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Pharmaceuticals: Classes, Therapeutic Agents, Areas of Application Volume 1

Edited by J.L. McGuire, Wiley-VCH Verlag, 2000. Price EUR 1099, DM 2149.46, 2315 pages in hardback, ISBN 3-527-29874-6

Introduction: Cardiovascular Drugs

Introduction: Cardiovascular Drugs is the first volume in a series of four focussing on various therapeutic areas. This volume is aimed at the medicinal chemist with a focus on cardiovascular drugs and will provide the scientist with an overview of compounds introduced onto the market. After a short introduction to the pharmaceutical industry, the book is subdivided into several chapters, focussing on cardioactive and vasoactive drugs, blood pressure increasing agents, antihypertensive agents, antiarrhythmic drugs, β-blockers, cardiac glycosides and synthetic cardiotonic drugs, calcium antagonists, drugs affecting circulation, and diuretics.

The book has been structured so that there are many areas of overlap, leading to the repetition of several classes of compounds. For example, the calcium channel antagonists are listed in five different chapters but without sufficient cross-referencing. As a result, the structure of verapamil, for example, can be found four times in the book. The homogeneity of the chapters is also limited. Although the β-blockers are described in detail with pharmacodynamics, pharmacokinetics and the clinical use of the drugs, only limited information is provided for the calcium channel antagonists. However, there is reasonable consistency for most compounds in all of the chapters with regards to providing the compounds formula and structure, molecular weight, melting point and CAS-registry number. In addition, for several compounds a short description of their synthesis and also the manufacturing pharmaceutical company of the compound are provided, together with their respective trade names. The majority of the cited literature is 20–30 years old and should have been supplemented by more recent publications. Unfortunately, the background of the respective physiology and pharmacology of antihypertensive, antiarrhythmic or diuretic drugs, for example, is only weakly described and aspects of modern molecular pharmacology do not appear to be discussed at all. As a further suggestion, it might have been helpful to increase the number of figures and schemata to the text.

It would also have been useful to the reader if an outlook towards new pharmacological strategies and an overview of compounds that are currently in preclinical and clinical development phases was provided. Further to this, a list of compounds that have been withdrawn from the market would be beneficial. This would have helped to present a more complete overview of this therapeutic area and the respective therapeutics.

In addition, I should also mention that the index is only provided as a general index in Volume 4, which makes it difficult to use the book as a quick source to obtain respective data and information.

In conclusion, I feel that scientists who are interested in the comparison of the chemical structures of the compounds on the market that are related to cardiovascular disorders will get an additional source of information for their work.

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Pharmaceuticals: Classes, Therapeutic Agents, Areas of Application Volume 2

Neuropharmaceuticals, Gastrointestinal Drugs and Respiratory Tract

The second volume of the book is composed of three sections; Neuropharmaceuticals, Gastrointestinal (GI) drugs and Respiratory tract. Within each section there are a number of topics, which reflect the diverse indications to which drugs might be put in those general areas (that is, 11 for neuroparmaceuticals, six for GI and three for respiratory tract).

The contributors are based mainly in Germany, although other nations are represented. Meanwhile, drugs and drug names focus on the USA and Europe (including the UK), but also extend occasionally to include the Pacific Rim. The language of the volume is comprehensible with only the occasional error, such as metabolization (presumably metabolism!).

With the complexity of the nervous system, it is perhaps not surprising that the editor has chosen to give a general introductory chapter entitled 'Neuropharmaceutical agents', which gives an overview of the anatomy, physiology, biochemistry and pharmacology of the nervous system. Given that Victor Whittaker is the author of the chapter, it is not surprising that the neurochemistry element is the strongest within this chapter.

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