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Autore	Zanders Edward D.
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Nota di contenuto	Introduction -- PART 1: How Drugs are Discovered and Developed in the Pharmaceutical Industry -- Introduction to Drugs and Drug Targets -- Background to chemistry of small and large molecules -- Laying the foundations- Drug discovery from antiquity to the twenty first century -- Part II-The drug development pipeline – discovery to testing in humans -- Drug discovery pipeline overview -- Target discovery -- Medicinal chemistry -- Biotherapeutics -- Screening for hits -- Process chemistry and formulation -- Preclinical development -- Part III-The drug development pipeline – clinical trials to marketing authorisation -- Clinical trials -- Regulatory affairs and marketing approval -- Diagnostics and personalized medicine -- Putting it All Together: a drug development case history -- Part IV- The Global Pharmaceuticals Business -- Commercial aspects of drug development -- Challenges and responses -- Part V - Professional Interactions with the Drug

Sommario/riassunto

The Science and Business of Drug Discovery is written for those who want to learn about the biopharmaceutical industry and its products whatever their level of technical knowledge. Its aim is to demystify the jargon used in drug development, but in a way that avoids over simplification and the resulting loss of key information. Each of the twenty chapters is illustrated with figures and tables which clarify some of the more technical points being made. Also included is a drug discovery case history which draws the relevant material together into a single chapter. In recognizing that it is difficult to navigate through the many external resources dealing with drug development, the book has been written to guide the reader towards the most appropriate information sources, including those listed in the two appendices. The following topics are covered: Different types of drugs: from small molecules to stem cells Background to chemistry of small and large molecules Historical background to drug discovery, pharmacology and biotechnology The drug discovery pipeline: from target discovery to marketed medicine Commercial aspects of drug discovery Challenges to the biopharmaceutical industry and its responses Material of specific interest to technology transfer executives, recruiters and pharmaceutical translators .