

Current Strategies and Ongoing Research in the Management of Advanced Prostate Cancer

CME Information

TARGET AUDIENCE

This activity has been designed to meet the educational needs of medical and radiation oncologists, urologists and other allied healthcare professionals.

OVERVIEW OF ACTIVITY

Cancers of the genitourinary (GU) system affect hundreds of thousands of individuals within the United States each year and account for almost 30% of new cancer diagnoses. Although GU cancers are a diverse array of distinct diseases, tumors of the prostate are among the most prevalent and are therefore the topic of extensive ongoing clinical research. Consequently, the clinical management of this disease is constantly evolving, necessitating rapid and consistent access to learning opportunities for clinicians who provide care for these patients.

These video proceedings from a CME symposium held during the 2016 Genitourinary Cancers Symposium feature discussions regarding the practice patterns of a cohort of prostate cancer (PC) investigators and related clinical research findings. By providing information on the latest research developments in the context of expert perspectives, this activity will assist medical and radiation oncologists, urologists and other healthcare professionals with the formulation of state-of-the-art clinical management strategies to facilitate optimal care for patients with PC.

LEARNING OBJECTIVES

- Appraise recent data on diagnostic and therapeutic advances in PC, and integrate this information, as appropriate, into current clinical care.
- Explore emerging data on the use of cytotoxic therapy in the setting of hormone-sensitive advanced PC, and consider this information when designing initial treatment plans for appropriate individuals.
- Recall existing and emerging research information demonstrating the effects of secondary hormonal interventions on quality and quantity of life for patients with castration-resistant PC, and use this information to guide therapeutic decision-making.

- Consider available research data and expert perspectives on the efficacy and safety of radium-223 dichloride as monotherapy or in combination with other treatment modalities, and use this information to appropriately integrate this novel radiopharmaceutical agent into clinical practice.
- Effectively apply evidence-based research findings in the determination of best-practice sequencing of available immunotherapeutic, chemotherapeutic and secondary hormonal agents for patients with metastatic PC.
- Explore the emerging data and active research evaluating novel agents and strategies in the setting of PSA-only recurrent or advanced PC, and discuss the biologic basis for their clinical activity.
- Counsel appropriately selected patients with recurrent, asymptomatic and symptomatic metastatic PC about the availability of and participation in ongoing clinical trials.

ACCREDITATION STATEMENT

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through a joint providership of the Yale School of Medicine and Research To Practice. The Yale School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

CREDIT DESIGNATION STATEMENT

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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/GUCancers16/Prostate/CME.

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

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MODERATOR — **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, Array BioPharma Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Baxalta Inc, 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 Corp, Daiichi Sankyo Inc, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech BioOncology, Genomic Health Inc, Gilead Sciences Inc, ImmunoGen Inc, Incyte Corporation, Janssen Biotech Inc, Jazz Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, NanoString Technologies, Natera Inc, Novartis Pharmaceuticals Corporation, Novocure, Onyx Pharmaceuticals, an Amgen subsidiary, Pharmacy-clics LLC, an AbbVie Company, 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.

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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

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Select Publications

William K Oh, MD

Hussain M et al. **Absolute prostate-specific antigen value after androgen deprivation is a strong independent predictor of survival in new metastatic prostate cancer: Data from Southwest Oncology Group trial 9346 (INT-0162).** *J Clin Oncol* 2006;24(24):3984-90.

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.

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.

Philip Kantoff, MD

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

Bellmunt J et al. **Prior endocrine therapy impact on abiraterone acetate clinical efficacy in metastatic castration-resistant prostate cancer: Post-hoc analysis of randomised phase 3 studies.** *Eur Urol* 2015;[Epub ahead of print].

Fizazi K et al. **Activity and safety of ODM-201 in patients with progressive metastatic castration-resistant prostate cancer (ARADES): An open-label phase 1 dose-escalation and randomised phase 2 dose expansion trial.** *Lancet Oncol* 2014;15(9):975-85.

Fong L et al. **Activated lymphocyte recruitment into the tumor microenvironment following preoperative sipuleucel-T for localized prostate cancer.** *J Natl Cancer Inst* 2014;106(11).

Galletti G et al. **ERG induces taxane resistance in castration-resistant prostate cancer.** *Nat Commun* 2014;5:5548.

GuhaThakurta D et al. **Humoral immune response against non-targeted tumor antigens after treatment with sipuleucel-T and its association with improved clinical outcome.** *Clin Cancer Res* 2015;21(16):3619-30.

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

Komura J et al. **Chromatin fine structure of the c-MYC insulator element/DNase I-hypersensitive site I is not preserved during mitosis.** *Proc Natl Acad Sci* 2007;104(40):15741-6.

Logothetis CJ et al. **Effect of abiraterone acetate and prednisone compared with placebo and prednisone on pain control and skeletal-related events in patients with metastatic castration-resistant prostate cancer: Exploratory analysis of data from the COU-AA-301 randomised trial.** *Lancet Oncol* 2012;13(12):1210-7.

Petrylak DP et al. **Docetaxel and estramustine compared with mitoxantrone and prednisone for advanced refractory prostate cancer.** *N Engl J Med* 2004;351(15):1513-20.

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

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.

Small EJ et al. **Placebo-controlled phase III trial of immunologic therapy with sipuleucel-T (APC8015) in patients with metastatic, asymptomatic hormone refractory prostate cancer.** *J Clin Oncol* 2006;24(19):3089-94.

Tannock IF et al. **Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer.** *N Engl J Med* 2004;351(15):1502-12.

Yen WC et al. **Targeting Notch signaling with a Notch2/Notch3 antagonist (tarextumab) inhibits tumor growth and decreases tumor-initiating cell frequency.** *Clin Cancer Res* 2015;21(9):2084-95.

A Oliver Sartor, MD

Berthold DR et al. **Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer: Updated survival in the TAX 327 study.** *J Clin Oncol* 2008;26(2):242-5.

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

Saad F et al. **Radium-223 in an international early access program (EAP): Effects of concomitant medication on overall survival in metastatic castration-resistant prostate cancer (mCRCP) patients.** *Proc ASCO* 2015;Abstract 5034.

Select Publications

Sartor O et al. **Radium-223 dichloride (Ra-223) efficacy and safety in patients with castration-resistant prostate cancer (CRPC) with bone metastases: Phase 3 ALSYMPCA study findings stratified by age group.** *Proc ESMO/ECCO 2015*;Abstract 2530.

Sartor OP et al. **Ra-223 experience in pretreated patients: EAP setting.** *Proc ASCO 2015*;Abstract 5063.

Sartor O et al. **Effect of radium-223 dichloride on symptomatic skeletal events in patients with castration-resistant prostate cancer and bone metastases: Results from a phase 3, double-blind, randomised trial.** *Lancet Oncol 2014*;15(7):738-46.

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.

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Antonarakis ES et al. **Androgen receptor splice variant 7 and efficacy of taxane chemotherapy in patients with metastatic castration-resistant prostate cancer.** *JAMA Oncol 2015*;1(5):582-91.

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

Chi K et al. **Treatment of mCRPC in the AR-axis-targeted therapy-resistant state.** *Ann Oncol 2015*;26(10):2044-56.

Lorente D et al. **Sequencing of agents in castration-resistant prostate cancer.** *Lancet Oncol 2015*;16(6):e279-92.

Sprenger C et al. **Androgen receptor splice variant V7 (AR-V7) in circulating tumor cells: A coming of age for AR splice variants?** *Ann Oncol 2015*;26(9):1805-7.

Taplin P et al. **Activity of galeterone in castrate-resistant prostate cancer (CRPC) with C-terminal AR loss: Results from ARMOR2.** *Proc EORTC-NCI-AACR 2014*;Abstract 4.

Taplin P et al. **Galeterone in 4 patient populations of men with CRPC: Results from ARMOR2.** *Proc ESMO 2014*;Abstract 7570.

Matthew R Smith, MD, PhD

Crook JM et al. **Intermittent androgen suppression for rising PSA level after radiotherapy.** *N Engl J Med 2012*;367(10):895-903.

Hussain M et al. **Intermittent versus continuous androgen deprivation in prostate cancer.** *N Engl J Med 2013*;368(14):1314-25.

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Penson D et al. **A multicenter phase 2 study of enzalutamide (ENZA) versus bicalutamide (BIC) in men with nonmetastatic (M0) or metastatic (M1) castration-resistant prostate cancer (CRPC): The STRIVE trial.** *Proc AUA 2015*;Abstract PII-LBA10.

Ryan CJ et al. **Effect of abiraterone acetate and low dose prednisone on prostate-specific antigen in patients with non-metastatic castration-resistant prostate cancer: The results from impact of abiraterone acetate in prostate-specific antigen core study.** *Proc AUA 2015*;Abstract MP87-19.

Smith MR et al. **Natural history of rising serum prostate-specific antigen in men with castrate nonmetastatic prostate cancer.** *J Clin Oncol 2005*;23(13):2918-25.