

1.	Record Nr.	UNIBAS000002661
	Autore	Green, Gerald
	Titolo	The last angry man / a novel by Gerald Green
	Pubbl/distr/stampa	New York : Scribner, c1956
	Descrizione fisica	494 p. ; 21 cm.
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	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9910139907503321
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	ISBN	1-282-30704-5 9786612307041 3-527-62386-8 3-527-62387-6
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	Altri autori (Persone)	WaterbeemdHan van de TestaBernard
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and Bioavailability; Contents; List of Contributors; Preface; A Personal Foreword; 1 Introduction: The Why and How of Drug Bioavailability Research; 1.1 Dening Bioavailability; 1.1.1 The Biological Context; 1.1.2 A Pharmacokinetic Overview; 1.1.3 Specic Issues; 1.2 Presentation and Layout of the Book; References; Part One Physicochemical Aspects of Drug Dissolution and Solubility; 2 Aqueous Solubility in Drug Discovery Chemistry, DMPK, and Biological Assays; 2.1 Introduction; 2.1.1 Denition of Aqueous Solubility; 2.1.2 Aqueous Solubility in Different Phases of Drug Discovery; 2.2 Aqueous Solubility in Hit Identification; 2.2.1 Aqueous Solubility from DMSO Solutions; 2.2.1.1 Turbidimetric Methods; 2.2.1.2 UV Absorption Methods; 2.2.1.3 Alternative Detection Methodology; 2.2.1.4 Application of DMSO-Based Solubility Assays; 2.3 Aqueous Solubility in Lead Identification and Lead Optimization; 2.3.1 Dried-Down Solution Methods; 2.3.2 Solubility from Solid; 2.3.3 Thermodynamic Solubility Assays with Solid-State Characterization; 2.3.4 Solubility by Potentiometry; 2.3.5 Application of Thermodynamic Solubility Data in LI and LO; 2.4 Conclusions; References; 3 Gastrointestinal Dissolution and Absorption of Class II Drugs; 3.1 Introduction; 3.2 Drug Absorption and the BCS; 3.3 Class II Drugs; 3.4 GI Physiological Variables Affecting Class II Drug Dissolution; 3.4.1 Bile Salts; 3.4.2 GI pH; 3.4.3 GI Transit; 3.4.4 Drug Particle Size; 3.4.5 Volume Available for Dissolution; 3.5 In Vitro Dissolution Tests for Class II Drugs; 3.5.1 Biorelevant Media; 3.5.2 Dynamic Lipolysis Model; 3.6 BCS-Based FDA Guidelines: Implications for Class II Drugs; 3.6.1 Potential of Redening BCS Solubility Class Boundary; 3.6.2 Biowaiver Extension Potential for Class II Drugs; 3.7 Conclusions; References; 4 In Silico Prediction of Solubility; 4.1 Introduction; 4.2 What Solubility Measures to Model?; 4.3 Is the Data Set Suitable for Modeling?; 4.4 Descriptors and Modeling Methods for Developing Solubility Models; 4.5 Comparing Literature Solubility Models; 4.6 What Is the Influence of the Domain of Applicability?; 4.7 Can We Tell when Good Predictions Are Made?; 4.8 Conclusions; References; Part Two Physicochemical and Biological Studies of Membrane Permeability and Oral Absorption; 5 Physicochemical Approaches to Drug Absorption; 5.1 Introduction; 5.2 Physicochemical Properties and Pharmacokinetics; 5.2.1 DMPK; 5.2.2 Lipophilicity, Permeability, and Absorption; 5.2.3 Estimation of Volume of Distribution from Physical Chemistry; 5.2.4 Plasma Protein Binding and Physicochemical Properties; 5.3 Dissolution and Solubility; 5.3.1 Calculated Solubility; 5.4 Ionization (pKa); 5.4.1 Calculated pKa; 5.5 Molecular Size and Shape; 5.5.1 Calculated Size Descriptors; 5.6 Hydrogen Bonding; 5.6.1 Calculated Hydrogen-Bonding Descriptors

Sommario/riassunto

The gold standard for industrial research now completely revised in line with current trends in the field, with all contributions extensively updated or rewritten. In 21 chapters readers can benefit from the key working knowledge of today's leading pharmaceutical companies, including Pfizer, AstraZeneca, and Roche. Drug developers from industry and academia present all the factors governing drug bioavailability, complete with practical examples and real-life data. Part I focuses on in vitro and in vivo measurements of physicochemical properties, such as membrane permeability and ioniza