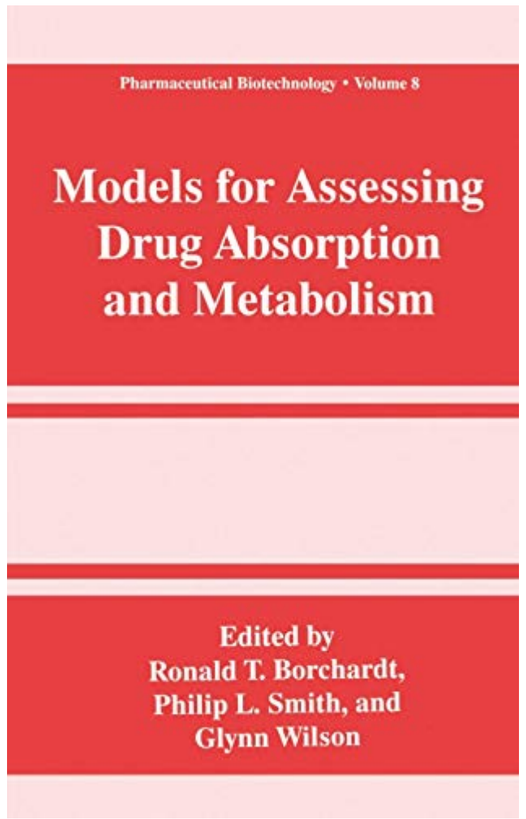

[MOBI] Models For Assessing Drug Absorption And Metabolism (Pharmaceutical Biotechnology, 8)

Right here, we have countless books **Models for Assessing Drug Absorption and Metabolism (Pharmaceutical Biotechnology, 8)** and collections to check out. We additionally have the funds for variant types and plus type of the books to browse. The normal book, fiction, history, novel, scientific research, as with ease as various additional sorts of books are readily straightforward here.

As this Models for Assessing Drug Absorption and Metabolism (Pharmaceutical Biotechnology, 8), it ends in the works monster one of the favored books Models for Assessing Drug Absorption and Metabolism (Pharmaceutical Biotechnology, 8) collections that we have. This is why you remain in the best website to look the amazing ebook to have.

Models for Assessing Drug Absorption and Metabolism-Ronald T. Borchardt 2013-06-29 Pharmaceutical scientists in industry and academia will appreciate this single reference for its detailed experimental procedures for conducting biopharmaceutical studies. This well-illustrated guide allows them to establish, validate, and implement commonly used in situ and in vitro model systems. Chapters provide ready access to these methodologies for studies of the intestinal, buccal, nasal and respiratory, vaginal, ocular, and dermal epithelium as well as the endothelial and elimination barriers.

Drug Absorption Studies-Carsten Ehrhardt 2007-12-22 This is a well thought-out, highly practical text covering contemporary ‘in vitro’ techniques for drug absorption studies. Starting at the molecular level of investigation, it continues with cell monolayer models (both primary and cell lines) and culminates with in situ techniques as a final testing format. In addition, chapters on high-throughput assays, in vitro-in vivo correlation, bioinformatics and regulatory issues are covered, giving a comprehensive overview of available models and techniques. Moreover, an appendix consisting of a number of practical protocols is available online, updated as needed, and should prove very helpful to apply the techniques directly to the benchside.

Concepts and Models for Drug Permeability Studies-Bruno Sarmento 2015-09-30 This book intends to be an updated compilation of the most important buccal, gastric, intestinal, pulmonary, nasal, vaginal, ocular, skin and blood-brain barrier in vitro models for predicting the permeability of drugs. Concepts and Models for Drug Permeability Studies focuses on different approaches and comprises of various models. Each model describes the protocol of seeding and conservation, the application for specific drugs, and takes into account the maintenance of physiologic characteristics and functionality of epithelium, from the simplest immortalized cell-based monoculture to the most complex engineered-tissue models. Chapters also discuss the equivalence between in vitro cell and tissue models and in vivo conditions, highlighting how each model may provisionally resemble a different drug absorption route. Updated information regarding the most recent in vitro models to study the permeability of drugs Short and concise chapters covering all the biological barriers with interest in drug permeability A combination of bibliographic information related with individual models and footnote instructions of technical procedures for construction of cell and tissue-based models Simple and clear scientific content, adaptable for young scientists and experimented researchers

Oral Drug Absorption-Jennifer B. Dressman 2000-06-06 A practical, hands-on guide for successfully developing oral drug products, this comprehensive reference runs the gamut from theoretical stages of computer-based calculations to practical guidelines for establishing in vitro/in vivo correlations. Coverage details the interrelationship between the physiology of the gastrointestinal tract and oral drug formulations and absorption, and progresses to the latest applications of pharmacokinetic analysis. Includes chapters by the innovators of the Biopharmaceutical Classification Scheme (BCS), human perfusions, and biorelevant dissolution testing! With over 600 literature references, equations, drawings, and photographs, Oral Drug Absorption offers multiple methods for predicting permeability, solubility, and dissolution for oral bioavailability and bioequivalence facilitates selection of appropriate drug candidates for development fully elaborates on the experimental and data analysis techniques of in vitro/in vivo correlations provides guidance to the Federal Drug Administration's BCS and its applications appends helpful case studies to the concepts discussed and much more! Contributions by more than 20 international specialists on the latest research make Oral Drug Absorption an invaluable tool and useful reference in the hands of pharmaceutical scientists, medicinal chemists, pharmacists, pharmacologists, toxicologists, biochemists, gastroenterologists, regulatory personnel, and graduate school students in these disciplines.

Oral Drug Absorption-Jennifer B. Dressman 2016-04-19 Oral Drug Absorption, Second Edition thoroughly examines the special equipment and methods used to test whether drugs are released adequately when administered orally. The contributors discuss methods for accurately establishing and validating in vitro/in vivo correlations for both MR and IR formulations, as well as alternative approaches for MR an

Dermal Absorption Models in Toxicology and Pharmacology-Jim E. Riviere 2005-08-24 Many experimental methods and mathematical modeling approaches rooted in disciplines outside of toxicology can be effectively applied to estimating dermal absorption. Dermal Absorption Models in Toxicology and Pharmacology explores current approaches and techniques that can be used to quantify dermal absorption with endpoints useful in both toxicology and pharmacology. The book begins with a review of basic principles and the in vitro and in vivo experimental approaches available for assessing dermal absorption of drugs and chemicals. This is followed by coverage of mathematical or in silico models for quantitating percutaneous absorption and the applications of these techniques to the risk assessment process. The remainder of the book explores scenarios where the unique properties of the chemicals being studied or the matrix in which they are exposed must be considered and then wraps up with a comparative analysis of chemical permeability in human and animal skin. Many of the books covering this subject are just too comprehensive and serve primarily as reference works. This book takes a different approach. Jim Riviere's editorial guidance ensures that the information is readable, accessible, authoritative, and concise, making it the perfect resource for familiarizing new researchers and students to the field and updating established scientists.

New Horizons in Predictive Drug Metabolism and Pharmacokinetics-Alan G. E. Wilson 2015-11-20 This book thoroughly explores the predictive role of drug metabolism and pharmacokinetics in drug discovery and in improving success rates and safety assessments of chemicals.

The Impact of Food Bioactives on Health-Kitty Verhoeckx 2015-04-29 “Infogest” (Improving Health Properties of Food by Sharing our Knowledge on the Digestive Process) is an EU COST action/network in the domain of Food and Agriculture that will last for 4 years from April 4, 2011. Infogest aims at building an open international network of institutes undertaking multidisciplinary basic research on food digestion gathering scientists from different origins (food scientists, gut physiologists, nutritionists...). The network gathers 70 partners from academia, corresponding to a total of 29 countries. The three main scientific goals are: Identify the beneficial food components released in the gut during digestion; Support the effect of beneficial food components on human health; Promote harmonization of currently used digestion models Infogest meetings highlighted the need for a publication that would provide researchers with an insight into the advantages and disadvantages associated with the use of respective in vitro and ex vivo assays to evaluate the effects of foods and food bioactives on health. Such assays are particularly important in situations where a large number of foods/bioactives need to be screened rapidly and in a cost effective manner in order to ultimately identify lead foods/bioactives that can be the subject of in vivo assays. The book is an asset to researchers wishing to study the health benefits of their foods and food bioactives of interest and highlights which in vitro/ex vivo assays are of greatest relevance to their goals, what sort of outputs/data can be generated and, as noted above, highlight the strengths and weaknesses of the various assays. It is also an important resource for undergraduate students in the ‘food and health’ arena.

Drug Bioavailability-Han van de Waterbeemd 2006-03-06 The peroral application (swallowing) of a medicine means that the body must first resorb the active substance before it can begin to take effect. The efficacy of drug uptake depends on the one hand on the chemical characteristics of the active substance, above all on its solubility and membrane permeability. On the other hand, it is determined by the organism's ability to absorb pharmaceuticals by way of specific transport proteins or to excrete them. Since many pharmacologically active substances are poorly suited for oral intake, a decisive criterion for the efficacy of a medicine is its so-called bioavailability. Written by an international team from academia and the pharmaceutical industry, this book covers all aspects of the oral bioavailability of medicines. The focus is placed on methods for determining the parameters relevant to bioavailability. These range from modern physicochemical techniques via biological studies in vitro and in vivo right up to computer-aided predictions. The authors specifically address possibilities for optimizing bioavailability during the early screening stage for the active substance. Its clear structure and comprehensive coverage make this book equally suitable for researchers and lecturers in industry and teaching.

Biopharmaceutics Applications in Drug Development-Rajesh Krishna 2007-09-20 The highly experienced authors here present readers with step-wise, detail-conscious information to develop quality pharmaceuticals. The book is made up of carefully crafted sections introducing key concepts and advances in the areas of dissolution, BA/BE, BCS, IVIC, and product quality. It provides a specific focus on the integration of regulatory considerations and includes case histories highlighting the biopharmaceutics strategies adopted in development of successful drugs.

Drug-like Properties: Concepts, Structure Design and Methods-Li Di 2010-07-26 Of the thousands of novel compounds that a drug discovery project team invents and that bind to the therapeutic target, typically only a fraction of these have sufficient ADME/Tox properties to become a drug product. Understanding ADME/Tox is critical for all drug researchers, owing to its increasing importance in advancing high quality candidates to clinical studies and the processes of drug discovery. If the properties are weak, the candidate will have a high risk of failure or be less desirable as a drug product. This book is a tool and resource for scientists engaged in, or preparing for, the selection and optimization process. The authors describe how properties affect in vivo pharmacological activity and impact in vitro assays. Individual drug-like properties are discussed from a practical point of view, such as solubility, permeability and metabolic stability, with regard to fundamental understanding, applications of property data in drug discovery and examples of structural modifications that have achieved improved property performance. The authors also review various methods for the screening (high throughput), diagnosis (medium throughput) and in-depth (low throughput) analysis of drug properties. * Serves as an essential working handbook aimed at scientists and students in medicinal chemistry * Provides practical, step-by-step guidance on property fundamentals, effects, structure-property relationships, and structure modification strategies * Discusses improvements in pharmacokinetics from a practical chemist's standpoint

Physiologically Based Pharmacokinetic (PBPK) Modeling-Jeffrey W. Fisher 2020-05-20 Physiologically Based Pharmacokinetic (PBPK) Modeling: Methods and Applications in Toxicology and Risk Assessment presents foundational principles, advanced techniques and applications of PBPK modeling. Contributions from experts in PBPK modeling cover topics such as pharmacokinetic principles, classical physiological models, the application of physiological models for dose-response and risk assessment, the use of in vitro information, and in silico methods. With end-of-chapter exercises that allow readers to practice and learn the skills associated with PBPK modeling, dose-response, and its applications to safety and risk assessments, this book is a foundational resource that provides practical coverage of PBPK modeling for graduate students, academics, researchers, and more. Provides end-of-chapter exercises to teach hands-on computational tools used in toxicology Supplies computer code and explanations and includes examples of applied models used in regulatory toxicology and research Authored by expert editors and contributors who are among the best PBPK modelers in the world

Biopharmaceutics Modeling and Simulations-Kiyohiko Sugano 2012-08-20 A comprehensive introduction to using modeling and simulation programs in drug discovery and development Biopharmaceutical modeling has become integral to the design and development of new drugs. Influencing key aspects of the development process, including drug substance design, formulation design, and toxicological exposure assessment, biopharmaceutical modeling is now seen as the linchpin to a drug's future success. And while there are a number of commercially available software programs for drug modeling, there has not been a single resource guiding pharmaceutical professionals to the actual tools and practices needed to design and test safe drugs. A guide to the basics of modeling and simulation programs, Biopharmaceutics Modeling and Simulations offers pharmaceutical scientists the keys to understanding how they work and are applied in creating drugs with desired medicinal properties. Beginning with a focus on the oral absorption of drugs, the book discusses: The central dogma of oral drug absorption (the interplay of dissolution, solubility, and permeability of a drug), which forms the basis of the biopharmaceutical classification system (BCS) The concept of drug concentration How to simulate key drug absorption processes The physiological and drug property data used for biopharmaceutical modeling Reliable practices for reporting results With over 200 figures and illustrations and a peerless examination of all the key aspects of drug research—including running and interpreting models, validation, and compound and formulation selection—this reference seamlessly brings together the proven practical approaches essential to developing the safe and effective medicines of tomorrow.

Animal Models for Oral Drug Delivery in Man-William Crouthamel 1983

Basic Pharmacokinetics, Second Edition-Mohsen A. Hedaya 2012-02-09 Knowledge of pharmacokinetics is critical to understanding the absorption, distribution, metabolism, and excretion of drugs. It is therefore vital to those engaged in the discovery, development, and preclinical and clinical evaluation of drugs, as well as practitioners involved in the clinical use of drugs. Using different approaches accessible to a wide variety of readers, Basic Pharmacokinetics: Second Edition demonstrates the quantitative pharmacokinetic relations and the interplay between pharmacokinetic parameters. After a basic introduction to pharmacokinetics and its related fields, the book examines: Mathematical operations commonly used in pharmacokinetics Drug distribution and clearance and how they affect the rate of drug elimination after a single dose Factors affecting drug absorption following extravascular drug administration, the rate and extent of drug absorption, and drug bioequivalence The steady-state concept during constant rate intravenous infusion and during multiple drug administration Renal drug elimination, drug metabolism, multicompartment models, nonlinear pharmacokinetics, and drug administration by intermittent intravenous infusion Pharmacokinetic-pharmacodynamic modeling, noncompartmental pharmacokinetic data analysis, clearance concept from the physiological point of view, and physiological modeling Clinical applications of pharmacokinetics, including therapeutic drug monitoring, drug pharmacokinetics in special populations, pharmacokinetic drug-drug interactions, pharmacogenomics, and applications of computers in pharmacokinetics Accompanying the book is a CD-ROM with self-instructional tutorials and pharmacokinetic and pharmacokinetic-pharmacodynamic simulations, allowing visualization of concepts for enhanced comprehension. This learning tool received an award from the American Association of Colleges of Pharmacy for innovation in teaching, making it a valuable supplement to this essential text.

Dermal Absorption and Toxicity Assessment-Michael S. Roberts 2007-12-14 The source Dermal Absorption and Toxicity Assessment supplies a state-of-the-art overview of the dermal absorption process, and is divided into six well organized sections. Written by internationally recognized experts in the field, this Second Edition is a complete revised and updated text, covering the wide range of methods used to assess skin ab

Animal Models for Oral Drug Delivery in Man-William Crouthamel 1983

Drug Delivery to the Posterior Segment of the Eye by Subconjuctival Injection-Wai-Yip Thomas Lee 2003

Percutaneous Absorption-Robert L. Bronaugh 1999-05-28 Since publication of the Second Edition in 1989, numerous innovations have occurred that affect the way scientists look at issues in the field of percutaneous absorption. Focusing on recent advances as well as updating and expanding the scope of topics covered in the previous edition, Percutaneous Absorption, Third Edition provides thorough coverage of the skin's role as an important portal of entry for chemicals into the body. Assembles the work of nearly 80 experts-30 more than the Second Edition-into a unified, comprehensive volume that contains the latest ideas and research! Complete with nearly 600 drawings, photographs, equations, and tables and more than 1600 bibliographic citations of pertinent literature, Percutaneous Absorption, Third Edition details the applied biology of percutaneous penetration factors that affect skin permeation, such as age, vehicles, metabolism, hydration of skin, and chemical structure in vivo and in vitro techniques for measuring absorption, examining factors influencing methodology such as animal models, volatility of test compound, multiple dosage, and artificial membranes procedures for use in transdermal delivery, exploring topics such as effects of penetration enhancers on absorption, optimizing absorption, and the topical delivery of drugs to muscle tissue And presents new chapters on mathematical models cutaneous

metabolism prediction of percutaneous absorption in vitro absorption methodology dermal decontamination concentration of chemicals in skin transdermal drug delivery mechanisms of absorption safety evaluation of cosmetics absorption of drugs and cosmetic ingredients nail penetration Emphasizes human applications-particularly useful for pharmacists, pharmacologists, dermatologists, cosmetic scientists, biochemists, toxicologists, public health officials, manufacturers of cosmetic and toiletry products, and graduate students in these disciplines! An invaluable reference source for readers who need to keep up with the latest developments in the field, Percutaneous Absorption, Third Edition is also an excellent experimental guide for laboratory personnel.

Applied Pharmacokinetics-William E. Evans 1992 The Third Edition of Applied Pharmacokinetics remains the gold standard by which all other clinical pharmacokinetics texts are measured. Written by leading pharmacokinetics researchers and practitioners, this book is the most advanced kinetics reference available. All chapters have been extensively updated or completely rewritten for this edition, and six new chapters have been added on pharmacodynamics, pharmacogenetics, pharmacokinetic considerations in the obese, dietary influences on drug disposition, zidovudine, and corticosteroids. Each chapter is tightly focused on the most important concepts and issues. Chapters on specific drugs are organized in a consistent format for quick, easy information retrieval. Major subheadings include Clinical Pharmacokinetics, Pharmacodynamics, Clinical Application of Pharmacokinetic Data, Analytical Methods, and Prospectus.

Pharmacometrics-Ene I. Ette 2013-03-14 Pharmacometrics is the science of interpreting and describing pharmacology in a quantitative fashion. The pharmaceutical industry is integrating pharmacometrics into its drug development program, but there is a lack of and need for experienced pharmacometricians since fewer and fewer academic programs exist to train them. Pharmacometrics: The Science of Quantitative Pharmacology lays out the science of pharmacometrics and its application to drug development, evaluation, and patient pharmacotherapy, providing a comprehensive set of tools for the training and development of pharmacometricians. Edited and written by key leaders in the field, this flagship text on pharmacometrics: Integrates theory and practice to let the reader apply principles and concepts. Provides a comprehensive set of tools for training and developing expertise in the pharmacometric field. Is unique in including computer code information with the examples. This volume is an invaluable resource for all pharmacometricians, statisticians, teachers, graduate and undergraduate students in academia, industry, and regulatory agencies.

Applied Biopharmaceutics and Pharmacokinetics-Leon Shargel 1993 The third edition of this introductory text covers the factors which influence the release of the drug from the drug product and how the body handles the drug. A stronger focus has been placed on the basics with clear explanations and illustrated examples. There is also more information on statistics and population pharmacokinetics and new chapters on drug distribution, computer applications, enzyme kinetics and pharmacokinetics models.

Pharmacokinetic Methods of Assessing Drug Absorption-Jack Chi-Kuen Loo 1971

Preclinical Drug Development-Mark Rogge 2016-04-19 Preclinical Drug Development, Second Edition discusses the broad and complicated realm of preclinical drug development. Topics range from assessment of pharmacology and toxicology to industry trends and regulatory expectations to requirements that support clinical trials. Highlights of the Second Edition include: PharmacokineticsModeling and simula

Clinical and Translational Science-David Robertson 2016-11-25 Clinical and Translational Science: Principles of Human Research, Second Edition, is the most authoritative and timely resource for the broad range of investigators taking on the challenge of clinical and translational science, a field that is devoted to investigating human health and disease, interventions, and outcomes for the purposes of developing new treatment approaches, devices, and modalities to improve health. This updated second edition has been prepared with an international perspective, beginning with fundamental principles, experimental design, epidemiology, traditional and new biostatistical approaches, and investigative tools. It presents complete instruction and guidance from fundamental principles, approaches, and infrastructure, especially for human genetics and genomics, human pharmacology, research in special populations, the societal context of human research, and the future of human research. The book moves on to discuss legal, social, and ethical issues, and concludes with a discussion of future prospects, providing readers with a comprehensive view of this rapidly developing area of science. Introduces novel physiological and therapeutic strategies for engaging the fastest growing scientific field in both the private sector and academic medicine Brings insights from international leaders into the discipline of clinical and translational science Addresses drug discovery, drug repurposing and development, innovative and improved approaches to go/no-go decisions in drug development, and traditional and innovative clinical trial designs

Alternatives to Laboratory Animals- 2008

A Comprehensive Guide to Toxicology in Nonclinical Drug Development-Ali S. Faqi 2016-11-03 A Comprehensive Guide to Toxicology in Nonclinical Drug Development, Second Edition, is a valuable reference designed to provide a complete understanding of all aspects of nonclinical toxicology in the development of small molecules and biologics. This updated edition has been reorganized and expanded to include important topics such as stem cells in nonclinical toxicology, inhalation and dermal toxicology, pitfalls in drug development, biomarkers in toxicology, and more. Thoroughly updated to reflect the latest scientific advances and with increased coverage of international regulatory guidelines, this second edition is an essential and practical resource for all toxicologists involved in nonclinical testing in industry, academic, and regulatory settings. Provides unique content that is not always covered together in one comprehensive resource, including chapters on stem cells, abuse liability, biomarkers, inhalation toxicology, biostatistics, and more Updated with the latest international guidelines for nonclinical toxicology in both small and large molecules Incorporates practical examples in order to illustrate day-to-day activities and the expectations associated with working in nonclinical toxicology

Basic Pharmacokinetics and Pharmacodynamics-Sara E. Rosenbaum 2016-11-28 Updated with new chapters and topics, this book provides a comprehensive description of all essential topics in contemporary pharmacokinetics and pharmacodynamics. It also features interactive computer simulations for students to experiment and observe PK/PD models in action. • Presents the essentials of pharmacokinetics and pharmacodynamics in a clear and progressive manner • Helps students better appreciate important concepts and gain a greater understanding of the mechanism of action of drugs by reinforcing practical applications in both the book and the computer modules • Features interactive computer simulations, available online through a companion website at: https://web.uri.edu/pharmacy/research/rosenbaum/sims/ • Adds new chapters on physiologically based pharmacokinetic models, predicting drug-drug interactions, and pharmacogenetics while also strengthening original chapters to better prepare students for more advanced applications • Reviews of the 1st edition: “This is an ideal textbook for those starting out ... and also for use as a reference book ...." (International Society for the Study of Xenobiotics) and “I could recommend Rosenbaum’s book for pharmacology students because it is written from a perspective of drug action . . . Overall, this is a well-written introduction to PK/PD .... “ (British Toxicology Society Newsletter)

ADME Processes in Pharmaceutical Sciences-Alan Talevi 2018-11-30 Absorption, Distribution, Metabolism and Excretion (ADME) processes and their relationship with the design of dosage forms and the success of pharmacotherapy form the basis of this upper level undergraduate/graduate textbook. As an introduction oriented to pharmacy students, it is also written for scientist from different fields outside of pharmaceutics. (e.g. material scientist, material engineers, medicinal chemists) who might be working in a positions in pharmaceutical companies or whose work might benefit from basic training in the ADME concepts and some biological background. Pedagogical features such as objectives, keywords, discussion questions, summaries and case studies add valuable teaching tools. This book will provide not only general knowledge on ADME processes but also an updated insight on some hot topics such as drug transporters, multi-drug resistance related to pharmacokinetic phenomena, last generation pharmaceutical carriers (nanopharmaceuticals), in vitro and in vivo bioequivalence studies, biopharmaceuticals, pharmacogenomics, drug-drug and food-drug interactions, and in silico and in vitro prediction of ADME properties. In comparison with other similar textbooks, around half of the volume would be focused on the relationship between expanding scientific fields and ADME processes. Each of these burgeoning fields has a separate chapter in the second part of the volume, and was written with leading experts on the correspondent topic, including scientists and academics from USA and UK (Duquesne University School of Pharmacy, Indiana University School of Medicine, University of Utah College of Pharmacy, University of Maryland, University of Bath). Additionally, each of the initial chapters dealing with the generalities of drug absorption, distribution, metabolism and excretion would include relevant, classic examples related to each topic with appropriate illustrations (e.g. importance of active absorption of levodopa, implications in levodopa administration, drug drug interactions and food drug interactions emerging from the active uptake; intoxication with paracetamol as a result of glutathione depletion, CYP induction and its relationship with acute liver failure caused by paracetamol, etc). ADME Processes and Pharmaceutical Sciences is written as a core textbook for ADME processes, pharmacy, pharmacokinetics, drug delivery, biopharmaceutics, drug disposition, drug design and medicinal chemistry courses.

Developing Solid Oral Dosage Forms-Yihong Qiu 2009-03-10 Developing Solid Oral Dosage Forms is intended for pharmaceutical professionals engaged in research and development of oral dosage forms. It covers essential principles of physical pharmacy, biopharmaceutics and industrial pharmacy as well as various aspects of state-of-the-art techniques and approaches in pharmaceutical sciences and technologies along with examples and/or case studies in product development. The objective of this book is to offer updated (or current) knowledge and skills required for rational oral product design and development. The specific goals are to provide readers with: Basics of modern theories of physical pharmacy, biopharmaceutics and industrial pharmacy and their applications throughout the entire process of research and development of oral dosage forms Tools and approaches of preformulation investigation, formulation/process design, characterization and scale-up in pharmaceutical sciences and technologies New developments, challenges, trends, opportunities, intellectual property issues and regulations in solid product development The first book (ever) that provides comprehensive and in-depth coverage of what's required for developing high quality pharmaceutical products to meet international standards It covers a broad scope of topics that encompass the entire spectrum of solid dosage form development for the global market, including the most updated science and technologies, practice, applications, regulation, intellectual property protection and new development trends with case studies in every chapter A strong team of more than 50 well-established authors/co-authors of diverse background, knowledge, skills and experience from industry, academia and regulatory agencies

In Vitro-In Vivo Correlations-David B. Young 2013-03-08 This book represents the invited presentations and some of the posters presented at the conference entitled "In Vitro-In Vivo Relationship (IVIVR) Workshop" held in Sep tember, 1996. The workshop was organized by the IVIVR Cooperative Working Group which has drawn together scientists from a number of organizations and institutions, both academic and industrial. In addition to Elan Corporation, which is a drug delivery com pany specializing in the development of ER (Extended Release) dosage forms, the IVIVR Cooperative Working Group consists of collaborators from the University of Maryland at Baltimore, University College Dublin, Trinity College Dublin, and the University of Not tingham in the UK. The principal collaborators are: Dr. Jackie Butler, Elan Corporation Prof. Owen Corrigan, Trinity College Dublin Dr. lain Cumming, Elan Corporation Dr. John Devane, Elan Corporation Dr. Adrian Dunne, University College Dublin Dr. Stuart Madden, Elan Corporation Dr. Colin Melia, University of Nottingham Mr. Tom O'Hara, Elan Corporation Dr. Deborah Piscitelli, University of Maryland at Baltimore Dr. Araz Raoof, Elan Corporation Mr. Paul Stark, Elan Corporation Dr. David Young, University of Maryland at Baltimore The purpose of the workshop was to discuss new concepts and methods in the devel opment of in vitro-in vivo relationships for ER products. The original idea went back ap proximately 15 months prior to the workshop itself. For some time, the principal collaborators had been working together on various aspects of dosage form development.

Aulton's Pharmaceutics-Michael E. Aulton 2013 Pharmaceutics is one of the most diverse subject areas in all of pharmaceutical science. In brief, it is concerned with the scientific and technological aspects of the design and manufacture of dosage forms or medicines. An understanding of pharmaceutics is therefore vital for all pharmacists and those pharmaceutical scientists who are involved with converting a drug or a potential drug into a medicine that can be delivered safely, effectively and conveniently to the patient. Now in its fourth edition, this best-selling textbook in pharmaceutics has been brought completely up to date to reflect the rapid advances in delivery methodologies by eye and injection, advances in drug formulations and delivery methods for special groups (such as children and the elderly), nanomedicine, and pharmacognosy. At the same time the editors have striven to maintain the accessibility of the text for students of pharmacy, preserving the balance between being a suitably pitched introductory text and a clear reflection of the state of the art. provides a logical, comprehensive account of drug design and manufacture includes the science of formulation and drug delivery designed and written for newcomers to the design of dosage forms New to this edition New editor: Kevin Taylor, Professor of Clinical Pharmaceutics, School of Pharmacy, University of London. Twenty-two new contributors. Six new chapters covering parenteral and ocular delivery; design and administration of medicines for the children and elderly; the latest in plant medicines; nanotechnology and nanomedicines, and the delivery of biopharmaceuticals. Thoroughly revised and updated throughout.

The Farnesoid-x-activated Receptor and Its Role in Lipid Metabolism-Heidi Rachelle Kast 2001

Drug Transporters-Glynis Nicholls 2016-08-17 Understanding and quantifying the effects of membrane transporters within the human body is essential for modulating drug safety and drug efficacy. The first volume comprehensively reviewed current knowledge and techniques in the transporter sciences and their relations to drug metabolism and pharmacokinetics. In this second volume on Drug Transporters, emphasis is placed on emerging sciences and technologies, highlighting potential areas for future advances within the drug transporter field. The topics covered in both volumes ensure that all relevant aspects of transporters are described across the drug development process, from in silico models and preclinical tools through to the potential impact of transporters in the clinic. Contributions are included from expert leaders in the field, at-the-bench industrial scientists, renowned academics and international regulators. Case studies and emerging developments are highlighted, together with the merits and limitations of the available methods and tools, and extensive references to reviews on specific in-depth topics are also included for those wishing to pursue their knowledge further. As such, this text serves as an essential handbook of information for postgraduate students, academics, industrial scientists and regulators who wish to understand the role of transporters in absorption, distribution, metabolism, and excretion processes. In addition, it is also a useful reference tool on the models and calculations necessary to predict their effect on human pharmacokinetics and pharmacodynamics.

Pharmacokinetics and Adverse Effects of Drugs-Ntambwe Malangu 2018-05-23 This book is a fruit of a collaborative work from several international scientists. It will be a useful resource for researchers, students, and clinicians. Each individual chapter could serve as a prescribed reading for postgraduate students and clinicians specializing in and practicing clinical pharmacology and toxicology, pharmacotherapy and pharmacotherapeutics, pharmacovigilance, and toxicovigilance, as well as those involved in clinical research, drug discovery, and development. Every chapter in this book discusses and provides illustrations on the theme discussed based on authors' understanding and experience while summarizing existing knowledge. In doing so, each chapter provides a new insight that would benefit a novice as well as a seasoned reader in understanding the pharmacokinetic mechanisms and risk factors involved in the occurrence of adverse effects of drugs.

Drug Metabolism-Corina Ionescu 2006-02-28 Drug Metabolism: Current Concepts provides a comprehensive understanding of the processes that take place following ingestion of a medicinal agent or xenobiotic, with an emphasis on the crucial role of metabolism (biotransformation). How a sound knowledge of these phenomena is incorporated into the design of effective new drug candidates is also explained. The user-friendly text focuses on concepts rather than extraneous details and is supported by many illustrated examples of biotransformations as well as frequent references to current critical reviews and articles highlighting the nature of research objectives in this vibrant area of medicinal development. The final topic on strategies for drug design relies on the background provided by the rest of the book. This book is ideally suited as an advanced text for courses in drug metabolism for students of medicine, pharmacy, pharmacology, biochemistry; and for courses in drug design and drug delivery for students of medicinal chemistry. It is also appropriate for professional seminars or courses that relate to the fate of a drug in the body, drug interactions, adverse reactions and drug design.

Drug Discovery and Development-Omboon Vallisuta 2015-06-03 It is very important for scientists all over the globe to enhance drug discovery research for better human health. This book demonstrates that various expertise are essential for drug discovery including synthetic or natural drugs, clinical pharmacology, receptor identification, drug metabolism, pharmacodynamic and pharmacokinetic research. The following 5 sections cover diverse chapter topics in drug discovery: Natural Products as Sources of Leading Molecules in Drug Discovery; Oncology and Drug Discovery; Receptors Involvement in Drug Discovery; Management and Development of Drugs against Infectious Diseases; Advanced Methodology.

Radiopharmaceuticals-Ph.D., Lawerence E. Williams 2016-04-19 Nanoengineering, energized by the desire to find specific targeting agents, is leading to dramatic acceleration in novel drug design. However, in this flurry of activity, some issues may be overlooked. This is especially true in the area of determining dosage and evaluating the effects of multiple agents designed to target more than one site of met

The Interactive Roles of P-glycoprotein and Cytochrome P-450 3A in Intestinal and Hepatic Drug Disposition-Chi-Yuan Wu 2003

Toxicology of the Skin-Nancy A. Monteiro-Riviere 2010-02-17 This key volume of the Target Organ Toxicology Series provides a fresh and modern approach to the subject of skin toxicology from the perspective of how the skin forms a barrier that protects the body from the external environment and how chemicals and drugs interact with the barrier properties of the skin. Any defects or perturbations to this barr