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Autore	Canci Jung Kyu
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Nota di contenuto	Part I. Value Creation and Managing Intellectual Property in the Life Science Industry -- Chapter 1. Value Creation, Valuation and Business Models in the Pharmaceutical Sector -- Chapter 2. Alternative Licensing Strategies: A Piecewise Deterministic Differential Game -- Chapter 3. Partnership Models for R&D in the Pharmaceutical Industry -- Part II. Modelling Specific Business Processes in the Life Science Industry -- Chapter 4. Pharma Tender Processes: Modelling Auction Outcomes -- Chapter 5. Multi-Echelon Inventory Optimization Using Deep

Reinforcement Learning -- Part III. Specialized Quantitative Tools in the Life Science Industry -- Chapter 6. Stochastic Differential Equations in Healthcare -- Chapter 7. Point Processes with Mixed Doubly Stochastic Poisson and Self-Exciting Flavors: An Excursion Into DALY Computations.

Sommario/riassunto

This open access book explores the field of life science business from a multidisciplinary perspective. Applying statistical, mathematical, game-theoretic, and data science tools to pharmaceutical and biotechnology business endeavors, the book describes value creation, value maintenance, and value realization in the life sciences as a sequence of processes using the quantitative language of applied mathematics. Written by experts from a variety of fields, the contributions illustrate the shift from a deterministic to a stochastic view of the processes involved, offering a new perspective on life sciences economics. The book covers topics such as valuing and managing intellectual property in life science, licensing in the pharmaceutical business, outsourcing pharmaceutical R&D, and stochastic modelling of a pharmaceutical supply chain. The book will appeal to scholars of economics and the life sciences, as well as to professionals in chemical and pharmaceutical industries. .
