About the Editors

Evangelos Xylinas

Evangelos Xylinas is an Assistant Professor of uro-oncology at the Department of Urology, Cochin, Hospital, Assistance Publique-Hôpitaux de Paris, Paris Descartes University, Paris France. He completed his medical studies and his residency in Paris, France (Cochin Hospital, Assistance Publique Hôpitaux de Paris) and then completed a uro-oncology fellowship at the Weill Cornell Medical Center, New York Presbyterian Hospital in New York City. His main scientific interest is urothelial carcinoma of the upper and lower tract. His research is focused on molecular mechanisms, markers, early detection, natural history, treatment, and translational and outcomes research. He has co-authored more than 150 peer-reviewed articles and 10 book chapters. He is the chairman of the bladder cancer section of the Young Academic Urologists Group of the European Association of Urology and board member of European Association of Urology Section of Onco-Urology. He is a reviewer and editorial board member for several urologic and oncologic journals.

Shahrokh F Shariat

Dr. Shariat is professor and chairman of the department of urology, Medical University of Vienna, Vienna General Hospital, Vienna, Austria, adjunct professor of urology and medical oncology at Weill Cornell Medical Center, New York, NY and adjunct professor of urology at the University of Texas Southwestern Medical Center, Dallas, TX, USA. He has published more than 731 peer-reviewed research papers (h-index: 66), 84 non-peer-reviewed research papers, and 14 book chapters, holds four patents stemming from his research into prostate and bladder cancer, and is the recipient of various national and international rewards. He currently spearheads several collaborative multicenter groups and prospective clinical trials. He is a member of various academic societies and a journal, meeting abstract, and grant reviewer for numerous national and international organizations. He is an editorial board member of various journals including European Urology, BJU International, World Journal of Urology, Current Opinion in Urology, and Immunotherapy among others.

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Foreword

Advances in bladder cancer management

Evangelos Xylinas &
Shahrokh F Shariat

Bladder cancer is alarmingly common in the world ranking ninth in cancer incidence, with approximately 356,000 new cases each year and more than 145,000 deaths per year [1,2]. In the United States, 74,690 new cases are estimated to be diagnosed in 2014 and 15,580 patients will die from bladder cancer [3]. In Europe, over 120,000 new cases are diagnosed each year with a 5 years prevalence of around 410,000 according to the IARC (EUCAN). Due to high recurrence rates, intensive surveillance strategies, and expensive treatment costs, the management of bladder cancer contributes significantly to medical costs [4,5]. Bladder cancer is the most expensive cancer in the United States, accounting for almost 3.7 billion US dollars (2001 values) in direct costs.

Despite its frequency, associated personal distress, lethal potential and socio-economical burden, bladder cancer lacks public awareness and research funding. In contrast to other malignancies such as breast and prostate cancer, which are in the middle of all public discussions, bladder cancer has not received the media attention it deserves. Indeed, there is little public awareness about the most basic facts of bladder cancer such as its risk factors and symptoms/signs. For example, while there is public knowledge about the connection between smoking and lung cancer, most people are unaware of the association between smoking and bladder cancer. Similarly,

while prostate-specific antigen is immediately associated with prostate cancer early detection, presence of hematuria is not related to bladder cancer risk in the public or medical consciousness leading too often to delays in diagnosis and resulting worse prognosis [6–8]. This lack of disease awareness and the resulting absence of public discussion regarding bladder cancer have had a negative impact on public funding for bladder cancer thereby stalling progress and innovation in this disease. Bladder cancer research has primarily been clinical in nature, generating a wealth of treatment-based and translational data. Despite advances in the molecular characterization of urothelial tumors (pathways), there are relatively few detailed mechanistic studies investigating molecular abnormalities and related functional impact on bladder cancer. Indeed, our research models are dated with for example cell lines created in the 1970s and animal models which are not representative of the panomic complexity of the human disease. Finally, inexplicably, for most pharmaceutical companies, bladder cancer has a low prioritization in their corporate targets for disease-specific drug development. The lack of research in the field together with low funding from public and private sources has thus limited advances in bladder cancer care resulting in no change in daily practices and survival over the last 30 years.

There is relatively limited evidence-based data to guide clinical decision-making in bladder cancer. Recently, the tools available for the diagnosis and management of bladder cancer have improved significantly, complementing a growing understanding of the biology of this disease. Bladder cancer requires appropriate management at all stages, since both the cure rate and morbidity are very sensitive to nuances of treatment. Yet proper risk stratification remains a challenge owing to the difficulty of clinical staging. This book addresses contemporary concepts and controversies, including the timely and accurate diagnosis of bladder cancer, emphasizing the integration of pathologic and radiographic variables for appropriate risk stratification. Important features regarding the natural history of bladder cancer will also be emphasized; the role of imaging and endoscopy in clinical decision making, diagnosis, staging and follow-up; and, common pathways of metastatic spread. Up-to-date information regarding technique and boundaries of surgical resection, indication and limitations of intravesical therapy, indication and extent of lymphadenectomy, clinical staging of bladder cancer, the role of perioperative chemotherapy in patients with high risk bladder cancer and treatment of metastatic bladder cancer will be detailed.

We believe that raising awareness among the general public and policy makers by linking smoking and occupational exposure to the risk of bladder cancer and by making all health care professionals aware of the basic symptoms (hematuria) that may entail bladder cancer could have a significant benefit. This textbook on bladder cancer is such organized to give clinicians,

health care professionals, researchers, opinion leaders and patients state-of-the art information on epidemiologic, basic science and clinical aspects of bladder cancer. A group of superb experts in various aspects of bladder cancer have been assembled all over the world to critically evaluate the literature and report their experience. We were privileged to work closely with each contributor and are immensely grateful to them for their time and dedication. We believe this book will serve as a comprehensive reference on this important disease that deserves more awareness.

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