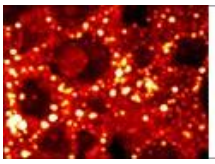

AACR Special Conference

Advances in Prostate Cancer Research

March 15-18, 2023 | Denver, CO

AACR American Association for Cancer Research

Poster Session A

Thursday, March 16

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.

A001 Differential alternative RNA splicing and transcription events between Black and White prostate cancer patients involve genes promoting cancer aggressiveness and associate with patient survival. Muthana Al Abo, Duke university, Durham, North Carolina.

A002 A reciprocal signaling crosstalk between the AR and BCl2-AKT pathways induces castration resistance in castration sensitive prostate cancer. Goutam Chakraborty, Icahn School of Medicine at Mount Sinai, New York, New York.

A004 Investigating the function of ZFHX3 in hormone sensitive prostate cancer initiation and treatment resistance. Isaiah M. King, National Cancer Institute, Bethesda, Maryland.

A005 Androgen receptor variants mRNA absolute quantification in prostate cancer cell models. Gabrianne Larson, University of Minnesota-Twin Cities, Minneapolis, Minnesota.

A006 Loss of PMEPA1 gene isoform facilitates the development of hormone and radiation therapies resistance in prostate cancer cells. Hua Li, Center for Prostate Disease Research, Murtha Cancer Center, Department of Surgery, Uniformed Services University of the Health Sciences, Bethesda, Maryland.

A007 Modulation of HER2 as a mechanism for AR expression. Daniel K.Y. Low, National Cancer Institute, Bethesda, Maryland.

A008 Elucidating the effects of the Alzheimer's disease associated gene BIN1 on cancer tumorigenesis. Collin McColl, Baylor College of Medicine, Houston, Texas.

A009 Distinct activity of androgen receptor splice variants in promoting prostate cancer metastasis. Maryam Labaf, University of Massachusetts Boston, Boston, Massachusetts.

A010 ANO7 expression changes in prostate cancer progression — association with an aggressive phenotype?. Olli Metsälä, University of Turku, Turku, Finland.

A011 TBX2 acts as a molecular switch to downregulate androgen receptor and upregulate glucocorticoid receptor signaling in castrate resistant prostate cancer. Srinivas Nandana, Texas Tech University Health Sciences Center, Lubbock, Texas.

A012 Adaptive and non-adaptive gene expression responses in prostate cancer during androgen deprivation. Reetta Nätkin, Tampere University, Tampere, Finland.

A013 Minor intron splicing is critical for survival of lethal prostate cancer. Anke Augspach, University of Bern-DBMR, Bern, Switzerland.

A014 NFI-family transcriptional factors direct AR cistrome redistribution during prostate cancer tumorigenesis. Larysa Poluben, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts.

A015 Citron kinase is a novel driver of prostate cancer progression and controls alternative splicing associated with treatment-resistance. Chitra Rawat, Cleveland Clinic, Cleveland, Ohio.

A016 Mechanism of hypoxia-induced centrosome loss in early prostate cancer. John M. Ryniawec, University of Arizona, Tucson, Arizona.

A017 Molecular analysis of matched PIN, invasive prostate cancer, and adjacent normal prostate tissue samples reveal distinct transcriptional signatures and clonal relationships. Siri H. Strand, Stanford University, Stanford, California.

A018 Increased RAD21 Promotes Prostate Cancer Development. Xiaofeng A. Su, Henry Jackson Foundation/Uniformed Services University of the Health Sciences, Bethesda, Maryland.

A019 Enzalutamide resistance is driven by adaptations that enhance AR splice variant and FOXA1 activities. Betul Ersoy-Fazlioglu, Beth Israel Deaconess Medical Center, Harvard University, Boston, Massachusetts.

A020 Unraveling the role of ANO7 in prostate cancer metabolism.. Nasrin Sultana, University of Turku, Turku, Finland.

A021 Reactive osteogenic-niche regulation of endocrine resistance in prostate cancer bone metastases: role of tenascin-C induced metabolic shift in regulating therapeutic resistance in prostate cancer. Rintu T. Thomas, Baylor College of Medicine, Houston, Texas.

A022 Alternative polyadenylation as a therapeutic vulnerability in prostate cancer. Kiel Tietz, University of Minnesota-Twin Cities, Minneapolis, Minnesota.

A023 RNF185 modulates prostate cancer metastatic potential through regulation of epithelial-mesenchymal transition. Benjamin Van Espen, Sanford Burnham Prebys Medical Discovery Institute, La Jolla, California.

A024 Glucocorticoid receptor-induced non-muscle caldesmon regulates growth and metastasis in castration-resistant prostate cancer. Verneri Virtanen, University of Turku and Turku University Hospital, Turku, Finland.

A025 Elevated periprostatic fat is associated with high grade prostate cancer in radiotherapy-treated patients. Sarah J. Winter, Patrick G. Johnston Centre for Cancer Research, Queen's University Belfast, Belfast, United Kingdom.

A026 BMX inhibition reverses HSD3B1-driven resistance in prostate cancer. Xiuxiu Li, Cleveland Clinic, Shaker Heights, Ohio.

A027 Identification and characterization of PLUTO-201, a novel lncRNA associated with prostate cancer metastasis. Noah Younger, University of California, San Francisco, California.

A028 Dissecting the role of cellular senescence in prostate cancer initiation and immune suppression. Lin Zhou, UMass Chan Medical School, Worcester, Massachusetts.

A029 Whole genome and transcriptome analysis of paired metastatic biopsies identified resistance mechanisms in castration-resistant prostate cancer. Xiaolin Zhu, University of California, San Francisco, California.

A031 A fat lot of good: A novel monounsaturated fatty acid promotes prostate cancer growth and survival. Lisa M. Butler, University of Adelaide, Adelaide, South Australia, Australia.

A033 Exploring synthetic lethality of targeting miR346-Unfolded Protein Response dependent DNA Damage Response mechanisms in treatment-resistant Prostate Cancer. Dimitrios Doultsinos, University of Oxford, Oxford, United Kingdom.

A037 Kinase GRK3 connects angiogenesis and neuroendocrine differentiation in prostate cancer progression by enhancing epigenetic activity of HDAC2. Wenliang Li, University of Texas Health Science Center at Houston, Houston, Texas.

A040 Multi-site sequencing of lethal prostate cancer reveals metastatic dissemination by independent and early-branching clones. Noshad Hosseini, University of Michigan, Ann Arbor, Michigan.

A041 Development of novel in-vitro mixed-cell models to capture genomic heterogeneity in prostate tumors. Sampreeti Jena, University of Minnesota-Twin Cities, Minneapolis, Minnesota.

A043 Identifying tumor heterogeneity and drug sensitivity in primary prostate cancer towards personalized medicine. Juening Kang, Inselspital, University Hospital of Bern, Bern, Switzerland.

A044 Generation of a new mouse model to study the role of oncofetal Cripto in aggressive lethal prostate cancer. Juening Kang, University Hospital-Inselspital, Bern, Switzerland.

A045 Whole transcriptome analysis of paired African American prostate cancer cell lines. Kristi Y. Lee, National Institutes of Health, Bethesda, Maryland.

A046 Integrated genomic analysis of primary prostate tumor foci and corresponding lymph node metastases identifies pathways associated with metastatic disease. Carlos S. Moreno, Emory University, Atlanta, Georgia.

A047 Panorama of complex structural variants in primary localized prostate cancer. André Olsen, Finsen Laboratory, Rigshospitalet; Biotech Research and Innovation Centre (BRIC), Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark.

A048 The importance of time: Circadian rhythm disruption and prostate cancer. Sierra T. Pence, Center for Prostate Disease Research (CPDR), Bethesda, Maryland.

A049 Immunohistochemical detection of ERG, ETV1, ETV4, and PTEN in prostate tumor specimens reveals the heterogeneity of multi-focal prostate cancer. Shyh-Han Tan, Center for Prostate Disease Research, Murtha Cancer Center Research Program, Department of Surgery, Uniformed Services University of the Health Sciences, Bethesda, Maryland.

A050 Convergent evolution in DNA repair-deficient mCRPC in response to targeted therapy. Thaidy Moreno, University of California, San Francisco, California.

A051 The spatial landscape of clonal somatic copy number alterations in benign and malignant prostate epithelia. Andrew Erickson, Nuffield Department of Surgical Sciences, University of Oxford, Oxford, United Kingdom.

A052 Chromatin conformational changes in prostate cancer progression. Ebrahim Afyounian, Tampere University, Tampere, Finland.

A053 Epigenomic analyses of circulating tumor DNA in patients with metastatic castration resistant prostate cancer (mCRPC) treated with immune checkpoint blockade and PARP inhibition. Anna Baj, National Cancer Institute, Bethesda, Maryland.

A054 Accurate prediction of cohesin-mediated 3D genome organization using 2D chromatin features. Khyati Chandratre, University of Texas at Dallas, Richardson, Texas.

A055 NSD2 is a requisite and targetable subunit of the AR/FOXA1 neo-enhanceosome complex in prostate cancer cells. Abhijit Parolia, University of Michigan, Ann Arbor, Michigan.

A056 AR/FOXA1-mediated active gene repression as a mechanism of prostate carcinogenesis. Sanjana Eyunni, University of Michigan, Ann Arbor, Michigan.

A057 Microscale analysis of histone modifications in rare cell populations in prostate cancer. Zachary J. Kauffman, University of Wisconsin-Madison, Madison, Wisconsin.

A058 Lineage plasticity is associated with an altered MAX cistrome through super-enhancer remodeling. Maxim Kobelev, Vancouver Prostate Centre, Vancouver, British Columbia, Canada.

A059 Epigenetic remodelling by class I HDAC inhibitors increases response to androgen signalling inhibitors in prostate cancer. Rachel McCole, Patrick G. Johnston Centre for Cancer Research, Queen's University Belfast, Belfast, United Kingdom.

A060 Genetic alterations induce distinct histone post-translational modifications during the transition to castration-resistant prostate cancer. Tanaya A. Purohit, University of Wisconsin-Madison, Madison, Wisconsin.

A061 Nuclear lamin content as a biomarker for prostate cancer progression. Rebeca San Martin, University of Tennessee, Knoxville, Tennessee.

A062 Alternative promoter usage is linked to transcriptional and epigenetic alterations during prostate cancer progression. Meng Zhang, University of California, San Francisco, California.

A064 Prediction of positive prostate biopsy is significantly improved in Black and Hispanic men when serum PVT1 exon 9 copy number is combined with serum prostate specific antigen. Emmanuel Owusu Asante-Asamani, Clarkson University, Potsdam, New York.

A065 Serum PVT1 exons 4A and 4B copy numbers are better predictors of high-grade prostate cancer in Black and Hispanic men than serum prostate specific antigen. Emmanuel Owusu Asante-Asamani, Clarkson University, Potsdam, New York.

A066 Molecular phenotyping in single cell RNA sequencing allows for identification of common populations across studies and platforms. Brian Capaldo, National Cancer Institute, Bethesda, Maryland.

A067 Cellular cartography reveals transcriptional specificity and spatial organization of diverse luminal epithelial cells in the murine prostate. Hanbyul Cho, University of Michigan, Ann Arbor, Michigan.

A068 Prostate luminal progenitors as the cell-of-origin for androgen receptor-independent prostate cancer. Chee Wai Chua, Clinical Stem Cell Research Center, Renji Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai, China (Mainland).

A069 Microscale modeling of the human prostate bone metastatic niche. Adeline Ding, University of Wisconsin-Madison, Madison, Wisconsin.

A070 Determining gene expression regulated by androgen receptor variant 7 in co-loss of MAP3K7/CHD1 prostate cancer. Claire Gillette, University of Colorado Anschutz Medical Campus, Aurora, Colorado.

A071 SOX2 induced plasticity and microenvironment lead to intratumoral and tissue-specific phenotypic heterogeneity in metastatic castration-resistant prostate cancer (mCRPC). Anson Ku, National Cancer Institute, Bethesda, Maryland.

A072 Unique mouse models of high-risk prostate cancer adequate for targeted interception. Anait S. Levenson, Long Island University, Brookville, New York.

A073 Human prostate-on-chip models to define stromal and epithelial interactions in normal and cancerous prostate. Cindy K. Miranti, University of Arizona Cancer Center, University of Arizona, Tucson, Arizona.

A074 In vivo modeling of castration-resistant prostate cancer in the immunodeficient SRG OncoRat. R. Grace Walton, Hera BioLabs, Lexington, Kentucky.

A075 Characterizing novel aggressive prostate cancer subtypes associated with loss of chromosomes 8p and 16q. Gabriel A. Yette, University of Colorado Anschutz Medical Campus, Aurora, Colorado.

A076 Evaluating cardiometabolic and oncologic risk among Puerto Rican men with prostate cancer. Carlos J. Diaz Osterman, Ponce Research Institute, Ponce, Puerto Rico.

A077 MicroRNA drivers of resistance to androgen deprivation therapy in prostate cancer. Philippa C. Saunders, Imperial College London, London, United Kingdom.

A078 Identifying and targeting the genetic determinants of immune suppression and immunotherapy failure in prostate cancer. Katherine C. Murphy, UMass Chan Medical School, Worcester, Massachusetts.

A079 Glutamine antagonist prodrug JHU083 reprograms immunosuppressive tumor-associated macrophages to drive tumor immunity in urologic cancers. Jelani C. Zarif, Johns Hopkins University School of Medicine, Baltimore, Maryland.

A080 Male-Biased Metabolic And Structural Muscular Changes Driven by Testosterone Flare-Like Conditions. John M. Fenimore, National Institutes of Health, Bethesda, Maryland.

A082 The epigenetic impact and therapeutic opportunity of AR-directed therapy for desmoplastic small round cell tumor. Danh Truong, MD Anderson Cancer Center, Houston, Texas.

A083 Low dose abiraterone in prostate cancer - safety, efficacy and pharmacoeconomic implications. Suryakanta Acharya, Assam Cancer Care Foundation, Lakhimpur, India.

A085 A luminal intermediate cell state maintains long-term prostate homeostasis and contributes to tumorigenesis. Flaminia Talos, Stony Brook University, Stony Brook, New York.