Epigenetics and novel signaling pathways in prostate carcinogenesis

Friday, 24 March 12:30 - 14:00

Location: Room Amsterdam, North Hall (Level 1)
Chairs: C.P. Evans, Sacramento (US)
G. Jenster, Rotterdam (NL)
S. Perner, Luebeck (DE)

Aims and objectives of this session
Invasion and metastasis in prostate cancer are regulated by different signaling molecules. In this session, the pathway of Wnt/beta-catenin and its interaction with other signaling cascades in prostate tumorigenesis and progression will be highlighted. In addition, novel findings about regulation of the key transcription factor ERG 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.

90
The prostate cancer-bone environment causes upregulation of the pentose phosphate pathway
By: Whithurn J.¹, Rao S.¹, Tabata S.², Hirayama A.², Soga T.², Hamdy F.¹, Edwards C.¹
Institutes: ¹University of Oxford, Nuffield Dept. of Surgical Sciences, Oxford, United Kingdom, ²Keio University, Institute for Advanced Biosciences, Tsuruoka, Japan

91
A novel epigenetic crosstalk between ERG and EZH2 leads to prostate cancer progression
By: Zoma M.¹, Curti L.¹, Shinde D.¹, Mitra A.¹, Albino D.¹, Rossi S.¹, Givveni G.¹, Losa M.¹, Thalmann G.², Chiorino G.³, Catapano C.V.¹, Carbone G.M.¹
Institutes: ¹IOR Institute of Oncology Research, Tumor Biology and Experimental Therapeutic, Bellinzona, Switzerland, ²University of Bern, Inselspital, Dept. of Urology, Bern, Switzerland, ³Fondo Edo Tempia, Laboratory of Cancer Genomics, Biella, Italy

92
Stage-specific embryonal antigen 4 expressing human prostate stem cells have enhanced regenerative potential in vivo
By: Höfner T.¹, Klein C.², Eisen C.², Rigo-Watermeier T.², Haferkamp A.¹, Sprick M.²
Institutes: ¹University Hospital Mainz, Dept. of Urology, Mainz, Germany, ²Heidelberg Institute for Stem Cell Technology and Experimental Medicine, HI-STEM GmbH, Heidelberg, Germany

93
Cell surface GRP78 activation by anti-GRP78 autoantibodies confers prostate tumour growth via tissue factor activation
By: Al-Hashimi A., Hoogenes J., Shayegan B., Austin R.
Institutes: McMaster University, Dept. of Medicine, Hamilton, Canada

94
MALT1 is a downstream gene of WNT/β-catenin inducing cell proliferation and invasion potential via the upregulation of NFκB activity in human prostate carcinoma cells
By: Juang H-H.¹, Tsui K-H.²
Institutes: ¹Chang Gung University, Dept. of Anatomy, Tao-yuan, Kwei-shan, Taiwan, ²Chang Gung Memorial Hospital, Dept. of Urology, Tao-yuan, Kwei-shan, Taiwan

95
SE-cadherin stimulates integrin-mediated chemotaxis in prostate cancer
By: Tsaur I.¹, Maxeiner S.², Rutz J.², Thomas C.¹, Jüngel E.¹, Haferkamp A.¹, Blaheta R.A.²
Institutes: ¹University Medicine Mainz, Dept. of Urology and Pediatric Urology, Mainz, Germany, ²University Hospital Frankfurt, Dept. of Urology and Pediatric Urology, Frankfurt, Germany

*96
Compartmentalized β-catenin driven by genomic rearrangement in prostate cancer dictates

Scientific Programme
growth factor dependent, intratumoral cell fate and behavior
By: Lu Q.1, Li M-C.1, Zhang J.2, Chen Y-H.2, Boykins C.1, Du J.3, Ai X.5, Chen B-A.6, Jiang Y-G.4
Institutes: 1Brody School Of Medicine At East Carolina University, Dept. of Anatomy and Cell Biology, Greenville, United States of America,
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3Beijing Institute of Heart, Lung, and Blood Vessel Diseases, Beijing An Zhen Hospital, Capital Medical University, Beijing, China,
4Beijing An Zhen Hospital, Capital Medical University, Dept. of Urology, Beijing, China,
5PLA Army General Hospital, Dept. of Urology, Beijing, China,
6Southeast University School of Clinical Medicine, Dept. of Hematology and Oncology, Nanjing, China

Expression of checkpoint receptors in tumor-infiltrated T-cells of renal cell and prostate carcinomas
By: Bedke J.1, Zelba H.2, Hennenlotter J.1, Zettl M.3, Rammensee H-G.2, Stenzl A.1, Gouttefangeas C.2
Institutes: 1University of Tübingen, Dept. of Urology, Tübingen, Germany,
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3Boehringer Ingelheim RCV GmgH & CoKG, NBE Discovery, Vienna, Austria

Evaluation of systematic alterations in the proteome by androgen receptor stimulation and blockade in prostate cancer
By: Molokwu C.1, Kristensen A.2, Zhang F.3, Saxena N.3, Shresta R.4, Bell R.4, Hach F.4, Collins C.5, Sorensen P.6, Gleave M.8
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3Vancouver Prostate Centre, Tumour Biology Group, Vancouver, Canada,
4Vancouver Prostate Centre, Bioinformatics Group, Vancouver, Canada,
5University of British Columbia, Dept. of Urological Sciences, Vancouver, Canada,
6University of British Columbia, Dept. of Pathology & Laboratory Medicine, Vancouver, Canada

Description of the dimerization surface for the ligand-binding domain of the androgen receptor and its role in transcriptional control by agonists and antagonists
By: Claessens F.1, Nadal M.2, Prekovic S.1, Gallastegui N.5, Helsen C.1, Abella M.2, Zielinska K.2, Gay M.3, Vilaseca M.3, Taules M.4, Houtsmuller A.5, Van Royen M.5, Fuentes-Prior P.2, Estebanez-Perpina E.2
Institutes: 1KU Leuven, Molecular Endocrinology Laboratory, Leuven, Belgium,
2Institute of Biomedicine of The University of Barcelona, Dept. of Biochemistry and Molecular Biomedicine, Barcelona, Spain,
3Parc Cientific De Barcelona, Mass Spectrometry Core Facility, Barcelona, Spain,
4Centres Cientifics I Tecnologics, Unitat De Citometra, Barcelona, Spain,
5Erasmus MC, Dept. of Pathology, Rotterdam, The Netherlands

Bone morphogenic protein-6 and retinoblastoma expression: An inverse relationship in prostate cancer progression?
By: McCormick K.1, Leiblich A.1, Stevens D.1, Alves C.1, Fan S-J.1, Carr K.1, Morris J.1, Harris A.2, Wilson C.1, Hamdy F.3, Goberdhan D.1
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Epigenetics in prostate cancer
G. Jenster, Rotterdam (NL)