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Preface

The theme of the 15th Bristol-Myers Squibb Nagoya International Cancer Treatment Symposium was “new immunological approach to cancer treatment” emphasizing, like the previous symposia, the treatment aspects of cancer research. Each year this symposium attracts an international audience of clinicians and basic researchers in oncology to exchange information and hear the most recent results of other groups working in related fields.

Recent progress in antibody engineering has led to advances in the treatment of hematologic malignancies and breast cancer. Meanwhile, other biotherapy modalities, including new targeted therapy and gene therapy, are being developed. As Dr Michael Pfreundschuh pointed out in his Keynote Address, determination of the antigenic structures of human tumors recognized by the host immune system is a prerequisite for the development of immunotherapeutic strategies. By defining antigenic targets that are recognized by autologous cytotoxic T lymphocytes, several tumor antigens, including differentiation, mutated, and testicular antigens aberrantly expressed in tumors, have been identified. Serological identification of antigens by recombinant expression cloning (SEREX) was developed as a novel procedure using serum from cancer patients to exploit

the B cell repertoire for the molecular definition of tumor antigens and analysis for epitopes recognized by T cells. The application of SEREX has resulted in the isolation of many new tumor antigens.

Although more than 1,000 antigens have been identified so far, only a few have been characterized beyond preliminary status. The information on antigens obtained by SEREX is in the International SEREX Data Bank, Ludwig Institute of Cancer Research, Lausanne, Switzerland, and is accessible to the public. In an attempt to define the entire spectrum of antigens expressed by human tumors (the human tumor immunome) joint efforts are being made by groups worldwide.

The same spirit of cooperation has made it possible to translate research results into effective therapies for many types of cancer. While more work remains before the mechanisms of carcinogenesis are understood and effective immunotherapeutic strategies including vaccines against it devised and applied clinically, symposia such as this one serve as important venues to strengthen global cooperation toward that end. We are grateful to Bristol-Myers Squibb for its continuing sponsorship of this symposium and hope that the papers in this publication are useful to oncologists in various fields.