This volume presents six review articles in four areas of modern cancer research: cancer cytogenetics, telomerase, cancer viruses and cancer immunology. In general, the articles are up-to-date, thoughtful essays on important aspects of cancer biology and medicine. There are no straightforward answers for cancer clinicians or researchers, but each of these articles points to important problems in the field and each gives a brief overview of the future challenges in their field.

Chromosome instability has been an intensely interesting and productive field of cancer research. David Gisselsson describes briefly the history of genetic instability, the importance of fragile sites and tumour specific chromosomal abnormalities. The interesting association between centrosomal abnormalities and carcinoma in situ is discussed in some detail. Telomerase has long been mooted as a major potential target for the development of cancer therapeutics. Although some potent small molecule inhibitors of telomerase have been identified, the anti-proliferative activity of these compounds in cellular systems/extracts is much lower than expected. With the current interest in telomerase as a vaccine and anti-cancer therapeutic, this review by Zhi Chen and David Corey is a timely summary of the challenges for the field.

The major article in this volume is directed towards the pathogenicity to retroviruses by Jan Svoboda, Josef Geryk and Daniel Elleder. This article contains a wealth of information on the biology of retroviruses relevant to cancer - the acquisition and activation of the Src oncogene, the subversion of immunity and transmission of retroviruses are covered in detail. This article is supported by a comprehensive list of over 400 useful references.

The last three articles concern immunological aspects of cancer biology: EBV and nasopharyngeal carcinoma (both local and serological responses); cytokine, antibody and vaccine approaches to the immunotherapy of prostate cancer; and a final short chapter on the role of CD4+ T-lymphocytes in anti-tumour immunity. These are all useful, accessible articles for scientists and clinicians with an interest in these fields, but who are not experts in EBV or immunology.

The book has an excellent index, so specific topics are found quite easily. It would be remiss not to point out that the quality of figures presented is quite disappointing – the graphics text is actually out of focus. The binding of all the colour figures in the middle of an irrelevant article is quite confusing, especially when there is no indication on the figures to which they are associated. The presentation of figures is so poor that they will be of little or no use for those involved in teaching.

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