

1. Record Nr.	UNINA9910139611803321
Titolo	Oral bioavailability [[electronic resource]] : basic principles, advanced concepts, and applications // edited by Ming Hu, Xiaoling Li
Pubbl/distr/stampa	Hoboken, NJ, : John Wiley & Sons, c2011
ISBN	1-283-25776-9 9786613257765 1-118-06758-4 1-118-06759-2 1-118-06752-5
Descrizione fisica	1 online resource (570 p.)
Collana	Wiley series in drug discovery and development
Altri autori (Persone)	HuMing, Ph. D. LiXiaoling <1957->
Disciplina	615/.19
Soggetti	Drugs - Bioavailability Drug development Intestinal absorption
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.
Nota di contenuto	ORAL BIOAVAILABILITY; CONTENTS; Foreword; Preface; Contributors; 1 Barriers to Oral Bioavailability-An Overview; 2 Physicochemical Characterization of Pharmaceutical Solids; 3 Solubility of Pharmaceutical Solids; 4 In Vitro Dissolution of Pharmaceutical Solids; 5 Biological and Physiological Features of the Gastrointestinal Tract Relevant to Oral Drug Absorption; 6 Absorption of Drugs via Passive Diffusion and Carrier-Mediated Pathways; 7 In Vitro-In Vivo Correlations of Pharmaceutical Dosage Forms; 8 Drug Metabolism in Gastrointestinal Tract 9 Efflux of Drugs via Transporters-The Antiabsorption Pathway 10 Liver Drug Metabolism; 11 Protein Binding of Drugs; 12 Urinary Excretion of Drugs and Drug Reabsorption; 13 Pharmacokinetic Behaviors of Orally Administered Drugs; 14 Effects of Food on Drug Absorption; 15 Drug-Drug Interactions and Drug-Dietary Chemical Interactions; 16 Anatomical and Physiological Factors Affecting Oral Drug Bioavailability in Rats, Dogs, and Humans; 17 Amino Acid Drug Transporters; 18 Drug

Transporters and Their Role in Absorption and Disposition of Peptides and Peptide-Based Pharmaceuticals
19 Organic Anion and Cation Drug Transporters 20 Gastric Retentive Drug Delivery Systems; 21 Lipid-Based and Self-Emulsifying Oral Drug Delivery Systems; 22 Prodrug Strategies to Enhance Oral Drug Absorption; 23 Oral Delivery of Protein/Peptide Therapeutics; 24 ABC Transporters in Intestinal and Liver Efflux; 25 Interplay Between Efflux Transporters and Metabolic Enzymes; 26 Regulatory Considerations in Metabolism- and Transporter-Based Drug Interactions; 27 Caco-2 Cell Culture Model for Oral Drug Absorption; 28 MDCK Cells and Other Cell-Culture Models of Oral Drug Absorption
29 Intestinal Perfusion Methods for Oral Drug Absorptions 30 Liver Perfusion and Primary Hepatocytes for Studying Drug Metabolism and Metabolite Excretion; 31 In vivo Methods for Oral Bioavailability Studies; 32 Determination of Regulation of Drug-Metabolizing Enzymes and Transporters; 33 Computational and Pharmacoinformatic Approaches to Oral Bioavailability Prediction; Index

Sommario/riassunto

Understand and assess the design, delivery, and efficacy of orally administered drugs. A practical guide to understanding oral bioavailability, one of the major hurdles in drug development and delivery, Oral Bioavailability: Basic Principles, Advanced Concepts, and Applications is designed to help chemists, biologists, life science researchers, pharmaceutical scientists, pharmacologists, clinicians, and graduate and students become familiar with the fundamentals and practices of the science of oral bioavailability. The difference in rate and extent between a drug taken orally and the a
