

## Epigenetics and novel signaling pathways in prostate carcinogenesis

Poster Session 07

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: [Whitburn J.](#)<sup>1</sup>, Rao S.<sup>1</sup>, Tabata S.<sup>2</sup>, Hirayama A.<sup>2</sup>, Soga T.<sup>2</sup>, Hamdy F.<sup>1</sup>, Edwards C.<sup>1</sup>  
**Institutes:**<sup>1</sup>University of Oxford, Nuffield Dept. of Surgical Sciences, Oxford, United Kingdom, <sup>2</sup>Keio University, Institute for Advanced Biosciences, Tsuruoka, Japan
- 91 **A novel epigenetic crosstalk between ERG and EZH2 leads to prostate cancer progression**  
By: [Zoma M.](#)<sup>1</sup>, Curti L.<sup>1</sup>, Shinde D.<sup>1</sup>, Mitra A.<sup>1</sup>, Albino D.<sup>1</sup>, Rossi S.<sup>1</sup>, Civenni G.<sup>1</sup>, Losa M.<sup>1</sup>, Thalmann G.<sup>2</sup>, Chiorino G.<sup>3</sup>, Catapano C.V.<sup>1</sup>, Carbone G.M.<sup>1</sup>  
**Institutes:**<sup>1</sup>IOR Institute of Oncology Research, Tumor Biology and Experimental Therapeutic, Bellinzona, Switzerland, <sup>2</sup>University of Bern, Inselspital, Dept. of Urology, Bern, Switzerland, <sup>3</sup>Fondo 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.](#)<sup>1</sup>, Klein C.<sup>2</sup>, Eisen C.<sup>2</sup>, Rigo-Watermeier T.<sup>2</sup>, Haferkamp A.<sup>1</sup>, Sprick M.<sup>2</sup>  
**Institutes:**<sup>1</sup>University Hospital Mainz, Dept. of Urology, Mainz, Germany, <sup>2</sup>Heidelberg Institute for Stem Cell Technology and Experimental Medicine, HI-STEM GGmbH, 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/ $\beta$ -catenin inducing cell proliferation and invasion potential via the upregulation of NF $\kappa$ B activity in human prostate carcinoma cells**  
By: [Juang H-H.](#)<sup>1</sup>, Tsui K-H.<sup>2</sup>  
**Institutes:**<sup>1</sup>Chang Gung University, Dept. of Anatomy, Tao-yuan, Kwei-shan, Taiwan, <sup>2</sup>Chang Gung Memorial Hospital, Dept. of Urology, Tao-yuan, Kwei-shan, Taiwan
- 95 **SE-cadherin stimulates integrin-mediated chemotaxis in prostate cancer**  
By: [Tsaour L.](#)<sup>1</sup>, Maxeiner S.<sup>2</sup>, Rutz J.<sup>2</sup>, Thomas C.<sup>1</sup>, Jüngel E.<sup>1</sup>, Haferkamp A.<sup>1</sup>, Blaheta R.A.<sup>2</sup>  
**Institutes:**<sup>1</sup>University Medicine Mainz, Dept. of Urology and Pediatric Urology, Mainz, Germany, <sup>2</sup>University Hospital Frankfurt, Dept. of Urology and Pediatric Urology, Frankfurt, Germany
- \*96 **Compartmentalized  $\beta$ -catenin driven by genomic rearrangement in prostate cancer dictates**

**growth factor dependent, intratumoral cell fate and behavior**

By: Lu Q.<sup>1</sup>, Li M-C.<sup>1</sup>, Zhang J.<sup>2</sup>, Chen Y-H.<sup>2</sup>, Boykins C.<sup>1</sup>, Du J.<sup>3</sup>, Ai X.<sup>5</sup>, Chen B-A.<sup>6</sup>, Jiang Y-G.<sup>4</sup>

**Institutes:**<sup>1</sup>Brody School Of Medicine At East Carolina University, Dept. of Anatomy and Cell Biology, Greenville, United States of America, <sup>2</sup>Brody School Of Medicine At East Carolina University, Dept. of Anatomy And Cell Biology, Greenville, United States of America, <sup>3</sup>Beijing Institute of Heart, Lung, and Blood Vessel Diseases, Beijing An Zhen Hospital, Capital Medical University, Beijing, China, <sup>4</sup>Beijing An Zhen Hospital, Capital Medical University, Dept. of Urology, Beijing, China, <sup>5</sup>PLA Army General Hospital, Dept. of Urology, Beijing, China, <sup>6</sup>Southeast University School of Clinical Medicine, Dept. of Hematology and Oncology, Nanjing, China

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**Expression of checkpoint receptors in tumor-infiltrated T-cells of renal cell and prostate carcinomas**

By: Bedke J.<sup>1</sup>, Zelba H.<sup>2</sup>, Hennenlotter J.<sup>1</sup>, Zettl M.<sup>3</sup>, Rammensee H-G.<sup>2</sup>, Stenzl A.<sup>1</sup>, Gouttefangeas C.<sup>2</sup>

**Institutes:**<sup>1</sup>University of Tübingen, Dept. of Urology, Tübingen, Germany, <sup>2</sup>University of Tübingen, Dept. of Immunology, Tübingen, Germany, <sup>3</sup>Boehringer Ingelheim RCV GmG & CoKG, NBE Discovery, Vienna, Austria

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**Evaluation of systematic alterations in the proteome by androgen receptor stimulation and blockade in prostate cancer**

By: Molokwu C.<sup>1</sup>, Kristensen A.<sup>2</sup>, Zhang F.<sup>3</sup>, Saxena N.<sup>3</sup>, Shrestha R.<sup>4</sup>, Bell R.<sup>4</sup>, Hach F.<sup>4</sup>, Collins C.<sup>5</sup>, Sorensen P.<sup>6</sup>, Gleave M.<sup>5</sup>

**Institutes:**<sup>1</sup>Bradford Royal Infirmary, Dept. of Urology, Bradford, United Kingdom, <sup>2</sup>British Columbia Cancer Research Centre, Proteomics Unit, Vancouver, Canada, <sup>3</sup>Vancouver Prostate Centre, Tumour Biology Group, Vancouver, Canada, <sup>4</sup>Vancouver Prostate Centre, Bioinformatics Group, Vancouver, Canada, <sup>5</sup>University of British Columbia, Dept. of Urological Sciences, Vancouver, Canada, <sup>6</sup>University of British Columbia, Dept. of Pathology & Laboratory Medicine, Vancouver, Canada

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**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.<sup>1</sup>, Nadal M.<sup>2</sup>, Prekovic S.<sup>1</sup>, Gallastegui N.<sup>2</sup>, Helsen C.<sup>1</sup>, Abella M.<sup>2</sup>, Zielinska K.<sup>2</sup>, Gay M.<sup>3</sup>, Vilaseca M.<sup>3</sup>, Taules M.<sup>4</sup>, Houtsmuller A.<sup>5</sup>, Van Royen M.<sup>5</sup>, Fuentes-Prior P.<sup>2</sup>, Estebanez-Perpina E.<sup>2</sup>

**Institutes:**<sup>1</sup>KU Leuven, Molecular Endocrinology Laboratory, Leuven, Belgium, <sup>2</sup>Institute of Biomedicine of The University of Barcelona, Dept. of Biochemistry and Molecular Biomedicine, Barcelona, Spain, <sup>3</sup>Parc Cientific De Barcelona, Mass Spectrometry Core Facility, Barcelona, Spain, <sup>4</sup>Centres Cientifics I Tecnològics, Unitat De Citometria, Barcelona, Spain, <sup>5</sup>Erasmus MC, Dept. of Pathology, Rotterdam, The Netherlands

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**Bone morphogenic protein-6 and retinoblastoma expression: An inverse relationship in prostate cancer progression?**

By: McCormick K.<sup>1</sup>, Leiblich A.<sup>1</sup>, Stevens D.<sup>1</sup>, Alves C.<sup>1</sup>, Fan S-J.<sup>1</sup>, Carr K.<sup>1</sup>, Morris J.<sup>1</sup>, Harris A.<sup>2</sup>, Wilson C.<sup>1</sup>, Hamdy F.<sup>3</sup>, Goberdhan D.<sup>1</sup>

**Institutes:**<sup>1</sup>University of Oxford, Dept. of Physiology, Anatomy and Genetics, Oxford, United Kingdom, <sup>2</sup>University of Oxford, The Weatherall Institute of Molecular Medicine, John Radcliffe Hospital, Oxford, United Kingdom, <sup>3</sup>University of Oxford, Nuffield Department of Surgical Sciences, John Radcliffe Hospital, Oxford, United Kingdom

13:49 - 13:56

**Epigenetics in prostate cancer**

G. Jenster, Rotterdam (NL)