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Titolo	Optimization of Pharmaceutical R&D Programs and Portfolios : Design and Investment Strategy // edited by Zoran Antonijevic
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ISBN	3-319-09075-5
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (204 p.)
Disciplina	330 519.5 519.6 658.40301
Soggetti	Operations research Decision making Mathematical optimization Statistics Operations Research/Decision Theory Optimization Statistics for Life Sciences, Medicine, Health Sciences
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 at the end of each chapters and index.
Nota di contenuto	Need for Optimal Design of Pharmaceutical Programs and Portfolios in Modern Medical Product Development -- Clinical Aspects of Pharmaceutical Portfolio Management -- Drug Development and the Cost of Capital -- Investment Considerations for Pharmaceutical Product Portfolios -- Challenges of Portfolio Management in Pharmaceutical Development -- Impact of Phase 2b Strategies on Optimization of Drug Development Programs -- Using Decision Analysis to Support the Design of Clinical Trials at a Program Level -- Indication Sequencing for a New Molecular Entity with Multiple Potential Oncology Indications -- Maximizing Return on Investment in Phase II Proof-of-Concept Trials -- Portfolio Optimization of Therapies and Their Predictive Biomarkers -- Dynamically Optimizing Budget

Allocation for Phase 3 Drug Development Portfolios Incorporating Uncertainty in the Pipeline.

Sommario/riassunto

Very little has been published on optimization of pharmaceutical portfolios. Moreover, most of the published literature comes from the commercial perspective, where probability of technical success (PoS) is treated as fixed, and not as a consequence of development strategy or design. In this book there is a strong focus on the impact of study design on PoS, and ultimately a portfolio's value. Design options that are discussed are dose-selection strategies, adaptive design, and enrichment. Some development strategies that are examined are indication sequencing, optimal number of programs, and optimal decision criteria. This book includes chapters written by authors with very broad backgrounds including financial, clinical, statistical, decision sciences, commercial, and regulatory. Many authors have long held executive positions and have been involved with decision making at a product or at a portfolio level. As such, it is expected that this book will attract a very broad audience, including decision makers in pharmaceutical R&D, commercial, and financial departments. The intended audience also includes portfolio planners and managers, statisticians, decision scientists, and clinicians. Early chapters describe approaches to portfolio optimization from big pharma, and venture capital standpoints, focusing on finances and processes. Later chapters present selected statistical and decision analysis methods for optimizing drug development programs and portfolios. Some methodological chapters are technical; however, with a few exceptions they require a basic knowledge of statistics by a reader. .
