DESCRIPTION

A step-by-step, integrated approach for successful, FDA-approved combination drug products

Using a proven integrated approach to combination drug development, this book guides you step by step through all the preclinical, clinical, and manufacturing stages. Written from an FDA regulatory perspective, the book not only enables you to bring a successful combination drug product to market, it also sets forth the most efficient and effective path to FDA approval.

The book begins with an introductory chapter presenting definitions and basic regulatory principles of combination products. Next, it reviews manufacturing and controls, preclinical testing models, pharmacology, clinical testing, regulatory submissions, FDA reviews, and approvals. Among the key topics examined are:

* The pharmacology, safety pharmacology, and toxicology supporting human clinical trials of combination products

* Approaches to clinical trial protocol design and execution

* Chemical, physicochemical, and analytical aspects of manufacturing controls and validation that lead to stable components for combination products

* Key sponsor/FDA meetings and negotiations essential for approval and commercialization
Case studies involving such actual combination products as Mylotarg, Herceptin, and HercepTest help you better understand how to implement the author's practical guidelines. References at the end of each chapter enable you to find more information on any stage of the development, manufacturing and approval processes.

This book is ideal for researchers, regulators, academics, project managers, and executives involved in the complex process of combination product development. Not only does it offer a comprehensive guide to the technical aspects of the field, it also integrates all of these technical aspects into a unified, effective approach to help ensure a successful, approved product.

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**ABOUT THE AUTHOR**

**Evan B. Siegel,** PhD, is President and CEO of Ground Zero Pharmaceuticals, Inc., and an Adjunct Professor at the University of Queensland in Australia. Dr. Siegel has held positions as a Toxicology Reviewer at the U.S. Food and Drug Administration and Supervising Toxicologist in the California Department of Health Services. He has also served in regulatory affairs and executive positions in CROs, the pharmaceutical industry, and trade associations. In addition, Dr. Siegel was an editor of *Regulatory Affairs Focus* from 1999 to 2001.

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