

# Preface

The *Handbook of Anticancer Pharmacokinetics and Pharmacodynamics* was designed with the objective of having a single reference on clinical pharmacology to serve as a guide to drug development with a focus on cancer therapy. The first edition of the handbook was organized to closely follow a logical flow of events of the drug development plan from identification of cancer-specific targets to preclinical testing to clinical trial design and all phases of clinical trials.

In this thoroughly updated and expanded second edition, we embarked on an even more comprehensive approach to adapt to the ever-changing drug development landscape, highlighting the recent changes involved in shifting the paradigm of the process over the last decade. The outline and objective of the handbook remain focused on a roadmap for moving an agent toward NDA submission. We have incorporated in this revised second edition new material on phase 0 trials in oncology, organ dysfunction trials, drug formulations, and their impact on anticancer drug pharmacokinetics/pharmacokinetics including strategies to improve drug delivery, pharmacogenomics and cancer therapy, high-throughput platforms in drug metabolism and transport pharmacogenetics, imaging in drug development, and nanotechnology in cancer. Together these chapters provide for a comprehensive overview of anticancer drug development.

Advances in understanding the molecular basis of cancer are critical for oncology drug researchers to translate molecular targets into new therapies. As the search for cancer-specific targets continues over the next decade, advances in drug discovery and development efforts are underway, and a practical guide detailing the underlying principles of these processes will be invaluable to cancer researchers. We hope to achieve this with an indispensable reference that should be of interest to both the clinical pharmacologist and the pharmaceutical scientist.

We would like to thank all of the authors for their thoughtful and thorough contributions. Our task of compiling this book was made easy by their high-quality efforts. We continue to be conscious of our patients who keep us focused on the goal of finding treatments and cures for all types of cancers.

Baltimore, MD, USA  
Bethesda, MD, USA  
Bethesda, MD, USA  
Tampa, FL, USA

Michelle A. Rudek  
Cindy H. Chau  
William D. Figg  
Howard L. McLeod

Handbook of Anticancer Pharmacokinetics and  
Pharmacodynamics

Rudek, M.A.; Chau, C.H.; Figg, W.; McLeod, H.L. (Eds.)

2014, IX, 836 p. 145 illus., 46 illus. in color., Hardcover

ISBN: 978-1-4614-9134-7

A product of Humana Press