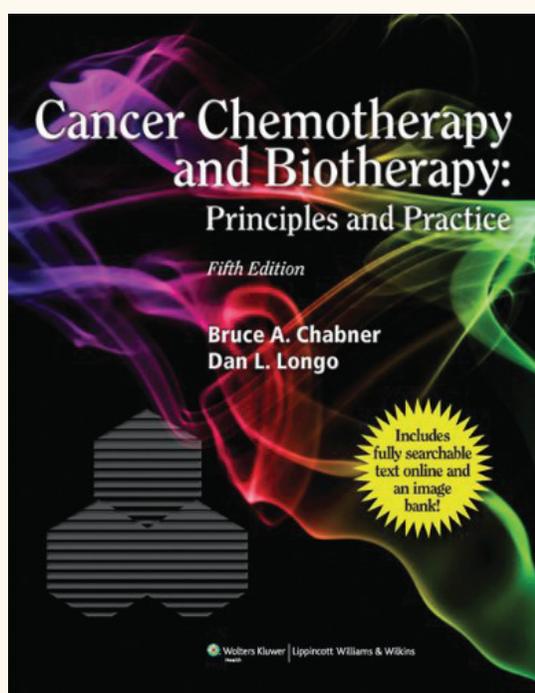


Cancer Chemotherapy and Biotherapy Principles and Practice

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علاج السرطان الكيماوي والحيوي المبادئ والممارسة

بروس تشابنر، دان لونجو



THE TREATMENT OF CANCER IS GOING through a phase of evolution and rapid progress. The last few years have seen a paradigm shift, and targeted therapy is now considered a cornerstone in cancer management. Despite this progress, cytotoxic chemotherapy plays a pivotal role in the medical management of various cancers. *Cancer Chemotherapy and Biotherapy: Principles and Practice* highlights the importance of this subject.

This hard-back 5th edition, with fully searchable online text and image bank, should be considered as a useful source of reference, especially with regards to cytotoxic chemotherapy, for any medical library, in the vicinity of which cancer is treated, or cancer management taught and learnt.

Section I deals with the basic principles of cancer treatment, including areas such as, drug discovery, development and marketing approval. In the present day setting of fierce competition amongst the pharmaceutical companies, this section provides guidelines as to how a molecule travels the journey from target identification to marketing and even post-marketing surveillance. Another important 'innovation' in this section is the chapter on "Pharmacogenomics". With the rapidly evolving indications and guidelines, these drugs are being used increasingly commonly across the globe. Nevertheless, the vast majority of the clinical trials are still conducted in North America, Western Europe and Japan. However, there are important genetic differences in various ethnic groups resulting in differential responses and toxicities, and the chapter highlights this aspect of drug development and disposition.

Section II deals in detail with the conventional cytotoxic chemotherapeutic agents and it is this section which could serve as a repository. The drugs are classified according to their mechanism of action, and the chapters include not only a detailed discussion of the compounds, but are also replete

with tables, figures and diagrams. Some sections are supported by more than 600 references; this alone testifies to the amount of detailed research that has gone into some of the chapters. For quick reference, the table of "Key Features" of almost all the compounds discussed in this section provides useful information in a nutshell.

Section III deals with the molecularly targeted therapies, referred to as 'biotherapy' in the title. Over the 160 pages of the section, compounds used regularly in routine clinical practice over the past dozen years are admixed with those still in the phase of investigation and phase III trials, such as the histone deacetylase inhibitors and some of the signalling inhibitors. Whereas this section provides details of the origins of the compounds, the rapidly evolving data in pivotal phase II and phase III trials over the past few years has made this information slightly outdated. Moreover, one would have liked to see more emphasis on compounds such as, imatinib mesylate, which changed the paradigm of treatment for cancer in 1999, to the extent that reputable journals indeed spoke about the 'treatment of cancers in the imatinib era', and rituximab which again changed the way lymphomas and many other benign and malignant conditions have been treated in the past decade. Also the section on conjugation of monoclonal antibodies with either immunotoxins or radiotherapy could have contained more details.

Section IV deals with 'immunologic agents', including cytokines, vaccines, and adoptive cellular therapies. The chapter on cytokines is detailed, with results of some of the landmark clinical trials, which may or may not form the backbone of routine clinical practice these days, but nevertheless are considered important steps in the journey of advancing the treatment of cancer. The sections on vaccines and adoptive therapy are relatively short, even by the standards of the book, but do provide the essentials which underpin the use of such therapies.

Section V deals with hormonal treatment of breast and prostate cancers. Although the two chapters explain the basis of use of several types of hormones/strategies, the rapid development and evolving data in the field means that the reader would be best advised to combine this section with the results of some of the recently concluded clinical trials in order to comprehend the overall picture in this form of cancer treatment.

Section VI deals with "Supportive care". Whereas, chapters on pain management, haematopoietic growth factors, treatment of nausea and vomiting and bisphosphonates are comprehensive, one would have liked to see some of the other topics, such as, psycho-social care, treatment of anxiety and depression, fatigue, and the management of common side effects of cytotoxic chemotherapy and targeted therapies in a reference book of this size.

Section VII deals with survivorship issues such as late effects of chemotherapy including infertility. The chapter on infertility summarises the results of salvage treatments to preserve/treat infertility, and provides the reader with some up-to-date results in the field. In this section, one would have liked to see something about chemoprevention, especially for those who are at high or very high risk of developing cancer.

In summary, this is a useful reference book; however, in some areas, the information it provides should be combined with other rapidly evolving data in order to obtain a full picture of the exciting times of cancer treatment in which we live!

REVIEWER

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