

UROLOGY INVESTIGATORS PROVIDE THEIR PERSPECTIVES ON CHALLENGING PRACTICAL ISSUES IN PROSTATE CANCER MANAGEMENT

# **CME** Information

## TARGET AUDIENCE

This activity is intended for urologists, medical and radiation oncologists and other healthcare providers involved in the treatment of prostate cancer.

## **OVERVIEW OF ACTIVITY**

Prostate cancer is the most frequently diagnosed cancer in men, with more than 50% of all cases found in individuals aged 65 years or older. Among the 220,800 new diagnoses of prostate cancer estimated within the United States in 2015, more than 90% will be discovered in the local and regional stages of disease where 5-year survival estimates approach 100% with current therapeutic intervention. This statistic emphasizes the importance of early detection, the effectiveness of current treatments and the natural history of the disease.

Significant interest has been shown in the development of multigene prognostic assays that can evaluate the unique biology of an individual's cancer to allow for further refinement of risk and subsequently more informed treatment decisions. In recent years a number of novel agents have received FDA approval accompanied by multiple new indications in the disease, and a number of these efforts have proven successful and have yielded therapeutic options that are already available for use in the clinic. As such, additional resources are necessary to assist clinicians as they contend with the complexity of decision-making throughout the course of prostate cancer treatment from localized to advanced metastatic castration-resistant prostate cancer (CRPC). To bridge the gap between research and patient care, this video presentation by Dr Leonard G Gomella uses a review of recent relevant publications and presentations, ongoing clinical trials and clinical investigator treatment preferences to assist urologists, medical and radiation oncologists and other healthcare providers involved in the treatment of prostate cancer with the formulation of up-to-date clinical management strategies.

#### LEARNING OBJECTIVES

• Review the use of genomic signatures to refine the risk of recurrence for patients with localized prostate cancer, and use this information to guide clinical decision-making.

- Recall research information demonstrating the effects of secondary hormonal interventions on quality and quantity of life for patients with chemotherapy-naïve CRPC, and use this information to guide treatment planning for these patients.
- Recognize the importance of performance status, symptom burden and site of disease in decisions on the use of sipuleucel-T for CRPC.
- Appreciate recent Phase III trial data documenting the benefit of adding docetaxel to androgen deprivation therapy for patients with hormone-sensitive metastatic disease.
- Identify appropriate bone-targeted therapeutic approaches (eg, bisphosphonates, RANK-ligand inhibitors, radium-223) for patients with metastatic CRPC.

#### ACCREDITATION STATEMENT

Research To Practice is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

#### **CREDIT DESIGNATION STATEMENT**

Research To Practice designates this enduring material for a maximum of 1.25 AMA PRA Category 1 Credits<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### HOW TO USE THIS CME ACTIVITY

This CME activity consists of a video component. To receive credit, the participant should watch the video, complete the Post-test with a score of 75% or better and fill out the Educational Assessment and Credit Form located at ResearchToPractice.com/GrandRoundsProstate15/CME.

#### CONTENT VALIDATION AND DISCLOSURES

Research To Practice (RTP) is committed to providing its participants with high-quality, unbiased and state-of-theart education. We assess potential conflicts of interest with faculty, planners and managers of CME activities. Real or apparent conflicts of interest are identified and resolved through a conflict of interest resolution process. In addition, all activity content is reviewed by both a member of the RTP scientific staff and an external, independent physician reviewer for fair balance, scientific objectivity of studies referenced and patient care recommendations.

**FACULTY** — The following faculty (and their spouses/partners) reported real or apparent conflicts of interest, which have been resolved through a conflict of interest resolution process:

### **Presenting Faculty Member**

#### Leonard G Gomella, MD

The Bernard W Godwin Professor of Prostate Cancer Chairman, Department of Urology Associate Director, Jefferson Sidney Kimmel Cancer Center Clinical Director Jefferson Sidney Kimmel Cancer Center Network Editor-in-Chief *Canadian Journal of Urology* Philadelphia, Pennsylvania

**Advisory Committee:** Abbott Laboratories, Astellas Pharma Global Development Inc, Bayer HealthCare Pharmaceuticals, Merck; **Consulting Agreements:** Dendreon Corporation, Janssen Biotech Inc, Merck; **Contracted Research:** Astellas Pharma Global Development Inc.

#### Moderator

#### Judd W Moul, MD

James H Semans, MD Professor of Surgery Division of Urologic Surgery Duke University Medical Center Durham, North Carolina

**Advisory Committee:** Bayer HealthCare Pharmaceuticals, Ferring Pharmaceuticals; **Contracted Research:** Astellas Pharma Global Development Inc; **Speakers Bureau:** Ferring Pharmaceuticals, Genomic Health Inc, Janssen Biotech Inc, Medivation Inc, Sanofi.

#### **Project Steering Committee Members**

#### Raoul S Concepcion, MD

Director of the Advanced Therapeutic Center Urology Associates Nashville, Tennessee

Advisory Committee, Consulting Agreements and Contracted Research: Astellas Pharma Global Development Inc, Bayer HealthCare Pharmaceuticals; **Speakers Bureau:** Amgen Inc, Astellas Pharma Global Development Inc, Bayer HealthCare Pharmaceuticals, Dendreon Corporation, Genomic Health Inc, Janssen Biotech Inc, MDxHealth Inc, Medivation Inc, Sanofi.

#### Thomas E Keane, MB, ChB

Professor and Chairman Medical University of South Carolina Department of Urology Charleston, South Carolina

**Advisory Committee:** Astellas Pharma Global Development Inc, Bayer HealthCare Pharmaceuticals, Ferring Pharmaceuticals, Janssen Biotech Inc.

#### Adam S Kibel, MD

Chief of Urology Brigham and Women's Hospital Dana-Farber Cancer Center Harvard Medical School Boston, Massachusetts

**Advisory Committee:** Profound Medical Corp; **Consulting Agreements:** Dendreon Corporation, Genomic Health Inc, MTG, Sanofi.

#### Daniel W Lin, MD

Professor and Chief of Urologic Oncology Department of Urology Bridges Endowed Professorship in Prostate Cancer Research University of Washington Seattle, Washington

**Contracted Research:** Genomic Health Inc, Myriad Genetic Laboratories Inc; **Research Grant:** Hologic Inc.

#### Neal D Shore, MD

Medical Director Carolina Urology Research Center Myrtle Beach, South Carolina

Advisory Committee: Astellas Pharma Global Development Inc, Bayer HealthCare Pharmaceuticals, Roche Laboratories Inc, Sanofi, Spectrum Pharmaceuticals Inc, Takeda Oncology; Consulting Agreement: Mundipharma International Limited; Contracted Research: Amgen Inc, Astellas Pharma Global Development Inc, Bayer HealthCare Pharmaceuticals, Genentech BioOncology, Genomic Health Inc, Lilly, Mundipharma International Limited, Roche Laboratories Inc, Sanofi, Spectrum Pharmaceuticals Inc, Takeda Oncology; Speakers Bureau: Bayer HealthCare Pharmaceuticals, Genomic Health Inc.

**PROJECT CHAIR** — **Dr Love** is president and CEO of Research To Practice, which receives funds in the form of educational grants to develop CME activities from the following commercial interests: AbbVie Inc, Amgen Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Pharma Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, CTI BioPharma, Daiichi Sankyo Inc, Dendreon Corporation, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech BioOncology, Genomic Health Inc, Gilead Sciences Inc, ImmunoGen Inc, Incyte Corporation, Janssen Biotech Inc, Jazz Pharmaceuticals Inc, Lilly, Medivation Inc, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, NanoString Technologies, Novartis Pharmaceuticals Corporation, Novocure, Onyx Pharmaceuticals, an Amgen subsidiary, Pharmacyclics Inc, Prometheus Laboratories Inc, Regeneron Pharmaceuticals, Sanofi, Seattle Genetics, Sigma-Tau Pharmaceuticals Inc, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Teva Oncology, Tokai Pharmaceuticals Inc and VisionGate Inc.

#### **RESEARCH TO PRACTICE STAFF AND EXTERNAL**

**REVIEWERS** — The scientific staff and reviewers for Research To Practice have no real or apparent conflicts of interest to disclose.

This educational activity contains discussion of published and/ or investigational uses of agents that are not indicated by the Food and Drug Administration. Research To Practice does not recommend the use of any agent outside of the labeled indications. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications and warnings. The opinions expressed are those of the presenters and are not to be construed as those of the publisher or grantors. This activity is supported by educational grants from Astellas Pharma Global Development Inc/Medivation Inc, Bayer HealthCare Pharmaceuticals, Dendreon Corporation, Genomic Health Inc and Sanofi.

#### Hardware/Software Requirements:

A high-speed Internet connection A monitor set to 1280 x 1024 pixels or more Internet Explorer 7 or later, Firefox 3.0 or later, Chrome, Safari 3.0 or later Adobe Flash Player 10.2 plug-in or later Adobe Acrobat Reader (Optional) Sound card and speakers for audio

Last review date: December 2015

Expiration date: December 2016

# **Select Publications**

ALSYMPCA: A double-blind, randomised, multiple dose, phase III, multicentre study of Alpharadin in the treatment of patients with symptomatic hormone refractory prostate cancer with skeletal metastases. NCT00699751

Antonarakis ES et al. **AR splice variant 7 (AR-V7) and response to taxanes in men with metastatic castration-resistant prostate cancer (mCRPC).** Genitourinary Cancers Symposium 2015;**Abstract 138**.

Antonarakis ES et al. Androgen receptor splice variant, AR-V7, and resistance to enzalutamide and abiraterone in men with metastatic castration-resistant prostate cancer (mCRPC). *Proc ASCO* 2014; Abstract 5001.

Antonarakis ES et al. **AR-V7** and resistance to enzalutamide and abiraterone in prostate cancer. *N Engl J Med* 2014;371(11):1028-38.

Beer TM et al. Enzalutamide in metastatic prostate cancer before chemotherapy. N Engl J Med 2014;371(5):424-33.

Bill-Axelson A et al. Radical prostatectomy or watchful waiting in early prostate cancer. N Engl J Med 2014;370(10):932-42.

CHAARTED: Chemohormonal therapy versus androgen ablation randomized trial for extensive disease in prostate cancer. NCT00309985

Fizazi K et al. Denosumab versus zoledronic acid for treatment of bone metastases in men with castration-resistant prostate cancer: A randomised, double-blind study. *Lancet* 2011;377(9768):813-22.

Haas GP et al. The worldwide epidemiology of prostate cancer: Perspectives from autopsy studies. *Can J Urol* 2008;15(1):3866-71.

James ND et al. Docetaxel and/or zoledronic acid for hormone-naïve prostate cancer: First overall survival results from STAMPEDE (NCT00268476). *Proc ASCO* 2015; Abstract 5001.

Jemal A et al. Cancer statistics, 2006. CA Cancer J Clin 2006;56(2):106-30.

Kantoff PW et al. Sipuleucel-T immunotherapy for castration-resistant prostate cancer. N Engl J Med 2010;363(5):411-22.

Kantoff P et al. Updated survival results of the IMPACT trial of sipuleucel-T for metastatic castration-resistant prostate cancer (CRPC). Genitourinary Cancers Symposium 2010; Abstract 8.

Klotz L et al. Long-term follow-up of a large active surveillance cohort of patients with prostate cancer. J Clin Oncol 2015;33(3):272-7.

Parker C et al. Alpha emitter radium-223 and survival in metastatic prostate cancer. N Engl J Med 2013;369(3):213-23.

Parker C et al. Hematologic safety of Ra-223 dichloride (Ra-223) in castration-resistant prostate cancer (CRPC) patients with bone metastases from the phase III ALSYMPCA trial. *Proc ASCO* 2013; Abstract 5060.

Penson D et al. A multicenter phase 2 study of enzalutamide (ENZA) versus bicalutamide (BIC) in men with nonmetastatic (MO) or metastatic (M1) castration-resistant prostate cancer (CRPC): The STRIVE trial. *Proc AUA* 2015; Abstract PII-LBA10.

Ryan CJ et al. Abiraterone acetate plus prednisone versus placebo plus prednisone in chemotherapy-naive men with metastatic castration-resistant prostate cancer (COU-AA-302): Final overall survival analysis of a randomised, double-blind, placebocontrolled phase 3 study. *Lancet Oncol* 2015;16(2):152-60.

Ryan CJ et al. Abiraterone in metastatic prostate cancer without previous chemotherapy. N Engl J Med 2013;368(2):138-48.

Sandler HM et al. A phase III protocol of androgen suppression (AS) and 3DCRT/IMRT versus AS and 3DCRT/IMRT followed by chemotherapy (CT) with docetaxel and prednisone for localized, high-risk prostate cancer (RTOG 0521). *Proc ASCO* 2015;Abstract LBA5002.

Schellhammer PF et al. Lower baseline prostate-specific antigen is associated with a greater overall survival benefit from sipuleucel-T in the Immunotherapy for Prostate Adenocarcinoma Treatment (IMPACT) trial. *Urology* 2013;81(6):1297-302.

Smith MR et al. Denosumab for the prevention of skeletal complications in metastatic castration-resistant prostate cancer: Comparison of skeletal-related events and symptomatic skeletal events. *Ann Oncol* 2015;26(2):368-74.

Sweeney C et al. Impact on overall survival (OS) with chemohormonal therapy versus hormonal therapy for hormone-sensitive newly metastatic prostate cancer (mPrCa): An ECOG-led phase III randomized trial. *Proc ASCO* 2014; Abstract LBA2.