Cancer Immune Therapy: Current and Future Strategies

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Gernot Stuhler, Peter Walden : Cancer Immune Therapy: Current and Future Strategies before purchasing it in order to gage whether or not it would be worth my time, and all praised Cancer Immune Therapy: Current and Future Strategies:

This book provides an overview on research in tumor immunology. It analyzes the molecular and cellular mechanisms of tumorgenesis and the instruments of the immune system that might be exploited for therapy. Major contributors to the field analyze the molecular and cellular mechanisms of tumorigenesis, evaluate the instruments of the immune system, summarize their clinical experiences, and discuss new strategies for cancer treatment. Researchers in the field

of immunology, tumor biology and medicine will find this up-to-date volume invaluable for evaluating future research activities.

From The New England Journal of MedicineThe dream of curing cancer by exploiting natural immunity goes back at least as far as the time of Paul Ehrlich, when the potential of the immune system was only a subject of speculation. Since then, having made substantial progress in understanding the molecular and cellular aspects of the immune system, we have begun to fulfill this dream -- at least for some patients. This book is not, however, about these clinical advances. Rather, it selectively explores emerging cellular and therapeutic approaches that may contribute to clinical advances over the next two decades. However, because the selection of topics is so random, the book lacks a predominant leitmotif that advances a specific hypothesis or concept. Investigational approaches to the identification of human tumor antigens with the use of cultured T cells or serologic analysis by recombinant expression cloning are described, but the analysis of genes and proteins and T-cell-receptor spectrotyping for this purpose are overlooked. Dendritic-cell vaccines are described, but peptide, anti-idiotypic, and allogeneic-cell vaccines are not. One of the early strategies used in clinical immunotherapy, bacterial vaccination, is well reviewed in the modern context of natural immunity through toll-like receptors. Interferons, also mediators of natural immunity, are mentioned in a good chapter on the regulation of the major histocompatibility complex. But no chapter covers the role of interferons in influencing antigen processing or immune effector-cell function or their therapeutic activity in both solid tumors and hematologic cancers. Although one whole chapter and part of another are devoted to interleukin-10, other cytokines (such as interleukin-2, interleukin-4, interleukin-12, and interleukin-18) merit only slight mention in the very complete and erudite chapters on transforming growth factor (beta) as an immunosuppressor and in a chapter on cytokines fused to antibodies. A chapter is devoted to preclinical investigations of monoclonal antibodies conjugated to chemical toxins, but there is no discussion of the clinically approved toxin ozogamicin conjugated to gemtuzumab. Other topics not included are the mechanism of the clinically effective engineered monoclonal antibodies (rituximab, ibritumomab, and alemtuzumab), two of which, rituximab and ibritumomab, are effective both alone and as radioimmunoconjugates. The editors of this monograph state that their goal is to review the "current understanding of tumor immunology with special emphasis on the inter-relationship of the tumor and immune system, and cancer immune therapy." A further understanding of the scientific basis of tumor immunology without a comprehensive clinical review is a worthwhile objective. But lessons can also be derived from a review of clinically effective approaches that may or may not yet have reached their full potential. On both counts, and because there are so many gaps in the selection of the subjects covered, this book should be valued mainly for the understanding it provides to readers interested in the individual topics. Jaroslaw Maciejewski, M.D., Ph.D. "...should be valued...for the understanding it provides to readers interested in individual topics." (New England Journal of Medicine, November 20, 2003) "...excellent text...easy to read and highly informative..." (Pharmaceutical Research, Vol. 20, No. 6, June 2003)