Clinical Pharmacokinetics

Fifth Edition

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DEDICATION

This fifth edition is dedicated to my students and residents, past and present who continue to inspire me; to our patients for whom we dedicate our professional lives; to my mother and father for their nurturing; to my family for making life interesting and fun; to Mercer University and the University of Arizona for providing me the best jobs I could have ever hoped for; and to the pharmacy profession for giving me opportunities that I never dreamed existed for a guy like me way back when it all started.

PREFACE TO THE FIFTH EDITION

Many studies have been published since the first edition of the *Clinical Pharmacokinetics*. The second, third, fourth, and now the fifth edition authors have taken advantage of advances in understanding to update the chapters. In many cases more judicious monitoring of drug concentrations is suggested compared to the early editions. For some drugs the dosing approaches are radically different now. For others, new prediction approaches are available that have been tested in larger numbers of patients. The impact of drug interactions and the determination of the appropriate dosing weight on pharmacokinetics and pharmacodynamics when patients are overweight can be of great importance to dosing decisions, so the authors have included this information when available. Pharmacogenomic issues are increasingly coming to the forefront in decisions about drug dosing or who should even receive certain drugs and many chapters have updates regarding what is known about the impact of pharmacogenetic studies on dosing. All of these updates should be helpful to users of the techniques.

This book is largely designed to help predict drug doses to achieve target concentrations or drug concentrations from doses administered to patients. However, important chapters on rational use of drug concentration measurements, dosing in overweight and obese patients, dosing considerations for a wider variety of drugs used in neonatal, pediatric and geriatric patients, drug dosing in renal disease, and creatinine clearance estimation (the precursor to dose and concentration estimates for a number of drugs), round out the fifth edition. Tables on international and traditional units for drugs and laboratory tests are included as well as specific content on the use of both types of units should allow easier use of the textbook around the world.

I gratefully acknowledge the chapter authors who volunteered a portion of their lives to each of the editions of this book, and to the authors' support staff for their assistance. Finally, without a doubt many thanks are due to the best collaborators in the world—the ASHP staff. I would particularly like to thank the staff editors—Michael Soares (1st edition), Con Ann Ling (2nd edition), and Dana Battaglia (3rd to 5th editions) for their outstanding dedication to making each edition happen. They all did much work and receive little of the credit. But, I know their value and it is tremendous. Thanks.

John E. Murphy

2011

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