gap that is typical for books and largely unavoidable of about 2 years. For this reason, this comprehensive, interdisciplinary text is a must for those involved in the development and teaching of ophthalmic preparations.

Professor Dr J. Kreuter
Frankfurt am Main
Germany

PII S0939-6411(96)00023-9

Pharmacokinetics: Regulatory-Industrial-Academic Perspectives.
Edited by P.G. Welling and F.L.S. Tse. Marcel Dekker, 270 Madison Avenue, New York, NY10016, 512 pages.

The objective of the book is to present the latest concepts and developments in the area of pharmacokinetics from the perspective of those actively working in this field. It is the second edition of this book, first published in 1988. As compared to the first edition, there is greater emphasis on topics that are rapidly changing within the dynamic framework of the application of pharmacokinetic principles to drug development, although some components of classical pharmacokinetics and metabolism have been retained.

The first chapter addresses the central issue of good laboratory practice regulations, as applied to pharmacokinetics.

The next four chapters address methods of assessing drug absorption:

- Methods to assess absorption in drug discovery
- Drug delivery systems: effects of pharmacokinetics on design, evaluation, and production
- Peptide and protein drug delivery
- Membrane transport.

The next section discusses various aspects of drug distribution:

- Blood-brain barrier permeability: pharmacological implications with special emphasis on peptides
- Modelling of relationships between pharmacokinetics and pharmacodynamics
- Spatial imaging of radioactivity in animal tissues and organs.

It is followed by two chapters on recent advances in drug metabolism methodology:

- Recent developments in drug metabolism methodology
- Hepatic microsomes and heterologous expression systems as in vitro models for human drug metabolism.

The next chapters focus on drug development:

- Integration of pharmacokinetics into drug discovery and development: the alternative approaches
- Pharmacokinetics in drug discovery and development: non clinical studies
- Pharmacokinetics in drug discovery and development: clinical studies
- Population pharmacokinetics and pharmacodynamics.

The book concludes with regulatory perspectives of bioavailability and bioequivalence issues:

- Bioavailability and bioequivalence of oral controlled-release products: a regulatory perspective
- Statistical considerations for bioavailability/bioequivalence studies.

Overall the chapters are well written, and the goal of the editors 'to present the latest concepts in the most rapidly changing areas in the broad discipline of pharmacokinetics' can be considered to have been largely achieved. The chapters are generally well documented by a vast and uptodate bibliography.

The only regret of the reviewer is that its orientation is very much North American. Among the 22 authors only three are European. This has as a consequence that chapters with strong regulatory components such as 'Good laboratory practice' and 'Bioavailability and Bioequivalence' reflect essentially the views of the US Food and Drug Administration. It also possibly explains why issues considered as important in Europe such as pharmacogenetics in drug development are only marginally discussed.

Such minor distortions should, however, not diminish the value and interest of the book which should be useful to all scientists actively involved in the use of pharmacokinetics in the process of drug discovery and development.

Prof. Luc P. Balant
Département de Psychiatrie
Hospitaux Universitaire de Genève
Switzerland

PII S0939-6411(96)00024-0