1. Record Nr. UNINA9910141437803321

Autore	Sugano Kiyohiko
Titolo	Biopharmaceutics modeling and simulations [[electronic resource]] : theory, practice, methods, and applications / / Kiyohiko Sugano
Pubbl/distr/stampa	Hoboken, N.J., : John Wiley & Sons, c2013
ISBN	1-118-35432-X 1-299-31459-7 1-118-35433-8 1-118-35430-3 1-118-35431-1
Descrizione fisica	1 online resource (521 p.)
Disciplina	615.19
Soggetti	Biopharmaceutics - methods Computer Simulation Drug Compounding - methods Models, Theoretical
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	Introduction -- Theoretical framework I : solubility -- Theoretical framework II : dissolution -- Theoretical framework III : biological membrane permeation -- Theoretical framework IV : gastrointestinal transit models and integration -- Physiology of gastrointestinal tract and other administration sites in humans and animals -- Drug parameters -- Validation of mechanistic models -- Bioequivalence and biopharmaceutical classification system -- Dose and particle size dependency -- Enabling formulations -- Food effect -- Biopharmaceutical modeling for miscellaneous cases -- Intestinal transporters -- Strategy in drug discovery and development -- Epistemology of biopharmaceutical modeling and good simulation practice.
Sommario/riassunto	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 professio