through Prodrugs for Oral and IV Drug Delivery 6 Prodrugs Designed to Target Transporters for Oral Drug Delivery7 Topical and Transdermal Delivery Using Prodrugs: Mechanism of Enhancement; 8 Ocular Delivery Using Prodrugs; 9 Reducing Presystemic Drug Metabolism; 10 Enzyme-Activated Prodrug Strategies for Site-Selective Drug Delivery; 11 Prodrug Approaches for Central Nervous System Delivery: 12 Directed Enzyme Prodrug Therapies: Part Three: Codrugs and Soft Drugs; 13 Improving the Use of Drug Combinations Through the Codrug Approach; 14 Soft Drugs; Part Four: Preclinical and Clinical Consideration for Prodrugs

15 Pharmacokinetic and Biopharmaceutical Considerations in Prodrug

## Sommario/riassunto

Discovery and Development16 The Impact of Pharmacogenetics on the Clinical Outcomes of Prodrugs; Index

This topical reference and handbook addresses the chemistry, pharmacology, toxicology and the patentability of prodrugs, perfectly mirroring the integrated approach prevalent in today's drug design. It summarizes current experiences and strategies for the rational design of prodrugs, beginning at the early stages of the development process, as well as discussing organ- and site-selective prodrugs. Every company employing medicinal chemists will be interested in this practice-oriented overview of a key strategy in modern drug discovery and development.