1. Record Nr. UNINA9910458943503321

Titolo	Preclinical development handbook ADME and biopharmaceutical properties [[electronic resource] /] / [edited by] Shayne Cox Gad
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Interscience, c2008
ISBN	1-281-23741-8 9786611237417 0-470-24903-X 0-470-24902-1
Descrizione fisica	1 online resource (1347 p.)
Collana	Pharmaceutical Development Series ; ; v.3
Altri autori (Persone)	GadShayne C. <1948->
Disciplina	615.1901 615.7 615/.7
Soggetti	Pharmacokinetics Drug development Electronic books.
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	PRECLINICAL DEVELOPMENT HANDBOOK ADME and Biopharmaceutical Properties; CONTRIBUTORS; CONTENTS; Preface; 1 Modeling and Informatics in Drug Design; 2 Computer Techniques: Identifying Similarities Between Small Molecules; 3 Protein-Protein Interactions; 4 Method Development for Preclinical Bioanalytical Support; 5 Analytical Chemistry Methods: Developments and Validation; 6 Chemical and Physical Characterizations of Potential New Chemical Entity; 7 Permeability Assessment; 8 How and Where Are Drugs Absorbed?; 9 Absorption of Drugs after Oral Administration 10 Distribution: Movement of Drugs through the Body11 The Blood-Brain Barrier and Its Effect on Absorption and Distribution; 12 Transporter Interactions in the ADME Pathway of Drugs; 13 Accumulation of Drugs in Tissues; 14 Salt and Cocrystal Form Selection; 15 Dissolution; 16 Stability: Physical and Chemical; 17 Dosage Formulation; 18 Cytochrome P450 Enzymes; 19 Metabolism Kinetics; 20 Drug Clearance; 21 In Vitro Metabolism in Preclinical Drug

Development; 22 Utilization of In Vitro Cytochrome P450 Inhibition Data for Projecting Clinical Drug-Drug Interactions
23 In Vivo Metabolism in Preclinical Drug Development24 In Vitro Evaluation of Metabolic Drug-Drug Interactions: Scientific Concepts and Practical Considerations; 25 Mechanisms and Consequences of Drug-Drug Interactions; 26 Species Comparison of Metabolism in Microsomes and Hepatocytes; 27 Metabolite Profiling and Structural Identification; 28 Linkage between Toxicology of Drugs and Metabolism; 29 Allometric Scaling; 30 Interrelationship between Pharmacokinetics and Metabolism; 31 Experimental Design Considerations in Pharmacokinetic Studies; 32 Bioavailability and Bioequivalence Studies
33 Mass Balance Studies34 Pharmacodynamics; 35 Physiologically Based Pharmacokinetic Modeling; 36 Mathematical Modeling as a New Approach for Improving the Efficacy/Toxicity Profile of Drugs: The Thrombocytopenia Case Study; 37 Regulatory Requirements for INDs/FIH (First in Human) Studies; 38 Data Analysis; Index

Sommario/riassunto

A clear, straightforward resource to guide you through preclinical drug developmentFollowing this book's step-by-step guidance, you can successfully initiate and complete critical phases of preclinical drug development. The book serves as a basic, comprehensive reference to prioritizing and optimizing leads, dose formulation, ADME, pharmacokinetics, modeling, and regulations. This authoritative, easy-to-use resource covers all the issues that need to be considered and provides detailed instructions for current methods and techniques.Each chapter is written by one or more leadin