Genomic biomarkers for diagnosis and prognosis of prostate cancer

Poster Session 26

**Saturday 16 March**
**16:00 - 17:30**

**Location:** Green Area, Room 4

**Chairs:** R. Flanigan, Maywood (US)
G. Jenster, Rotterdam (NL)
K.A. Tasken, Oslo (NO)

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

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Molecular phenotypes in DNA repair deficiency correlate with specific clinical outcomes subtypes and genetic background

By: Cussenot O.¹, Perrot E.², Brureau L.², Blanchet P.², Diedhiou A.³, Comperat E.¹, Iliev D.⁴, Pruss D.⁴, Timms K.M.⁴, Cancel-Tassin G.⁵
¹Sorbonne Universite, GRC n°5, ONCOTYPE-URO, AP-HP, Tenon Hospital, Paris, France, ²CHU Pointe-a-Pitre/Abymes, Dept. of Urology, Pointe a Pitre, Guadeloupe, ³CHU Pointe-a-Pitre/Abymes, Dept. of Pathology, Pointe a Pitre, Guadeloupe, ⁴Myriad Genetics Inc, Salt Lake City, United States of America, ⁵CeRePP, Paris, France

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Mitochondrial dysfunction correlates directly with progression and poor long-term prognosis in prostate cancer

By: Sachdeva A.¹, Hart C.A.², Carey C.³, Lawless C.¹, Brown M.D.², Greaves L.¹, Heer R.⁴, Turnbull D.M.¹, Clarke N.W.²
¹Newcastle University, Wellcome Centre for Mitochondrial Research, Newcastle-upon-Tyne, United Kingdom, ²University of Manchester, Genito-Urinary Cancer Research Group, Manchester, United Kingdom, ³Newcastle University, Dept. of Molecular Pathology Node, Newcastle-upon-Tyne, United Kingdom, ⁴Newcastle University, Northern Institute for Cancer Research, Newcastle-upon-Tyne, United Kingdom

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INSM1 expression discriminates neuroendocrine differentiation from Paneth cell-like change in prostate cancer and predicts castration-resistance progression

By: Xin Z, Zhu Y, Pan J, Dong B, Xue W.
Renji Hospital, School of Medicine, Shanghai Jiao Tong University, Dept. of Urology, Shanghai, China

**Aims and objectives of this presentation**

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5hmC levels predict biochemical failure following radical prostatectomy in prostate cancer patients with ERG negative tumors

By: Kristensen G.1, Strand S.H.2, Røder M.A.1, Berg K.D.1, Toft B.G.3, Høyer S.4, Borre M.5, Sørensen K.D.2, Brasso K.1
1Copenhagen University Hospital, Rigshospitalet, Copenhagen Prostate Cancer Center, Department of Urology, Copenhagen, Denmark, 2Aarhus University Hospital, Dept. of Molecular Medicine, Aarhus, Denmark, 3Copenhagen University Hospital, Rigshospitalet, Dept. of Pathology, Copenhagen, Denmark, 4Aarhus University Hospital, Dept. of Pathology, Aarhus, Denmark, 5Aarhus University Hospital, Dept. of Urology, Aarhus, Denmark

Genomic profiling of patients with metastatic castration-resistant prostate cancer (mCRPC) for the evaluation of rucaparib: Next-generation sequencing (NGS) of tumour tissue and cell-free DNA (cfDNA)

1Instituto Catalan de Oncologia, Dept. of Medical Oncology, Barcelona, Spain, 2Memorial Sloan Kettering Cancer Center, Dept. of Genitourinary Oncology, New York, United States of America, 3Adelaide and Meath Hospital (Incorporating the National Children's Hospital), Dept. of Genito-Urinary Oncology, Dublin, Ireland, 4Cabrini Hospital, Dept. of Medical Oncology, Malvern, Australia, 5Mount Vernon Cancer Centre, Dept. of Clinical Oncology, Northwood, United Kingdom, 6The Ottawa Hospital Cancer Centre, Dept. of Medical Oncology, Ottawa, Canada, 7Vejle Sygehus, Dept. of Oncology, Vejle, Denmark, 8Royal Hobart Hospital, Dept. of Medical Oncology, Hobart, Australia, 9University of Maryland Greenebaum Cancer Center, Dept. of Medicine, Baltimore, United States of America, 10Urology Associates Clinical Research, Dept. of Oncology, Nashville, United States of America, 11University Hospital Geelong (Barwon Health), Dept. of Medical Oncology, Geelong, Australia, 12Rocky Mountain Cancer Centers – USOR, Dept. of Medical Oncology, Hematology, Aurora, United States of America, 13Centre Eugène Marquis, Dept. of Medical Oncology, Rennes, France, 14Royal Marsden Hospital, Dept. of Medical Oncology, London, United Kingdom, 15Clinique Victor Hugo Centre Jean Bernard, Dept. of Medical Oncology, Le Mans, France, 16Centre Hospitalier Universitaire Dr-Georges-L.-Dumont, Dept. of Medical Oncology, Moncton, Canada, 17Centre d’Oncologie de Gentilly, Dept. of Medical Oncology, Nancy, France, 18Premier Medical Group of the Hudson Valley, Dept. of Urology, Poughkeepsie, United States of America, 19Frimley Health NHS Foundation Trust, Dept. of Medical Oncology, Slough, United Kingdom, 20Clovis Oncology, Inc., Dept. of Translational Medicine, Boulder, United States of America, 21Clovis Oncology, Inc., Clinical Development, Boulder, United States of America.
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**Ductal adenocarcinoma of the prostate: Exploring its genetic landscape**

By: Chow K.\(^1\), Wong L-M.\(^2\), Bedo J.\(^3\), Papenfuss A.T.\(^3\), Peters J.S.\(^4\), Costello A.J.\(^4\), Hovens C.M.\(^1\), Corcoran N.M.\(^1\)

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**Tumor-metastasis crosstalk in prostate cancer: Examining the effects of cytoreductive primary tumor removal in an orthotopic xenograft model**

By: Linxweiler J.\(^1\), Hajili T.\(^1\), Körbel C.\(^2\), Zeuschner P.\(^1\), Menger M.D.\(^2\), Stöckle M.\(^1\), Junker K.\(^1\), Saar M.\(^1\)

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**The cluster of differentiation 44 variant 8-10 messenger RNA contained in exosomes is a potential marker for docetaxel resistance among prostate cancer patients**

By: Kato T.\(^1\), Mizutani K.\(^1\), Horie K.\(^1\), Kawakami K.\(^2\), Fujita Y.\(^2\), Ito M.\(^2\), Koie T.\(^1\)

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**Natural killer cell activity: An innovative biomarker predicting prostate cancer severity**

By: Kuo M-C.\(^1\), Huang C-Y.\(^1\), Kung H-N.\(^2\), Lu Y-C.\(^1\)

\(^1\)National Taiwan University Hospital, Dept. of Urology, Taipei City, Taiwan, \(^2\)National Taiwan University, Dept. of Anatomy and Cell Biology, Taipei City, Taiwan
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Capturing circulating tumor cells from a large blood volume: A pilot study using diagnostic leukapheresis


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Circulating tumor DNA targeted sequencing predicts the prognosis of mCRPC patients

By: Dong B.1, Fan L.1, Yang B.2, Wu K.3, Zhang F.4, Chen W.5, Huohua C.6, Pan J.1, Zhu Y.1, Luo C.7, Yang Y.7, Zhao G.7, Wang C.7, Li L.8, Yao X.2, Wei X.1
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Tissue specific NKX3.1 positive circulating tumor cells isolated by ISET in prostatic cancer patients

By: Monterisi S.1, Colombo P.2, Duga S.3, Saita A.4, Elefante M.G.2, Casale P.4, Buffi N.M.4, Hurle R.4, Lunghezzani G.4, Guazzoni G.4, Veronesi G.5, Lazzeri M.4
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A modified bioinformatics approach of detecting low-frequency mutations in cell-free DNA to achieve precision medicine for advanced prostate cancer

By: Mizuno K.1, Fujimoto A.2, Sumiyoshi T.1, Goto T.1, Kobayashi T.1, Yamasaki T.1, Inoue T.1, Ogawa O.1, Akamatsu S.1, Nakagawa H.3

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MiR Scientific Sentinel Scores - a new platform technology for identification of clinically significant prostate cancer using miRNA and snoRNA expression signatures

By: Klotz L.H. 1, Tenniswood M. 2, Tilki D. 3, Dirienzo A. 2, Wang W-L. 2

1 Sunnybrook Health Sciences Centre, Dept. of Surgery (urology), Toronto, Canada, 2 miR Scientific LLC, Research and Development, New York, United States of America, 3 Martini Klinik Prostate Cancer Center, University Hospital Hamburg-Eppendorf, Dept. of Urology, Hamburg, Germany

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Comparative proteome analysis identified NAMPT as a potential serum marker for the prediction of docetaxel-resistance in prostate cancer

By: Keresztes D. 1, Módos O. 1, Szűcs M. 1, Hüttl A. 1, Csizmarik A. 1, Nagy N. 1, Kretz V. 1, Bracht T. 2, Sitek B. 2, Witzke K. 2, Puhr M. 3, Sevcenko S. 4, Kramer G. 5, Shariat S. 5, Nyirády P. 1, Szarvas T. 1

1 Semmelweis University, Dept. of Urology, Budapest, Hungary, 2 Ruhr University Bochum, Medizinisches Proteom-Center, Bochum, Germany, 3 Medical University of Innsbruck, Dept. of Urology, Innsbruck, Austria, 4 Donaupital, Dept. of Urology, Vienna, Austria, 5 Medical University of Vienna, Dept. of Urology, Vienna, Austria

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17:23 - 17:23 Conclusion