

Book Reviews

Platinum-Based Drugs in Cancer Therapy. Edited by Lloyd R. Kendall and Nicholas P. Farrell. Humana Press, Totowa, NJ. 2000. xii + 341 pp. 16 × 23.5 cm. ISBN 0-896-03599-9. \$145.00.

This book brings together all of the key aspects of platinum drug chemistry in one concise volume. Developed in four parts, the text covers the basic chemistry and biochemistry of platinum compounds before moving on to clinical aspects, and it ends with an overview of likely future developments in the field. Each chapter is well-written and focuses on important topic matter (two examples: How does cisplatin kill cells? and New platinum drugs: the pathway to oral therapy). Literature coverage is more than adequate with references cited through 1998. The figures and tables are very clear, and the book is very readable.

Chapter 1 presents a concise description of the solution chemistry of platinum compounds and methods used to characterize product species, both in vitro and from metabolic sources. Chapter 2 builds on the structural chemistry by reviewing the selection and targeting mechanism of platinum drugs, while Chapter 3 builds the case for the use of transplatin-oligonucleotide complexes as drugs, with a particular focus on structural issues. Chapter 4 deals with the very important topic of cisplatin accumulation, detailing import mechanisms and cellular carriers. Chapter 5 concerns the equally important topic of cellular resistance to platinum-based drugs, with a discussion of possible mechanisms. This topic is developed further in Chapter 6. Chapter 7 overviews the current hypotheses concerning how cisplatin kills cancer cells. Chapters 8–11 focus on real clinical case studies for a variety of cancer drugs, reporting experiences with the single drugs and combinations with taxanes. These chapters also establish the pharmacological profiles for these compounds as well as comparing their relative effectiveness for different cancer types. Chapters 12 and 13 address the toxicology of platinum compounds and the regulatory consequences that arise. Chapter 14 presents an overview of what the future might bring, with an emphasis on polynuclear charged platinum compounds.

The strength of the text lies in the diversity of topics that are covered in such a succinct fashion. Clinicians will benefit from the earlier focus on basic chemistry and biochemistry, while the bench scientist will better appreciate the practicalities of using these compounds from the lucid experiences of the clinical case studies. The price of the book is reasonable for a general review volume. It should find a place on all library shelves, and it will no doubt be a routine reference text for specialists in the field.

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Traditional Chinese Medicine – Molecular Structures, Natural Sources, and Applications. By X. Yan, J. Zhou, and G. Xie. Edited and with an introduction by G. W. A. Milne. Ashgate Publishing, Ltd., Hampshire, U.K. 1999. vii + 1024 pp. 17.5 × 25 cm. ISBN 0 566 08210 1. \$295.00.

This book functions primarily as a dictionary or handbook, and it consists of three parts. Part I lists 6808 chemical compounds isolated from traditional Chinese medicine (TCM), arranged alphabetically by their chemical names. Each entry includes the structure, molecular formula, molecular weight, sources, and the reference to the Chinese literature where the identification of the chemical was first reported. Part II contains 1268 Chinese medicines from 1548 distinct plant species, arranged alphabetically by their English names. Each listing includes up to six items of information: English name, Chinese name, origin, part used, medical effects, and indication. Part III consists of four indexes of TCM, arranged by Chinese names, English names, Latin (origin) names, and chemical names.

Part I provides western medicinal chemists with a valuable database of compounds from TCM. The three compilers are veteran chemists who have worked both in China and in the West for many years. Their expertise gives this book substantial authority. All structural drawings are neat and very professional. For most compounds, the stereochemistry is expressed clearly. Part II provides a quick way for western scientists to find the biological effect of a TCM from the English name of the natural source/medication. In Part III, the last index (Chemicals in TCM) also provides a convenient way to locate a compound that has multiple names.

The weak part of the book is Part III, the indexes. Although the first three indexes do cross-reference TCM by English, Latin, and family names, they do not reference any of these terms to page numbers in Parts I and II. The absence of this feature makes it harder for the reader to find a chemical compound. A corresponding searchable database on CD-ROM would have been valuable as a companion to this book. Including Chinese characters for each Chinese herb would also have benefited the Chinese reader. Nevertheless, the book remains a great resource for all medicinal chemists who are interested in TCM.

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