1. Record Nr. UNINA9910141254203321

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| Titolo | ADME-enabling technologies for drug design and development [[electronic resource] /] / edited by Donglu Zhang, Sekhar Surapaneni |
| Pubbl/distr/stampa | Hoboken, N.J., : Wiley, c2012 |
| ISBN | 1-280-59257-5<br>9786613622402<br>1-118-18076-3<br>1-118-18077-1<br>1-118-18074-7 |
| Descrizione fisica | 1 online resource (623 p.) |
| Altri autori (Persone) | ZhangDonglu<br>SurapaneniSekhar |
| Disciplina | 615.1/9 |
| Soggetti | Drugs - Design<br>Drug development<br>Drugs - Metabolism<br>Pharmaceutical chemistry<br>Pharmacokinetics<br>Pharmaceutical technology |
| 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 | ADME-Enabling Technologies in Drug Design and Development; CONTENTS; FOREWORD; PREFACE; CONTRIBUTORS; PART A: ADME: OVERVIEW AND CURRENT TOPICS; 1: REGULATORY DRUG DISPOSITION AND NDA PACKAGE INCLUDING MIST; 1.1 INTRODUCTION; 1.2 NONCLINICAL OVERVIEW; 1.3 PK; 1.4 ABSORPTION; 1.5 DISTRIBUTION; 1.5.1 Plasma Protein Binding; 1.5.2 Tissue Distribution; 1.5.3 Lacteal and Placental Distribution Studies; 1.6 METABOLISM; 1.6.1 In vitro Metabolism Studies; 1.6.2 Drug-Drug Interaction Studies; 1.6.3 In vivo Metabolism (ADME) Studies; 1.7 EXCRETION; 1.8 IMPACT OF METABOLISM INFORMATION ON LABELING<br>1.9 CONCLUSIONSREFERENCES; 2: OPTIMAL ADME PROPERTIES FOR CLINICAL CANDIDATE AND INVESTIGATIONAL NEW DRUG (IND) |

PACKAGE; 2.1 INTRODUCTION; 2.2 NCE AND INVESTIGATIONAL NEW DRUG (IND) PACKAGE; 2.3 ADME OPTIMIZATION; 2.3.1 Absorption; 2.3.2 Metabolism; 2.3.3 PK; 2.4 ADME OPTIMIZATION FOR CNS DRUGS; 2.5 SUMMARY; REFERENCES; 3: DRUG TRANSPORTERS IN DRUG INTERACTIONS AND DISPOSITION; 3.1 INTRODUCTION; 3.2 ABC TRANSPORTERS; 3.2.1 Pgp (MDR1, ABCB1); 3.2.2 BCRP (ABCG2); 3.2.3 MRP2 (ABCC2); 3.3 SLC TRANSPORTERS; 3.3.1 OCT1 (SLC22A1) and OCT2 (SLC22A2); 3.3.2 MATE1 (SLC47A1) and MATE2K (SLC47A2)
3.3.3 OAT1 (SLC22A6) and OAT3 (SLC22A8)3.3.4 OATP1B1 (SLCO1B1, SLC21A6), OATP1B3 (SLCO1B3, SLC21A8), and OATP2B1 (SLCO2B1, SLC21A9); 3.4 IN VITRO ASSAYS IN DRUG DEVELOPMENT; 3.4.1 Considerations for Assessing Candidate Drugs as Inhibitors; 3.4.2 Considerations for Assessing Candidate Drugs as Substrates; 3.4.3 Assay Systems; 3.5 CONCLUSIONS AND PERSPECTIVES; REFERENCES; 4: PHARMACOLOGICAL AND TOXICOLOGICAL ACTIVITY OF DRUG METABOLITES; 4.1 INTRODUCTION; 4.2 ASSESSMENT OF POTENTIAL FOR ACTIVE METABOLITES; 4.2.1 Detection of Active Metabolites during Drug Discovery
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6.3.4 Quantitative Pharmacology (QP) and Pharmacometrics

Sommario/riassunto

A comprehensive guide to cutting-edge tools in ADME research The last decade has seen tremendous progress in the development of analytical techniques such as mass spectrometry and molecular biology tools, resulting in important advances in drug discovery, particularly in the area of absorption, distribution, metabolism, and excretion (ADME). ADME-Enabling Technologies in Drug Design and Development focuses on the current state of the art in the field, presenting a comprehensive review of the latest tools for generating ADME data in drug discovery. It examines the broadest possible rang