Aims and objectives of this session
Use of validated prostate cancer biomarkers is important for selection of patients who risk developing aggressive disease and also for monitoring castration therapy resistance. Novel approaches to analyze markers in multifocal prostate cancer will be presented.

Poster viewing of 20 minutes. Presentations will take place on stage. Standard presentations are 2 minutes in length, followed by 2 minutes for discussion. Extended presentations (+) are 3 minutes in length, followed by 3 minutes for discussion.

**Germline mutations in ATM and BRCA1/2 distinguish risk for lethal and indolent prostate cancer and are associated with early age at death**


Institutes: 1Huashan Hospital, Fudan University, Dept. of Urology, Shanghai, China, 2NorthShore University HealthSystem, Program for Personalized Cancer Care, Evanston, United States of America, 3Johns Hopkins University School of Medicine, Dept. of Urology and The James Buchanan Brady Urologic Institute, Baltimore, United States of America, 4NorthShore University HealthSystem, Dept. of Surgery, Evanston, United States of America, 5NorthShore University HealthSystem, Center for Molecular Medicine, Evanston, United States of America, 6NorthShore University HealthSystem, Dept. of Medicine, Evanston, United States of America, 7University of Utah, Dept. of Internal Medicine, Salt Lake City, United States of America, 8Johns Hopkins Medical Institutions, Sidney Kimmel Comprehensive Cancer Center, Baltimore, United States of America

**Comprehensive molecular dissection of multi-focal prostate cancer and concomitant lymph node metastasis: Implications for tissue based prognostic biomarkers**

By: Salami S.1, Hovelson D.2, Mathieu R.3, Kaplan J.2, Susani M.4, Rioux-Leclercq N.5, Shariat S.3, Tomlins S.2, Palapattu G.1

Institutes: 1University of Michigan, Dept. of Urology, Ann Arbor, United States of America, 2University of Michigan, Dept. of Pathology, Ann Arbor, United States of America, 3Medical University Vienna, Dept. of Urology, Vienna, Austria, 4Medical University Vienna, Dept. of Pathology, Vienna, Austria, 5Rennes University Hospital, Dept. of Pathology, Rennes, France

**A genomic analysis of metastases-prone localized prostate cancer in a European high-risk population**

By: Van Den Broeck T.1, Gevaert T.1, Prekovic S.2, Ong K.2, Tosco L.1, Moris L.2, Smeevis E.2, Lehrer J.3, Haddad Z.3, Helsen C.2, Margrave J.3, Van Poppel H.1, Everaerts W.1, Erho N.3, Buerki C.3, Davicioni E.3, Joniau S.1, Claessens F.2

Institutes: 1UZ Leuven, Dept. of Urology, Leuven, Belgium, 2KU Leuven, Laboratory of Molecular Endocrinology, Leuven, Belgium, 3GenomeDx, GenomeDx Biosciences, Vancouver, Canada

**Analysing circulating tumour cells with epithelial and mesenchymal features for prostate cancer prognosis**
Decipher test impacts decision-making among patients considering adjuvant and salvage treatment following radical prostatectomy: interim results from the multicenter prospective PRO-IMPACT study


Institutes: University of Washington, Seattle Cancer Care Alliance, Seattle, United States of America, 2GenomeDx Biosciences, Clinical Development, Vancouver, Canada, 3GenomeDx Biosciences, Dept. of Biostatistics, Vancouver, Canada, 4Emmes Canada, Dept. of Biostatistics, Burnaby, Canada, 5The Urology Center of Colorado, Dept. of Urology, Colorado, United States of America, 6Spectrum Health Medical Group, Dept. of Urology, Grand Rapids, United States of America, 7Virginia Urology, Dept. of Urology, Richmond, United States of America, 8Fox Chase Cancer Center, Surgical Oncology, Philadelphia, United States of America, 9Lakeland Regional Cancer Center, Dept. of Urology, Lakeland, United States of America, 10Nova Southeastern University, Urological Research Network, Miami, United States of America, 11Delaware Valley Urology, LLC, Dept. of Urology, Voorhees, United States of America, 12Alaska Clinical Research Center, Dept. of Urology, Anchorage, United States of America, 13Brigham and Womens Hospital, Dept. of Urology, Boston, United States of America, 14Cedars-Sinai Medical Center, Dept. of Urology, Los Angeles, United States of America, 15University of Utah, Huntsman Cancer Institute, Salt Lake City, United States of America, 16University of Miami, Miller School of Medicine, Miami, United States of America, 17University of Colorado, Anschutz Medical Campus, Aurora, United States of America, 18University of Vermont Medical Center, Dept. of Urology, Burlington, United States of America, 19Lancaster Urology, Dept. of Urology, Lancaster, United States of America, 20Thomas Jefferson University, Sidney Kimmel Medical College, Philadelphia, United States of America, 21Carolina Urology Partners, Dept. of Urology, Gastonia, United States of America, 22GenomeDx Biosciences, Bioinformatics, San Diego, United States of America, 23UT Southwestern Medical Center, Dept. of Urology, Dallas, United States of America

The occurrence and therapeutic consequences of androgen receptor copy number gain in prostate cancer patients using Droplet Digital PCR

By: Buelens S.1, Claeys T.1, Kumps C.1, Dhoondt B.1, Poelaert F.1, Nurten Y.2, Vynck M.3, Thas O.3, Ost P.4, Vandesompele J.2, Lumen N.1

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Identification of a CTC-based prognostic signature in mCRPC driven by Aurora Kinase A and Wnt signaling

Identification of a CTC-based prognostic signature in mCRPC driven by Aurora Kinase A and Wnt signaling

By: Morgan T.1, Singhal U.1, Wang Y.1, Henderson J.1, Niknafs Y.2, Qiao Y.2, Taichman R.3, Zaslavsky A.1, Feng F.4, Palapattu G.1, Chinnaian A.2, Tomlins S.2

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Delineation of human prostate cancer evolution identifies chromothripsis as a polyclonal event selecting for FKBP4 driven castration resistance
Cell free DNA methylation markers as predictors of treatment response and prognosis for castration-resistant prostate cancer
By: Hendriks R.1, Dijkstra S.1, Smit F.2, Vandersmissen J.2, Van De Voorde H.2, Mulders P.1, Van Oort I.1, Van Criekinge W.2, Schalken J.1
Institutes: Radboudumc, Dept. of Urology, Nijmegen, The Netherlands, 2MDxHealth, Dept. of Research and Development, Irvine, United States of America, 3Ghent University, Dept. of Statistics and Bio-Informatics, Ghent, Belgium

Expression of neuropilin 2 as predictor for tumour-related death in patients with prostate cancer
By: Borkowetz A.1, Toma M.2, Füssel S.1, Erdmann K.1, Hoenscheid P.2, Froehner M.1, Muders M.2, Wirth M.1
Institutes: 1TU Dresden, Dept. of Urology, Dresden, Germany, 2TU Dresden, Dept. of Pathology, Dresden, Germany

Calcium signaling remodeling as a predictive factor of systemic recurrence after radical prostatectomy
Institutes: 1Pitié Salpétrière Academic Hospital, Dept. of Urology, Paris, France, 2Brest University Hospital, Dept. of Pathology, Brest, France, 3University Rennes 1, INSERM U1085-IRSET, Rennes, France, 4Brest University Hospital, Dept. of Urology, Brest, France, 5Brest University Hospital, INSERM U 1412, Centre D'Investigation Clinique, Brest, France, 6University of Brest, INSERM U 1078, Brest, France

Circulating tumor cells in prostate cancer
H.G. Lilja, New York (US)