Record Nr. UNINA9910143555503321 Physiologically based pharmacokinetic modeling [[electronic resource]] **Titolo** : science and applications / / edited by Micaela B. Reddy ... [et al.] Pubbl/distr/stampa Hoboken, N.J., : Wiley-Interscience, c2005 **ISBN** 1-280-27583-9 9786610275830 0-470-24616-2 0-471-47876-8 0-471-47877-6 Descrizione fisica 1 online resource (442 p.) Altri autori (Persone) ReddyMicaela B Disciplina 615.7040724 615/.7 Soggetti **Pharmacokinetics** Xenobiotics Toxicology 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. PHYSIOLOGICALLY BASED PHARMACOKINETIC MODELING; CONTENTS; Nota di contenuto PREFACE; ACKNOWLEDGMENTS; CONTRIBUTORS; CHAPTER 1 INTRODUCTION: A HISTORICAL PERSPECTIVE OF THE DEVELOPMENT AND APPLICATIONS OF PBPK MODELS; 1.1 Introduction; 1.2 A Historical Perspective; 1.2.1 Responses to Inhaled Compounds; 1.2.2 Pharmaceutical Applications; 1.2.3 Occupational and Environmental Applications; 1.2.4 Digital Computation and PBPK Modeling; 1.3 Expansion of PBPK Model Applications; 1.3.1 PBPK Models for Tissue Dosimetry from Secondary Data; 1.3.2 Biological Mechanisms Underlying Pharmacokinetic Behaviors 1.3.3 Chemicals as Probes of Biological Processes 1.3.4 Risk Assessment Applications; 1.3.5 PBPK Models as Repository of Mechanistic Data on Distribution and Response; 1.4 Summary; Notation; References; PART I PBPK MODELING FOR VOLATILE ORGANIC COMPOUNDS; CHAPTER 2 HALOGENATED ALKANES; 2.1 Introduction;

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Sommario/riassunto

A definitive, single source of information on PBPK modelingPhysiologically-based pharmacokinetic (PBPK) modeling is becoming increasingly important in human health risk assessments and in supporting pharmacodynamic modeling for toxic responses. Organized by classes of compounds and modeling purposes so users can quickly access information, this is the first comprehensive reference of its kind. This book presents an overview of the underlying principles of PBPK model development. Then it provides a compendium of PBPK modeling information, including historical development, specific modeli