



AACR Special Conference

Advances in Prostate Cancer Research

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AACR
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221001E

Poster Session B

Friday, March 17

5:00-7:30 p.m.

**current as of 3/4/2023*

[R] = Remote presentation. Poster recording can be found on the conference virtual platform.

B001 Heterogeneity of cancer network biophysical phenotypes is required for tumor muscle invasion in vivo. Anne E. Cress, University of Arizona Cancer Center, University of Arizona, Tucson, Arizona.

B002 Lactate metabolism regulates chromatin accessibility and prostate luminal differentiation. Andrew S. Goldstein, University of California, Los Angeles, California.

B003 EVI1 Oncogenic Role in Non-canonical AR driven lethal Prostate Cancer. Surendra Gulla, University at Buffalo, Buffalo, New York.

B004 Genomic loss of TP53 impairs AR-targeted activity in metastatic prostate cancer. Wanting Han, Fred Hutchinson Cancer Center, Seattle, Washington.

B005 The oncogenic transcription factor ERG has distinct roles and signaling regulation in different prostate cancer cell types. Peter C. Hollenhorst, Indiana University, Bloomington, Indiana.

B006 Identifying the molecular signature of bi-potent prostate epithelial cells through scRNA-seq. Hunain Khawaja, University of Arizona, Tucson, Arizona.

B007 New generation mTOR blocker sensitizes prostate cancer models to AR-targeting therapy. Francesco Bonollo, Department for BioMedical Research, Urology Research Laboratory, University of Bern, Bern, Switzerland.

B008 Tumor-stromal 3D co-cultures to study the role of cancer-associated fibroblasts in the acquisition of androgen-deprivation therapy resistance in prostate cancer. Francesco Bonollo, University of Bern, Bern, Switzerland.

B010 A novel systemic methodology for mapping the clonal architectures of human prostate tumors that develop resistance to Androgen Receptor (AR)-targeted therapy. Chennan Li, National Cancer Institute, Bethesda, Maryland.

B011 PRAC1 epigenetic silencing in castration resistant prostate cancer and its novel role in androgen receptor biology. Jin-Yih Low, Fred Hutchinson Cancer Center, Seattle, Washington.

B012 Genomic and epigenomic drivers of double-negative metastatic prostate cancer. Arian Lundberg, University of California, San Francisco, California.

B013 KLF5 drives basal cell identity to promote prostate cancer lineage plasticity. Samuel P. Pitzen, University of Minnesota-Twin Cities, Minneapolis, Minnesota.

B014 ONECUT2 activates diverse drug-resistant phenotypes in prostate cancer. Chen Qian, Cedars Sinai Medical Center, Los Angeles, California.

B015 HOXA9 promotes enzalutamide resistance in RB-p53 deficient prostate cancer.. Michael V. Roes, Department of Pathology and Laboratory Medicine, Western University, London, Ontario, Canada.

B016 Liquid biopsy biomarker analysis of a phase ii trial of sacituzumab govitecan in castrate resistant metastatic prostate cancer. Jamie M. Sperger, University of Wisconsin-Madison, Madison, Wisconsin.

B017 Lineage-specific PRC2 targets and response to EZH2 inhibition in neuroendocrine prostate cancer. Varadha Balaji Venkadakrishnan, Dana-Farber Cancer Institute, Boston, Massachusetts.

B018 Loss of androgen receptor-mediated repression leads to EphA2 overexpression that promotes cellular dedifferentiation and castration resistance of prostate cancer through noncanonical signaling. BingCheng Wang, Case Western Reserve University, Cleveland, Ohio.

B019 A synthetic lethal screen for Snail-induced enzalutamide resistance identifies JAK/STAT signaling as a therapeutic vulnerability in prostate cancer. Kathryn E. Ware, Duke University, Durham, North Carolina.

B020 BCL2 expression is enriched in AR-independent advanced prostate cancer. Daniel Westaby, The Institute of Cancer Research, London, United Kingdom.

B021 Examining the role of HER2 signaling in promoting prostate cancer proliferation in an androgen receptor-low environment. Scott Wilkinson, National Cancer Institute, Bethesda, Maryland.

B022 Dopamine receptor antagonists sensitize prostate cancer cells to androgen targeted therapy. Le Zhang, Cedars-Sinai Medical Center, Los Angeles, California.

B023 Targeting noncanonical Wnt5a signaling suppresses the neural lineage network and overcomes enzalutamide resistance in advanced prostate cancer. Shu Ning, University of California, Davis, California.

B024 Nuclear size and nuclear shape instability in prostate cancer epithelial cells during metastatic progression. Edwin Posadas, Cedars Sinai Medical Center, Los Angeles, California.

B025 MicroRNA regulators of neuroendocrine differentiation of prostate cancer. Sharanjot Saini, Augusta University, Augusta, Georgia.

B026 PIM kinases regulates tumor associated macrophage survival and inflammatory signaling. Amber N. Clements, University of Arizona, Tucson, Arizona.

B027 Elevated mitochondrial reactive oxygen species dysregulate the tumor microenvironment in prostate cancer of African American Men. Asmaa El-Kenawi, Moffitt Cancer Center, Tampa, Florida.

[R] B028 Vigorous physical activity associated changes in immune cell infiltrate are linked with reduced prostate tumour aggressiveness. Lanshan Huang, Queen's University Belfast, Belfast, United Kingdom.

B029 Foxf2 activates antitumor immunity to repress the progression of prostate cancer by repressing Fgl1. Deyong Jia, University of Washington, Seattle, Washington.

B030 Spatially-resolved cell-cell interactions between tumor microenvironment and immunologically “hot” and “cold” locally advanced prostate tumors. Anson Ku, National Cancer Institute, Bethesda, Maryland.

B031 Investigation of the ubiquitin ligase RNF31 as a mediator of immune evasion in advanced prostate cancer. Tianyi Liu, University of California, San Francisco, California.

- B032 Combined A2AR and PARP inhibition in homologous recombination deficient (HRD) castrate-resistant prostate cancer (CRPC).** Patrick J. McCann, Columbia University Irving Medical Center, New York, New York.
- B033 Probing the role of hypoxia and the tumor microenvironment at spatially resolved single cell resolution in prostate cancer disease trajectories.** Migle Mikutenaite, University of Copenhagen, Biotech Research and Innovation Centre; Rigshospitalet, Finsen Laboratory, Copenhagen, Denmark.
- B034 A scoping review of carcinogenic potential in prostate cancer from 40+ years of functional vitamin D and K deficiency.** Tim RD Oliver, Barts Cancer Institute, London, United Kingdom.
- B035 Leveraging therapy-induced senescence for prostate cancer immunotherapy.** Marcus Ruscetti, UMass Chan Medical School, Worcester, Massachusetts.
- B036 Immune cell profiling of human prostate tumors identifies a protective and pathological role for intratumoral mast cells in the development of biochemical recurrence and metastasis.** Cara Schafer, Center for Prostate Disease Research (CPDR), Bethesda, Maryland.
- B037 Elevated mitochondrial activity is a targetable signature of prostate cancer bone metastases.** Shang Su, The University of Toledo, Toledo, Ohio.
- B038 Prostate cancer (PCa) cell dormancy in bone depends on physical contacts between PCa cells and osteoblasts and can be induced via FAK inhibition.** Shang Su, The University of Toledo, Toledo, Ohio.
- B039 Influence of tumor-associated fibroblasts and their exosomes in the development and progression of prostate cancer.** Aishwarya Tagat, Saarland University Hospital, Homburg/Saar, Germany.
- B040 Novel immunotherapy strategies targeting PTEN and TP53 defects in advanced prostate cancer.** Di Zhao, The University of Texas MD Anderson Cancer Center, Houston, Texas.
- B041 AR suppresses MHC Class I expression and T-cell response in prostate cancer.** Alexis Smith, University of California, San Francisco, California.
- B044 Exosomal cancer-type SLCO1B3 and ABCC3 as potential biomarkers of castration resistant prostate cancer.** Erica L. Beatson, National Cancer Institute, Bethesda, Maryland.
- B045 Single cell proteomics as a method to analyze circulating tumor cells in prostate cancer patients.** Alec Horrmann, University of Minnesota-Twin Cities, Minneapolis, Minnesota.
- B046 Multimodal biomarkers that predict the presence of Gleason pattern 4: Potential impact for active surveillance.** Anna Y. Lee, Ontario Institute for Cancer Research, Toronto, Ontario, Canada.
- B047 Characterizing the landscape of extracellular vesicles from prostate cancer cell lines.** Megan Ludwig, University of Minnesota-Twin Cities, Minneapolis, Minnesota.
- B048 Performance of diagnostic biomarkers in the Canary Prostate cancer Active Surveillance Study (PASS).** Lisa F. Newcomb, Fred Hutchinson Cancer Center, Seattle, Washington.
- B049 Radiogenomic profiling of prostate tumors prior to external beam radiotherapy (EBRT) converges on a transcriptomic signature of TGF-beta activity driving tumor recurrence.** Adam G. Sowalsky, National Cancer Institute, Bethesda, Maryland.
- B050 Human interpretation of 3D histopathology image datasets of whole prostate biopsies reveals more cribriform pattern (Gleason pattern 4) carcinoma than is seen in standard 2D histology images..** Lawrence True, University of Washington, Seattle, Washington.

- B051 Alterations in SIRT2-H3K18Ac identify increased P300 activity in circulating tumor Cells from patients with CRPC.** Bing Yang, University of Wisconsin-Madison, Madison, Wisconsin.
- B052 Prostate cancer prevention is possible thanks to the evaluation of the primary exons of the BRCA1 biomarker in men.** Callinis Capo Chichi, Abomey Calavi University, Cotonou, Benin.
- B053 Native circulating tumor DNA (ctDNA) analysis predicts gene expression and delineates distinctive molecular subtypes of prostate cancer.** Navonil De Sarkar, Medical College of Wisconsin, Milwaukee, Wisconsin.
- B054 Inherited mutations of DNA damage repair genes in a racially diverse cohort of men with prostate cancer.** Indu Kohaar, Center for Prostate Disease Research, Murtha Cancer Center Research Program, Department of Surgery, Uniformed Services University of the Health Sciences, Bethesda, Maryland.
- B056 Homoharringtonine, a translational inhibitor, induces dramatic apoptosis in prostate cancer xenografts.** Seiji Arai, Gunma University Graduate School of Medicine, Maebashi, Japan.
- B057 ZBTB7A as a novel vulnerability in neuroendocrine prostate cancer.** Song Yi Bae, University of Minnesota-Twin Cities, Minneapolis, Minnesota.
- B058 Exploring the oncogenic role of six-transmembrane epithelial antigen of the prostate in the context of androgen receptor signaling.** Candice Bizzaro, Thomas Jefferson University, Philadelphia, Pennsylvania.
- B059 Understanding the role of Poly (ADP-ribose) polymerase 1 (PARP-1) activity in prostate cancer.** Moriah Cunningham, Thomas Jefferson University, Philadelphia, Pennsylvania.
- B060 Characterization of DNA repair defects in CDK12 mutant prostate cancer and the identification of differential vulnerabilities.** Sander Frank, Fred Hutchinson Cancer Center, Seattle, Washington.
- B061 Updated analysis of “CANCAP03” – a study into the pharmacodynamic biomarker effects of olaparib (PARP Inhibitor) ± degarelix (GnRH antagonist) given prior to radical prostatectomy.** Harveer Dev, University of Cambridge, Cambridge, United Kingdom.
- B062 ERGi-USU selectively inhibit ERG positive prostate cancer through ATF3 mediated ferroptosis.** Binil Eldhose, Center for Prostate Disease Research, Murtha Cancer Center Research Program, Department of Surgery, Uniformed Services University of the Health Sciences, Bethesda, Maryland.
- B063 Interplay between PARP and the RB/E2F axis in prostate cancer.** Latese Evans, Thomas Jefferson University, Philadelphia, Pennsylvania.
- B064 ONECUT2 inhibition, a potential treatment for lethal prostate cancer.** Brad Gallent, Cedars Sinai Medical Center, Los Angeles, California.
- B065 Combining the androgen receptor inhibitor darolutamide with PI3K/AKT/mTOR pathway inhibitors has superior efficacy in preclinical models of prostate cancer.** Bernard Haendler, Bayer AG, Berlin, Germany.
- B066 Genome-wide CRISPR screens identify PTGES3 as a druggable AR modulator.** Haolong Li, University of California, San Francisco, California.
- B067 CRM1 inhibitor Selinexor induces DNA damage repair-related vulnerability in prostate cancer cells..** Rajendra Kumar, The Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, Maryland.

B068 Treatment combinations targeting MCL-1 and BCL-xL exert synergistic anti-tumor effects in AR-V7 expressing CRPC cell lines. Giulia C. Napoli, National Cancer Institute/National Institutes of Health, Bethesda, Maryland.

B069 SPOP loss places the prostate luminal epithelial cells at a selective disadvantage. Kinza Rizwan, Baylor College of Medicine, Houston, Texas.

B070 Global proteomics and phosphoproteomics profiling of prostate cancer patient derived xenografts tumors from the LuCaP series. Zoi E. Sychev, University Of Minnesota, Minneapolis, Minnesota.

B071 Evaluating the synergy between enzalutamide and SRC kinase inhibitors against castration-resistant prostate cancer. Ralph E. White, University of Minnesota-Twin Cities, Minneapolis, Minnesota.

B072 Induction of PARP7 creates a vulnerability for growth inhibition by RBN2397 in prostate cancer cells. Krzysztof Wierbilowicz, University of Virginia, Charlottesville, Virginia.

B073 Inhibiting prostate cancer by targeting the metabolic mevalonate pathway. Diandra Zipinotti dos Santos, Princess Margaret Cancer Centre, University Health Network, Toronto, Ontario, Canada.

B074 Targeting CBP/p300 and its downstream transcriptional machinery in advanced PCa. Ayesha A. Shafi, Center for Prostate Disease Research, Murtha Cancer Center Research Program, Uniformed Services University of the Health Sciences, Bethesda, Maryland.

B075 Anti-human LIV-1 antibody drug conjugate for treatment of metastatic prostate cancer. Xiaobei Zhao, Bioray Pharmaceutical Corp., San Diego, California.

B076 IGFBP3 promotes resistance to olaparib via modulating EGFR signaling in advanced prostate cancer. Amy R. Leslie, University of California, Davis, California.

B077 Development of combination therapies with RET inhibitors for neuroendocrine prostate cancer using mouse organoid models. Ricardo Y. Roman, University of Puerto Rico at Mayaguez, Mayaguez, Puerto Rico.