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Preclinical Development Handbook

ADME and Biopharmaceutical Properties

Edited by

Shayne Cox Gad

PRECLINICAL DEVELOPMENT HANDBOOK

ADME and Biopharmaceutical Properties

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Cary, North Carolina

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PREFACE

This *Preclinical Development Handbook: ADME and Biopharmaceutical Properties* continues and extends the objective behind the entire *Handbook* series: an attempt to achieve a through overview of the current and leading-edge nonclinical approaches to evaluating the pharmacokinetic and pharmacodynamic aspects of new molecular entity development for therapeutics. The 38 chapters cover the full range of approaches to understanding how new molecules are absorbed and distributed in model systems, have their biologic effects, and then are metabolized and excreted. Such evaluations provide the fundamental basis for making decisions as to the possibility and means of pursuing clinical development of such moieties. Better performance in this aspect of the new drug development process is one of the essential keys to both shortening and increasing the chance of success in developing new drugs.

The volume is unique in that it seeks to cover the entire range of available approaches to understanding the performance of a new molecular entity in as broad a manner as possible while not limiting itself to a superficial overview. Thanks to the persistent efforts of Mindy Myers and Gladys Mok, these 38 chapters, which are written by leading practitioners in each of these areas, provide coverage of the primary approaches to the problems of understanding the mechanisms that operate in *in vivo* systems to transfer a drug to its site of action and out.

I hope that this newest addition to our scientific banquet is satisfying and useful to all those practitioners working in or entering the field.