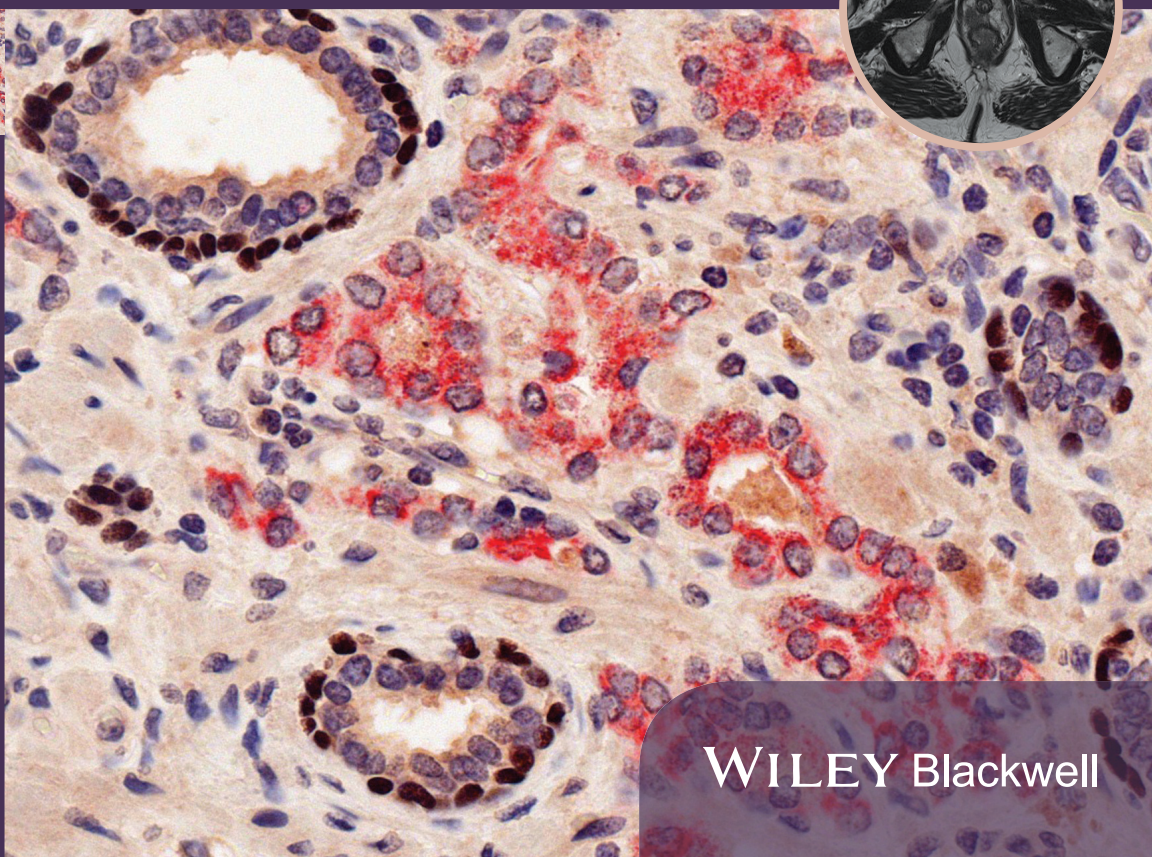
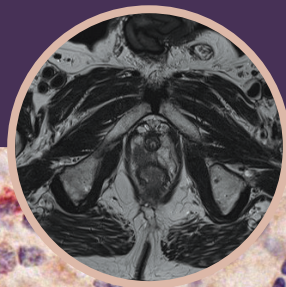
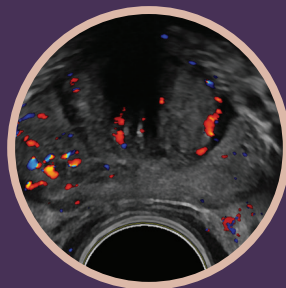
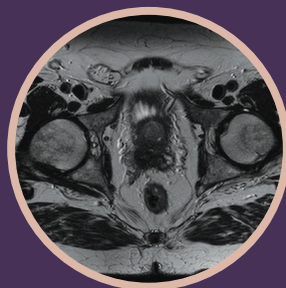


PROSTATE CANCER

DIAGNOSIS AND CLINICAL MANAGEMENT

Edited by Ashutosh K. Tewari,
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WILEY Blackwell

Prostate Cancer

Diagnosis and clinical management

Prostate Cancer

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This edition first published 2014 © 2014 by John Wiley & Sons, Ltd.

Registered office: John Wiley & Sons, Ltd, The Atrium, Southern Gate, Chichester,
West Sussex, PO19 8SQ, UK

Editorial offices: 9600 Garsington Road, Oxford, OX4 2DQ, UK
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111 River Street, Hoboken, NJ 07030-5774, USA

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Library of Congress Cataloging-in-Publication Data

Prostate cancer (Tewari)

Prostate cancer : diagnosis and clinical management / edited by Ashutosh K. Tewari,
Peter Whelan, John Graham.

p. ; cm.

Includes bibliographical references and index.

ISBN 978-1-118-34735-5 (pbk.)

I. Tewari, Ashutosh, editor of compilation. II. Whelan, Peter, 1947– editor of compilation.

III. Graham, John, 1955– editor of compilation. IV. Title.

[DNLM: 1. Prostatic Neoplasms–diagnosis. 2. Prostatic Neoplasms–therapy.

3. Patient Care Management. 4. Prostate–pathology. 5. Prostate–surgery. WJ 762]

RC280.P7

616.99'463–dc23

2013034289

A catalogue record for this book is available from the British Library.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Cover image: back drop © author Ch 03; inserts © author Ch 05

Cover design by Meaden Creative

Set in 9.5/13pt Meriden by Aptara Inc., New Delhi, India

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Preface

With the advent of new drugs and innovative technologies with which to treat prostate cancer in the last few years, and the realization that over-diagnosis and hence overtreatment have been a feature of the recent past; it was felt timely to produce a short, comprehensive book on all aspects of prostate cancer, leaving the details for the expert to the many excellent contemporary monographs.

We are privileged to have had an internationally known team of contributors ranging across the field. Aaron Katz and colleagues set the scene with the all important review of the epidemiology and natural history of the disease. Jon Oxley sets the contemporary context of histopathology; Philippa J. Cheetham gives us an exhaustive review of the current state of markers in this disease, whereas Jonathan Richenberg brings us up to date with imaging of the disease both locally and distantly. In an innovatory chapter, William Richard Cross reviews what informed consent means and the evidence we have, stage by stage, with which to advise our patients.

The management of localized disease is discussed from all aspects of possible therapies, starting with a discussion on active monitoring, a counterintuitive concept when dealing with cancer in not offering treatment immediately, and why it is valid in prostate cancer, by L. Boccon-Gibod. Ashutosh Tewari gives an authoritative description of surgical treatment, whereas P.J. Hoskin examines both external beam radiotherapy and brachytherapy to help us understand why, numerically, these are the most frequent treatments utilized. Hashim U. Ahmed and Mark Emberton review the role of emerging therapies to which they have contributed so much.

In linked chapters, Theo M. de Reijke, George Thalmann, and Bertrand Tombal, together with their colleagues, explore what options there are when definitive therapies appear to have failed. It is hoped that these, taken together with William Richard Cross's chapter, will allow all readers to reflect on the two important components of prostate cancer treatment:

evidence and timescale. Johann de Bono brings his immense experience and expertise to discuss the exciting developments of new therapies in this disease. Peter Whelan looks at the progress and lack of it, from the beginning of anatomical radical prostatectomy through the PSA era to the current day, whereas John D. Graham reminds us that this is a malignant disease with which we are dealing and some patients progress and some die from it. In a sensitive account, he sets out how our patients may be supported to have a “good death.”

Finally, we thought it appropriate to ask a scientist, Norman Maitland, who has spent more than 30 years in this field, to give a scientific rather than a clinical take on future prospects.

We hope this book will prove useful to the experts to enable them to understand where other experts are “coming from,” what their therapies have to offer, and what are these therapies’ inevitable limitations to the generalist who can use this book to help guide patients through the bewildering options available, and sincerely to include the lay reader, both patient and their relatives. We hope that it will provide a comprehensive summary, an accessible narrative, and a starting point for discussions patients will have with their treating physicians.

Andrew von Eschenbach, a urologist and ex-director of the US National Institute of Cancer, stated that the hope was to turn prostate cancer into a chronic disease. This has largely been achieved in the current era with many men living a quarter or even a third of their lives after the diagnosis. We hope this book shows how this came about and how men can and must be persuaded to live out their lives as fully as possible, and that there are always options, and one will probably fit an individual’s needs.

We are grateful to all at Wiley especially Oliver Walter who commissioned this volume, and to Kate Newell and Claire Brewer.

CHAPTER 1

Prostate Cancer Epidemiology

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United States—recent trends in incidence and mortality

Incidence

Prostate cancer is the most common non-skin cancer diagnosed among American males, affecting roughly one in six men (16.15%) over the course of their lifetime. Prostate cancer is also the second leading cause of cancer-related deaths in American men. According to the most recent data from the Surveillance Epidemiology and End Results (SEER) database, an estimated 241 740 men were diagnosed with prostate cancer and over 28 000 died of it in the United States in 2012 [1]. The incidence of prostate cancer spiked in the United States in the early 1990s because of the advent of more aggressive prostate-specific antigen (PSA) screening [2]. This was followed by a sharp decline from 1992 to 1995 during which incidence rates returned to a new baseline which remained approximately two and a half times the pre-PSA era rate, likely due to the fact that increased screening in prior years had successfully diagnosed much of the previously undetected prostate cancer patients in the population.

Mortality and survival

Most recent data show that mortality rates due to prostate cancer have been declining, with a 3.5% decrease between 2000 and 2009 [3]. In addition, 5-year survival rates have also been increasing, jumping from 76% between 1983 and 1985 to 98% between 1992 and 1998 [4]. While this staggering rise in survival and decline in mortality can in part be attributed

Prostate Cancer: Diagnosis and Clinical Management, First Edition.

Edited by Ashutosh K. Tewari, Peter Whelan and John D. Graham.

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