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Book Reviews

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Manipulation of the Immune Response in Cancer

Tumor immunology has been considered a breakthrough in cancer research. Although several approaches have been attempted which turned out to be clinically useful, there is still a demand for more insight into mechanisms and reactions which can be manipulated in order to eradicate cancer cells in the tumor-bearing individual.

This book is a compilation of reports presented at a meeting held at Oxford in 1977. Nevertheless, the book has not lost its actuality as it represents the major fields of cancer immunology.

The first chapters deal with the expression and characterization of tumor-associated antigens in both animals and man, giving a survey of present experiments and methods.

Somatic cell hybridization, a method that has gained much interest during recent years, is described in a further chapter. With the aid of hybrids, it is possible to characterize antigens and to study their regulation and transformation, and, furthermore, to obtain monoclonal antibodies, which can be used for the isolation and characterization of distinct antigens on lymphoid or tumor cells. The section referring to effector cells includes studies on natural killer cells which have been demonstrated to play a major role in defense mechanisms against malignant tumors. Recently, it has been found that these cells can be activated by several mechanisms and biologic response modifiers such as BCG, C. parvum or Interferon. The other group of effector cells
which have regained interest during recent years are the macrophages (M0). Several aspects of the involvement of M0 in the immune response are presented in this chapter. Furthermore, methods for activating M0 against tumor targets in vivo and in vitro have been reported. Soluble factors without antibody characteristics are important for mediating various immune reactions. These factors are able to facilitate or suppress immune reactions, and are the subject of a separate chapter.

The final part of the book is devoted to the questions of manipulating the response in favor of the host in order to create an antibody response or cell-mediated immunity against hypothetical tumor-associated antigens. As there are several sets of lymphocytes regulating immune response, there are also several candidates for such a manipulation (helper cells, suppressor cells). This book offers an insight into present approaches in basic tumor immunology presented by leading scientists in this field. It is, therefore, important reading for immunologists and both experimental and clinical oncologists.

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