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Titolo	Fundamentals of Antimicrobial Pharmacokinetics and Pharmacodynamics // edited by Alexander A. Vinks, Hartmut Derendorf, Johan W. Mouton
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Descrizione fisica	1 online resource (467 p.)
Disciplina	615.7
Soggetti	Infectious diseases Pharmacology Immunology Medical microbiology Public health Infectious Diseases Pharmacology/Toxicology Medical Microbiology Public Health
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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	Foreword -- Section I: Basic Concepts and Principles -- Introduction to Pharmacodynamics and microbiology -- In vitro and animal PK/PD model -- MIC and breakpoints -- Principles of applied PK/PD modeling -- Population Pk/PD modeling and its applications to antimicrobials -- Drug resistance and Drug-drug combinations -- Section II: Clinical -- Aminoglycosides -- Beta-lactam antibiotics including continuous infusion -- Macrolides -- Glycopeptides -- Quinolones -- Other.- .
Sommario/riassunto	Over the past decade, significant progress has been made in the theory and applications of pharmacodynamics of antimicrobial agents. On the basis of pharmacokinetic-pharmacodynamic modeling concepts it has become possible to describe and predict the time course of antimicrobial effects under normal and pathophysiological conditions. The study of pharmacokinetic-pharmacodynamic relationships can be

of considerable value in understanding drug action, defining optimal dosing regimens, and in making predictions under new or changing pre-clinical and clinical circumstances. Not surprisingly, pharmacokinetic-pharmacodynamic modeling concepts are increasingly applied in both basic and clinical research as well as in drug development. Fundamentals of Antimicrobial Pharmacokinetics and Pharmacodynamics is designed as a reference on the application of pharmacokinetic-pharmacodynamic principles for the optimization of antimicrobial therapy, namely pharmacotherapy, and infectious diseases. The reader is introduced to various aspects of the fundamentals of antimicrobial pharmacodynamics, the integration of pharmacokinetics with pharmacodynamics for all major classes of antibiotics, from basic research to clinical situations.
