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Prostate Cancer Prevention

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Preface

Prostate cancer is the most common type of cancer and the third leading cause of cancer death among men in the developed world. Better understanding of factors that modify the risk of prostate cancer and its preventive measures that include pharmacological intervention will help us reduce the burden of this disease. At the same time, a combination of early detection and better discrimination between aggressive and indolent prostate cancer may help reduce treatment-related morbidity and mortality due to prostate cancer.

Recent genome-wide association studies have identified several single nucleotide polymorphisms (SNPs) associated with prostate cancer. These SNPs, in combination as panels, may allow us to identify individuals at high risk of developing prostate cancer. European Prospective Investigation into Cancer and Nutrition and other observational studies are shedding light on dietary and lifestyle factors that modify prostate cancer risk. This information will help in reducing disease risk through lifestyle and dietary modifications and also in better identification of those at high risk, perhaps in tandem with SNP panels.

Screening for prostate cancer by PSA testing remains a very controversial area. Apparently conflicting results from two of the largest screening trials, the ERSPC trial and the PLCO trial, have elicited a strong debate among the experts. Investigators of both these trials present their data and views in this book.

Several agents like 5 α -reductase inhibitors aspirin, isoflavonoids, DFMO, and lycopene have been investigated for their role in prostate cancer prevention. This remains an active area of investigation with several ongoing and planned trials. Although the US FDA ruled against the use of 5 α -reductase inhibitors in prostate cancer prevention due to an excess of high-grade prostate cancers, recent long-term survival data from the Prostate Cancer Prevention Trial do not support any detriment in survival. Additionally, with a third of low-grade cancers being prevented, use of 5 α -reductase inhibitors may be a cost-effective way to reduce prostate cancer burden.

Once diagnosed, distinguishing aggressive prostate cancer from an indolent one is the key question where screening is common. Optimal clinical management of low-risk prostate cancer is also very important in reducing treatment-related morbidity.

The chapters in this book, written by leading researchers and experts in the field, elaborate on these important issues. Each chapter not only discusses the most up-to-date evidence on the topic but also discusses the ongoing research and future directions for research. We believe that scientists and clinicians dealing with prostate cancer will find this book to be a useful companion.

London, UK

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