Experimental approach to advanced prostate cancer

**Aims and objectives of this session**
Recent research has revealed several novel targets in prostate cancer. However, a single therapy approach will likely not be efficient in improving patient survival. For this reason, systemic pharmacology approaches have been developed in order to provide a scientific basis for novel therapies. The session will also address key issues of drug delivery in prostate cancer.

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.

**New approaches to overcome endocrine therapy resistance in prostate cancer**

*746*

Identification and characterization of selective androgen receptor degraders (SARDs) for the treatment of enzalutamide unresponsive and/or resistant prostate cancer

By: Getzenberg R.¹, Ponnusamy S.², Thiyagarajan T.³, Hwang D.-J.³, He Y.³, McEwan I.⁴, Watt C.⁴, Moldoveanu T.⁵, Miller D.⁶, Narayanan R.²

Institutes: ¹Gtx Inc, Dept. of Prostate Cancer, Memphis, United States of America, ²University of Tennessee Health Science Center, Dept. of Medicine, Memphis, United States of America, ³University of Tennessee Health Science Center, Dept. of Pharmaceutical Sciences, Memphis, United States of America, ⁴School of Medicine, Institute of Medical Sciences, Aberdeen, United Kingdom, ⁵St. Jude's Children's Research Hospital, Dept. of Structural Biology, Memphis, United States of America, ⁶University of Tennessee Health Science Center, Pharmaceutical Sciences, Memphis, United States of America

**Targeting enzalutamide-resistant prostate cancer using the novel androgen receptor inhibitor ODM-201**

By: Borgmann H., Ozistanbullu D., Beraldi E., Dalal K., Fazli L., Gleave M.

Institutes: Vancouver Prostate Centre, Dept. of Urology, Vancouver, Canada

**Targeting androgen receptor variants by niclosamide overcomes resistance to abiraterone and enzalutamide**

By: Liu C., Lou W., Pan C.-X., Evans C., Gao A.

Institutes: University of California Davis, Dept. of Urology, Sacramento, United States of America

**The STAT3 inhibitor galiellalactone prevents prostate cancer cell induced generation of myeloid derived suppressor cells from monocytes ex vivo**

By: Hellsten R.,¹ Leandersson K.², Johansson M.³, Bjarrell A.¹

Institutes: ¹Division of Urological Cancers, Dept. of Translational Medicine, Lund University, Malmö, Sweden, ²Cancer Immunology, Dept. of Translational Medicine, Lund University, Malmö, Sweden, ³Gliacrmone Pharma AB, Helsingborg, Sweden

**The multi-kinase inhibitor EC-70124 delivers a double-hit to prostate cancer stem cells interfering with both STAT3 and NF-kB signaling**
Dopamine hydrochloride relative nanoparticles in the treatment of prostate cancer  
By: Zhang C., Zhao X., Lin T., Guo H.  
Institutes: Nanjing Drum Tower Hospital, Dept. of Urology, Nanjing, China

ALK1Fc suppresses tumor growth by impairing proliferation of human prostate cancer cells in vitro and in vivo  
By: Astrologo L. 1, Zoni E. 1, Karkampouna S. 1, Gray P. 2, Klima I. 1, Goumans M.J. 2, Hawinkels L. 2, Van Der Pluijm G. 3, Ten Dijke P. 3, Spahn M. 4, Thalmann G. 4, Kruihof-De Julio M. 1  
Institutes: Urology Research Laboratory, Dept. of Clinical Research, Bern, Switzerland, 2Leiden University Medical Center, Dept. of Molecular Cell Biology, Leiden, The Netherlands, 3Leiden University Medical Center, Dept. of Urology, Leiden, The Netherlands, 4University Hospital Bern, Dept. of Urology, Bern, Switzerland

A tale of tails: A novel approach to immunotherapy of prostate cancer  
By: Galustian C. 1, Smolarek D. 1, Sakellariou C. 1, Elhage O. 1, Smith R. 1, Dasgupta P. 2  
Institutes: Kings College London, Dept. of Innate Immunity, London, United Kingdom, 2Kings College London, Dept. of Innate Immunity and the Urology Centre, London, United Kingdom

Systems pharmacology and quantitative proteomics for developing targeted triple therapy  
By: Ebhardt H.A. 1, Root A. 2, Beizaei A. 1, Liu Y. 3, Gauthier N. 4, Sander C. 4, Aebersold R. 3  
Institutes: University College Dublin, Systems Biology Ireland, Dublin, Ireland, 2Memorial Sloan-Kettering Cancer Center, Weill Cornell Graduate School of Medical Sciences, New York City, United States of America, 3ETH Zurich, Institute of Molecular Systems Biology, Zurich, Switzerland, 4Dana-Farber Cancer Institute, CBio Center At Dana-Farber, Boston, United States of America

Transdermal delivery of leuprolide acetate with chitosan microneedles: A promising tool for androgen deprivation therapy  
By: Tsai Y-S. 1, Chen M-Y. 2, Lan S-K. 3, Tsai H-T. 4, Chen M-C. 5, Tzai T-S. 6  
Institutes: National Cheng Kung University Hospital, Dept. of Urology, Tainan, Taiwan, 2Madou SinLau Hospital, Dept. of Urology, Tainan, Taiwan, 3Dalin Tzu-Chi Hospital, Dept. of Urology, Tainan, Taiwan, 4National Cheng-Kung University Hospital, Dept. of Urology, Tainan, Taiwan, 5National Cheng-Kung University, Dept. of Chemical Engineering, Tainan, Taiwan, 6Tainan An-Nan Hospital, Dept. of Urology, Tainan, Taiwan

Co-treatment with L-methadone increases the efficacy of cytostatic drugs in prostate cancer cells  
By: Stadlbauer B. 1, Kozian D. 2, Stief C. 1, Buchner A. 1  
Institutes: Ludwig-Maximilians-University Munich, Dept. of Urology, Munich, Germany, 2Sanofi-Aventis GmbH, Research Department, Frankfurt, Germany

SEMA3C drives cancer growth and treatment resistance via cognate ligand-independent activation of multiple receptor tyrosine kinases  
By: Takeuchi A. 1, Masaki S. 1, Peacock J. 2, Eto M. 1, Martin E G. 2, Ong C. 2  
Institutes: Graduate School of Medical Sciences, Kyushu University, Dept. of Urology, Fukuoka, Japan, 2University of British Columbia, Vancouver Prostate Centre, Vancouver, Canada