Prognostic and Predictive Value of p53

EUROPEAN SCHOOL OF ONCOLOGY, SCIENTIFIC UPDATES, 1

Edited by Jan G.M. Klijn

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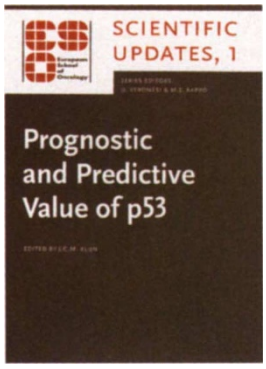
In the course of managing a patient with cancer, the oncologist is routinely called upon to provide a realistic prognosis and to present the patient with options for curative or palliative therapy. In some cases both the prognosis and optimal therapeutic course are readily apparent, but often the decisions to be made are more difficult and fraught with uncertainty. In the case of a number of commonly occurring cancers, different patients who are at a seemingly similar stage of illness often experience a remarkably varied progression of their disease. Another problem is an unpredictable response to therapy, which is often arduous and of varying efficacy. The identification of patients who might most benefit from available therapy and who might safely be spared unnecessary treatment is therefore a clinical goal of great importance.

A revolution in the understanding of the molecular basis of carcinogenesis is well underway. Implicit in the excitement of this area of research is the expectation that advances in the laboratory will lead to tangible benefits for people with cancer. As the most intensively studied gene implicated in cancer, *p53* is an obvious focal point for attempts to correlate a tumor's genes with the destiny of a patient. The book *Prognostic and Predictive Value of p53*, edited by Jan G. M. Klijn, seeks to assess the extent to which this is currently possible.

Borne of a meeting organized by the European School of Oncology in December 1996, this book is a collection of articles that examine the relationship of p53 abundance and mutation to patient prognosis and predicted response to therapeutic intervention. This analysis is no easy task. A voluminous number of studies have been published on this topic. The results have often conflicted and in general an overwhelming consensus has failed to emerge. The authors of this monograph gamely sort through a wealth of published and unpublished information and seek an answer to the timely question: is knowledge of a tumor's p53 status clinically useful?



This book is arranged in ten chapters, many of which are quite broad in scope. Although a certain amount of redundancy is inherent in virtually any multi-author work of this sort, this book suffers from quite a bit of repetition of some basic concepts. For example, several chapters offer a review of the many biological properties of p53 and even have similar illustrative figures. A discussion of the significance of p53 aberration in breast cancer is spread out among sections of six chapters, where a single well organized chapter would have had far more impact. There is a substantial amount of primary data presented, some of which does serve to help clarify results that are reviewed, but much of it probably would have been more appropriately published in a peer-reviewed journal. The consequence of this redundancy and data from the authors' laboratories in this slender volume is in some instances a lack of depth. A more detailed and illustrated discussion of the methodologies used in assessing p53 status, for example, might have been useful for the clinicians and preclinical scientists for whom this book was intended. Perhaps the most valuable feature of this book is several sections in which the results of many studies are summarized and presented in an easy-to-read tabular format. Here, the scope and magnitude of the authors' efforts are apparent, as is the contrary nature of the reports published to date. As it is, this text would be most useful for researchers active in this field.

The stated purpose of the *Scientific Updates* series, of which this book is the first volume, is to rapidly publish information in rapidly evolving areas within oncology. This subject certainly qualifies as one such area. In fact, many papers relevant to topics convered here have been published in the time that has elapsed since the meeting in late 1996 upon which this book is based. Paradoxically, this book is simultaneously out of date and ahead of its time. The studies it analyzes have been followed up by more studies, but still a clear, definitive role for p53 testing of tumor samples as part of the management of cancer patients remains to be proven. Time will tell if it is disingenuous to think that the genotype of a single locus can give useful information in the complex and varied process that is cancer. Either way, this series might do well to revisit this notion in a future volume.

Gene Therapy for Neurological Disorders and Brain Tumors

Edited by E.A. Chiocca & X.O. Breakefield

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The concept of gene therapy is simple—introduce a good copy of the gene that will provide the appropriate protein to alleviate the defect. In more complex scenarios, the introduced gene product may slow the progression of the disease, boost the immune system, or interfere with the establishment of the disease. There is no dearth of diseases or investigators practicing the trade of gene therapy, yet there is not a single success to claim. A colleague recently showed a slide entitled 'Successful Gene Therapy Trials'—the rest of it was blank. Why? The likely answer is that the methods used for gene delivery are inadequate for sustained expression of the foreign gene product. Any book on gene therapy must therefore tackle the issue of gene delivery before any successful outcome can be anticipated.

The book *Gene Therapy for Neurological Disorders and Brain Tumors* is divided into three sections. The first section appropriately deals with delivery systems mostly