

Concepts, Clinical Developments, and Therapeutic Advances in Cancer Chemotherapy

Cancer Treatment and Research

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Cancer Treatment and Research

Foreword

Where do you begin to look for a recent, authoritative article on the diagnosis or management of a particular malignancy? The few general oncology textbooks are generally out of date. Single papers in specialized journals are informative but seldom comprehensive; these are more often preliminary reports on a very limited number of patients. Certain general journals frequently publish good indepth reviews of cancer topics, and published symposium lectures are often the best overviews available. Unfortunately, these reviews and supplements appear sporadically, and the reader can never be sure when a topic of special interest will be covered.

Cancer Treatment and Research is a series of authoritative volumes which aim to meet this need. It is an attempt to establish a critical mass of oncology literature covering virtually all oncology topics, revised frequently to keep the coverage up to date, easily available on a single library shelf or by a single personal subscription.

We have approached the problem in the following fashion. First, by dividing the oncology literature into specific subdivisions such as lung cancer, genitourinary cancer, pediatric oncology, etc. Second, by asking eminent authorities in each of these areas to edit a volume on the specific topic on an annual or biannual basis. Each topic and tumor type is covered in a volume appearing frequently and predictably, discussing current diagnosis, staging, markers, all forms of treatment modalities, basic biology, and more.

In Cancer Treatment and Research, we have an outstanding group of editors, each having made a major commitment to bring to this new series the very best literature in his or her field. Martinus Nijhoff Publishers has made an equally major commitment to the rapid publication of high quality books, and world-wide distribution.

Where can you go to find quickly a recent authoritative article on any major oncology problem? We hope that Cancer Treatment and Research provides an answer.

WILLIAM L. MCGUIRE
Series Editor

Preface

As in the preceding two volumes on cancer chemotherapy published in this series, this book represents but a glimpse at the vast and expanding area of cancer chemotherapy. When considered in its broadest sense, biologic response modifiers introduced to treat cancer in man are the latest class of agents being studied for their antiproliferative activities. It is fitting that the first of these drugs widely employed as a result of recombinant technology be reviewed in depth just as five years of investigational clinical experience have been completed. Although disappointing to those who expected a universally successful translation of its heralded *in vitro* versatility, alpha interferon has established itself as an effective treatment of hairy cell leukemia and a promising adjunct in several other clinical areas. Coincidentally we review deoxycoformycin, which is also proving to be effective in hairy cell leukemia. Deoxycoformycin, while failing to live up to expectations of unprecedented selectivity against lymphoid tumors, also holds promise if we learn to respect its toxicities; and it holds great theoretical interest. Another drug covered in depth is tiazofurin. Although this compound has not proven to have clinical utility, the experience in phase I trials is instructive, and its mechanism of action has been investigated in detail. Its antiviral properties should also prove of interest in this era of burgeoning hopes of controlling retroviral and other viral infections. Since viral etiology of malignancy is coming into prominence with the acquired immunodeficiency syndrome-related neoplasms, future relationships between antitumor activity and antiviral properties might emerge.

The evolving concepts and technical applications of locoregional therapy are covered by the San Diego group of Drs. Markman and Howell, who provide the perspective of several years and, by now, hundreds of patients' experiences. The sound pharmacologic basis of this approach was developed less than a decade ago by workers at the National Cancer Institute. The advantage achieved by intraperitoneal administration of drugs has been carefully studied utilizing a range of agents, and its theoretical foundations have been amply confirmed. This review therefore constitutes an excellent example of the optimal interface between the laboratory and the clinic in establishing new therapeutic modalities.

Another aspect of experimental therapeutics deals with the interface of animal and human pharmacology in the planning and execution of phase I studies. More closely linked to the laboratory are the principles of biochemical modulation, many of which have not yet been successfully applied clinically. Finally, clinicians and experimentalists alike might be interested in the overview of the DNA alkaline elution technique in drug development by its initiator, Dr. Kurt Kohn and his colleagues.

The review of clinical applications of chemotherapy focuses on two distinct areas, each of which merits in-depth attention at this time. Brain tumors, which first yielded partially to chemotherapy more than 18 years ago, must be reevaluated with an eye towards capitalizing on recent advances in tumor biology. Mediastinal germ cell tumors represent a new entity which is now successfully treated with chemotherapy and is worthy of a thorough review. We hope that in-depth readers and surveyors of the chemotherapy field will find this blend of concepts, new clinical developments, and therapeutic landmarks useful to clinical and laboratory scientists on a recurrent basis.

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