

Foreword



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Consulting Editor

This edition of the *Surgical Oncology Clinics of North America* is devoted to tumor immunology. The guest editor is Robert P. Sticca, MD. Dr. Sticca is Chair of Surgery and Program Director for the General Surgery Residency at the University of North Dakota. Dr. Sticca received his general surgery training from Boston University, and this was followed by a surgical oncology fellowship at the Roswell Park Cancer Institute. His basic science and research has centered around dendritic cell vaccines for melanoma and renal cell cancer, and thymidylate synthase variation in human colorectal tumors.

Dr. Sticca has put together an expert group of investigators with several discussions centered around the current immunotherapeutic strategies in solid tumors. The role of cancer vaccines in both therapy and prevention is also discussed. Cancer is felt to be the result of several sequential events, including transformation by viruses or environmental carcinogens, such as radiation and chemicals, genetic predisposition, and tumor promoters. The theory of immune surveillance states that the immune system constantly recognizes and eliminates tumor cells. If a tumor escapes immune surveillance and grows too large for the immune system to kill, the result is cancer. Immune surveillance is likely to be successful against virus-induced tumors that express foreign peptides. Tumors vary greatly in their immunogenicity and even tumors who have antigens which can be recognized by the host immune system can evade immune elimination. Several immunotherapies have been tested in human trials, including melanoma vaccines. Melanoma

vaccines have induced tumor remission in some patients, and whole protein, peptide, and recombinant vaccines are also being developed. Heat shock proteins from tumor cells are also being tested as possible vaccines. Lastly, tumor antigen pulsed autologous dendritic cells are being tested for their ability to stimulate a tumor specific immune response.

All of the issues above are described in detail by experts in the field of tumor immunology. Dr. Sticca has emphasized to the authors to develop articles in tumor immunology that would be applicable and educational for the practicing surgeon. I believe Dr. Sticca and his authors have been successful in achieving this goal.

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