Short Talks Selected from Proffered Abstracts

PR-01 **TRIM29 is required for basal bladder cancer invasive progression**. Alan Kelleher. University of Michigan, Ann Arbor, Michigan, United States.

PR-02 **Sarcomatoid Histological Variants of Canine Muscle-Invasive Bladder Cancer: Transcription Factor Activation Highlights Pathways of Epithelial-Mesenchymal Transformation Similar to Humans**. Karin Allenspach. University of Georgia, Athens, Georgia, United States.

PR-03 **T cell receptor repertoire and diversity are prognostic markers in bladder cancer**. Nanna Kristjánsdóttir. National Cancer Institute, National Institutes of Health, Bethesda, Maryland, United States.

PR-04 **Spatial proteomics and transcriptomics reveal an altered immune cell landscape in bladder cancer patients unresponsive to BCG treatment**. Trine Strandgaard. Aarhus University Hospital, Aarhus, Denmark.

PR-05 **Final results from a Phase I trial of intravesical chemoimmunotherapy with gemcitabine and Bacillus Calmette-Guérin (BCG) for patients with BCG-exposed high-grade non-muscle invasive bladder cancer**. Syed Alam. Memorial Sloan Kettering Cancer Center, New York, New York, United States.

PR-06 **EG-70 (detalimogene voraplasmid), a novel, non-viral intravesical gene therapy for BCG-unresponsive non-muscle-invasive bladder cancer: Preclinical characterization and translation into the clinic**. Marie-Line Goulet. enGene Inc, Boston, Massachusetts, United States.

PR-07 **Identifying targeted therapies for muscle invasive bladder cancer via STAG2 expression**. Sarah Athans. Roswell Park Comprehensive Cancer Center, Buffalo, New York, United States.

PR-08 **Modulating the PPARγ pathway to augment NECTIN4-targeting chimeric antigen receptor (CAR) T cell therapy**. Jonathan Chou. UCSF, San Francisco, California, United States.

PR-09 **Exploring the functional consequences of APOBEC3-induced non-coding hotspot mutations in bladder cancer using massively parallel reporter assays and CRISPR-mediated base editing**. Rouf Banday. National Cancer Institute, National Institutes of Health, Bethesda, Maryland, United States.

PR-10 **Exploratory analysis of tumor tertiary lymphoid structures using a novel artificial intelligence–based approach in patients with muscle-invasive urothelial carcinoma from the CheckMate 274 trial**. Matthew Milowsky. Department of Urology, Radboud University, Nijmegen, Netherlands.

PR-11 **Imaging mass cytometry captures patient heterogeneity enabling BCG response stratification in non-muscle invasive bladder cancer**. Ali Foroughi pour. The Jackson Laboratory for Genomic Medicine, Farmington, Connecticut, United States.
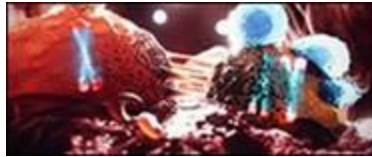
Poster Session A (To be presented on May 18 from 4:15-6:15 p.m. ET)

A001 **Urine-based liquid biopsy test for the detection of residual bladder cancer in radical cystectomy patients**. Philip Abbosh. Fox Chase Cancer Center, Philadelphia, Pennsylvania, United States.

A002 **Assessment of the Diagnostic Accuracy of Oncuria-Detect® for Detection of Upper Tract Urothelial Carcinoma**. Toru Sakatani. Cedars-Sinai Medical Center, Los Angeles, California, United States.

A003 **Characterization of circulating tumor cells from patients with metastatic bladder cancer**. Mark Day. University of Michigan, Ann Arbor, Michigan, United States.

A004 **Clinical test design affects tumor tissue and ctDNA FGFR gene status in metastatic urothelial cancer: a prospective study**. David Müller. Department of Urology, University Hospital Basel, University of Basel, Switzerland; Vancouver Prostate Centre, Department of Urologic Sciences, University of British Columbia, Vancouver, British Columbia, Canada.

A005 **Exploring liquid biopsy for the detection of bladder cancer:Unraveling RNA fusions**. Mayer Saidian. nRichDX, Irvine, California, United States.

A006 **Bladder cancer risk stratification with the Oncuria 10 plex bead-based urinalysis assay using three different Luminex xMAP instrumentation platforms**. Toru Sakatani. Cedars-Sinai Medical Center, Los angeles, California, United States.

A007 **Circulating tumor DNA and tissue staining analyses reveal heterogeneous ERBB2/HER2 status in urothelial cancer**. Gillian Vandekerkhove. University of British Columbia, Vancouver, British Columbia, Canada.

A008 **Racial differences in characteristics and outcomes of adjuvant nivolumab for muscle-invasive urothelial carcinoma (MIUC) in the real-world setting**. Regina Barragan-Carrillo. City of Hope Comprehensive Cancer Center, Duarte, California, United States.

A009 **Integrative drug screening and multi-omic characterization of patient-derived bladder cancer organoids reveals novel molecular correlates of chemotherapy response**. Nathan Merrill. University of Michigan, Ann Arbor, Michigan, United States.

A010 **Cancer Associated Fibroblast dependency in a novel immunocompetent mouse model of bladder cancer**. philip abbosh. Fox Chase, Philadelphia, Pennsylvania, United States.

A011 **Bladder cancerization is linked to epithelial basalization and is reversed by EGF inhibition**. Kris Prado. Stanford University School of Medicine, Palo Alto, California, United States.

A012 **Kmt2c/d loss primes urothelium for tumorigenesis and redistributes Menin to bivalent promoters**. Naitao Wang. Memorial Sloan Kettering Cancer Center, New York, New York, United States.

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A013 **Functional and clinical consequences of hotspot non-coding mutations upstream of the LEPROTL1 gene in bladder cancer**. Kelly Butler. National Cancer Institute (NCI), National Institutes of Health (NIH), Bethesda, Maryland, United States.

A014 **PIK3CA mutation might confer resistance to an FGFR inhibitor, erdafitinib, in urothelial cancer cells**. Seiji Arai. Gunma University Graduate School of Medicine, Maebashi, Japan.

A015 **Novel genetic driver for the genesis of muscle invasion in bladder cancer.** Sreenidhi Mohanvelu. Oklahoma State University, Stillwater, Oklahoma, United States.

A016 **NRF2 activation promotes a fitness disadvantage in normal urothelium and drives a basal-like phenotype**. Akihiro Hamada. Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States.

A017 **Patient-reported experience related to aspects of quality of life after cystectomy from an exploratory focus group**. Andrea Ireland. Janssen Medical Affairs, a Johnson & Johnson company, Horsham, Pennsylvania, United States.

A018 **A case of Buschke-Löwenstein tumor with superimposed infection and associated urothelial carcinoma**. ALIYA KHAN. BROWARD HEALTH NORTH, Pompano Beach, Florida, United States.

A019 **TRIM29 enhances the invasion of bladder cancer cells by modulating the intermediate filament network and focal adhesions**. Yin Wang. University of Michigan, Ann Arbor, Michigan, United States.

A020/ PR-01 **TRIM29 is required for basal bladder cancer invasive progression**. Alan Kelleher. University of Michigan, Ann Arbor, Michigan, United States.

A021 **The role of MGAT5 in sex-dependent regulation of CD8+ T cells in muscle-invasive bladder cancer**. Morgan Roberts. University of British Columbia, Vancouver Prostate Centre, Vancouver, British Columbia, Canada.

A022/ PR-02 **Sarcomatoid Histological Variants of Canine Muscle-Invasive Bladder Cancer: Transcription Factor Activation Highlights Pathways of Epithelial-Mesenchymal Transformation Similar to Humans**. Karin Allenspach. University of Georgia, Athens, Georgia, United States.

A023 **Stratification of bladder cancer patients with the use of flow cytometry is increasing the diagnostic potential of molecular classifiers**. Bernhard Kiss. Inselspital, University Hospital of Bern, Bern, Switzerland.

A024 **Genomic peroxisome proliferator-activated receptor gamma (PPARG) study: A sponsored testing program to identify patients harboring genetic alterations in advanced UC in support of the FX-909 Phase 1 study**. Bijal Kakrecha. Flare Therapeutics, Cambridge, Massachusetts, United States.

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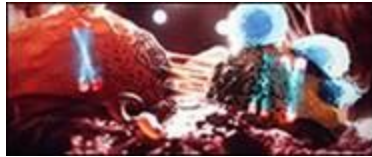
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A025 **Integrating genomic alterations and histopathological features for enhanced risk stratification in non-muscle invasive bladder cancer**. Melinda Lillesand. Stavanger University Hospital, Stavanger, Norway.

A026 **PIN1 isomerase promotes the initiation and progression of bladder cancer through SREBP2-mediated cholesterol biosynthesis pathway**. Xue Wang. Salk Institute for Biological Studies, La Jolla, California, United States.

A027 **The role of nuclear receptors as promoters of luminal tumors and suppressors of basal/squamous tumors.** Cathy Mendelsohn. Columbia University, New York, New York, United States.

A028 **A living biobank of patient-derived organoids reveals a role for KMT2D in maintaining luminal identity in urothelial carcinoma**. John Christin. Columbia University Irving Medical Center, New York, New York, United States.

A029 **Transcriptome analysis of variant histology bladder cancer reveals drug target heterogeneity**. Jacob Tallman. Memorial Sloan Kettering Cancer Center, New York, New York, United States.

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Poster Session B (To be presented on May 19 from 4:15-6:15 p.m. ET)

B001 **Urinary bladder cancer incidence and mortality in the United States: 20-year trends and initial impact of the COVID-19 pandemic**. Grace Gallant. Dartmouth College, Hanover, New Hampshire, United States.

B002/PR011 **Imaging mass cytometry captures patient heterogeneity enabling BCG response stratification in non-muscle invasive bladder cancer**. Ali Foroughi pour. The Jackson Laboratory for Genomic Medicine, Farmington, Connecticut, United States.

B003 **Preliminary Machine Learning Integration of DNA Methylation-Based Tumor Immune Microenvironment Deconvolution with Histopathological Slides for Bladder Cancer Prognostication**. Joshua Levy. Cedars-Sinai Medical Center, Los Angeles, California, United States.

B004 **Deep learning unveils molecular footprints in histology: predicting molecular subtypes from bladder cancer histology slides**. Farbod Khoraminia. Erasmus Medical Center, Rotterdam, Netherlands.

B005/PR-03 **T cell receptor repertoire and diversity are prognostic markers in bladder cancer**. Nanna Kristjánsdóttir. Department of Molecular Medicine, Aarhus University Hospital; Department of Clinical Medicine, Aarhus University, Aarhus C, Denmark.

B006 **GSTT2 MODULATES IMMUNE ACTIVATION AND IMPACTS RESPONSE TO BCG IMMUNOTHERAPY IN BLADDER CANCER**. Mugdha Patwardhan. National University of Singapore, Singapore, Singapore.

B007 **Urinary cytokine profiles reflect rationale for treatment with gemcitabine and Bacillus Calmette-Guérin (BCG) in BCG-exposed high-risk non-muscle invasive bladder cancer (NMIBC)**. Christopher Gaffney. Memorial Sloan Kettering Cancer Center, New York, New York, United States.

B008 **High expression of the exhaustion markers PD1 and PD-L1 in non-muscle invasive bladder cancer is associated with poor outcome following Bacillus Calmette-Guérin immunotherapy**. Tine Andreasen. Aarhus University Hospital, Aarhus C, Denmark.

B009 **Targeting bladder cancer-macrophage interactions by SPARC peptides**. Neveen Said. Wake Forest University School of Medicine, Winston Salem, North Carolina, United States.

B010 **Tumor B8T expression stratifies overall survival in high risk muscle invasive urothelial carcinoma.** Burles Johnson III. Johns Hopkins University Greenberg Bladder Cancer Institute, Baltimore, Maryland, United States.

B011 **Predictable successes: drug additivity explains the efficacy of combination therapies for metastatic urothelial cancer**. Adam Palmer. Department of Pharmacology, Computational Medicine Program, UNC Lineberger Comprehensive Cancer Center, UNC Chapel Hill, Chapel Hill, North Carolina, United States.
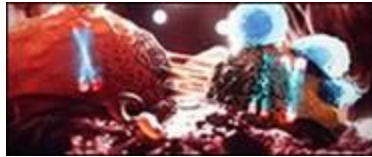
B012 **BET inhibition sensitizes preclinical models of bladder cancer to DDR inhibitors**. Bhavika Chirumamilla. UNC Eshelman School of Pharmacy, Chapel Hill, North Carolina, United States.

B013 **Novel prognostic score for patients with metastatic bladder cancer on immunotherapy**. Vishwani Chauhan. Barts Health NHS Trust, London, United Kingdom.

B014 **FGFR inhibition upregulates Nectin-4 expression in FGFR3 altered urothelial carcinoma.** Sean Clark-Garvey. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States.

B015/PR-05 **Final results from a Phase I trial of intravesical chemoimmunotherapy with gemcitabine and Bacillus Calmette-Guérin (BCG) for patients with BCG-exposed high-grade non-muscle invasive bladder cancer**. Syed Alam. Memorial Sloan Kettering Cancer Center, New York, New York, United States.

B016/PR-06 **EG-70 (detalimogene voraplasmid), a novel, non-viral intravesical gene therapy for BCG-unresponsive non-muscle-invasive bladder cancer: Preclinical characterization and translation into the clinic**. Marie-Line Goulet. enGene Inc, Boston, Massachusetts, United States.

B017 **Novel Mesothelin-Based CAR T Cells Targeting MUC16 as an Intravesical Bladder Cancer Therapy**. Parwiz Abrahimi. Weill Cornell Medicine, New York, New York, United States.

B018 **KDM6A and MTAP expression loss enable identification of a large fraction of low grade non-invasive urothelial neoplasia of the urinary bladder.** Neele Heckmann. Institute of Pathology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany.

B019 **Identification of gene signatures predictive of response to Ad-IFNα/Syn3 in bladder cancer**. Sharada Mokkapati. The UT MD Anderson Cancer Center, Houston, Texas, United States.

B020 **Development of novel Src-targeting strategies to block bladder cancer invasive progression**. Nicole Jerome. University of Michigan, Ann Arbor, Michigan, United States.

B021 **Targeting nucleotide excision repair in non-muscle invasive bladder cancer**. Qiang Li. Roswell Park Comprehensive Cancer Center, Buffalo, New York, United States.

B022/PR-07 **Identifying targeted therapies for muscle invasive bladder cancer via STAG2 expression**. Sarah Athans. Roswell Park Comprehensive Cancer Center, Buffalo, New York, United States.

B023/PR-08 **Modulating the PPARγ pathway to augment NECTIN4-targeting chimeric antigen receptor (CAR) T cell therapy**. Jonathan Chou. UCSF, San Francisco, California, United States.

B024 **Development of HM-001 as a therapeutic drug for non-muscle invasive bladder cancer**. Shinji Mima. HOIST Co., Ltd.,, Osaka, Japan.

B025 **Luminal-to-basal phenotypic plasticity promotes invasive phenotypes in a live-imaging assay using patient-derived bladder tumor organoids**. Clementine Le Coz. Columbia University Irving Medical Center, New York City, New York, United States.

B026 **APOBEC3 promotes squamous differentiation via IL1A/AP-1 signaling**. Michael Sturdivant. University of North Carolina Chapel Hill, Chapel Hill, North Carolina, United States.

B027 **The MAT2A inhibitor IDE397: a novel combination backbone for urothelial cancer subjects with MTAP deficiency**. Claire Neilan. IDEAYA Biosciences, South San Francisco, California, United States.