Basic research in renal tumours: Gene profiling and molecular markers

**Location:** Room 14c (ICM, Level 1)

**Chairs:**
- L. Mengual, Barcelona (ES)
- A. Vuksanovic, Belgrade (RS)

**Aims and objectives of this presentation**
To show and discuss latest advances in gene profiling as well as molecular markers of prognosis.

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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**Identifying the metastatic subclone by exhaustive sampling of primary and metastasis in clear cell renal cell carcinoma (ccRCC) pair**

**By:** Soultati A.¹, O'Brien T.², Challacombe B. J.², Nicol D.³, Horswell S.⁴, Xu H.⁵, Rowan A. J.⁶, Lopez J. I.⁶, Stares M.³, Chandra A.⁷, Chowdhury S.⁸, Rudman S.⁹, Matthews N.³, Larkin J.¹⁰, Turajlic S.⁵, Swanton C.⁵

**Institutes:**
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- ²Guy's and St Thomas NHS Foundation Trust, Dept. of Urology, London, United Kingdom,
- ³Royal Marsden Hospital NHS Foundation Trust, Dept. of Urology, London, United Kingdom,
- ⁴The Francis Crick Institute, Dept. of Bioinformatics and Biostatistics, London, United Kingdom,
- ⁵The Francis Crick Institute, Translational Cancer Therapeutics Laboratory, London, United Kingdom,
- ⁶Cruces University Hospital, Dept. of Pathology, Bilbao, Spain,
- ⁷Guy's and St Thomas NHS Foundation Trust, Dept. of Pathology, London, United Kingdom,
- ⁸Guy's and St Thomas NHS Foundation Trust, Dept. of Medical Oncology, London, United Kingdom,
- ⁹The Francis Crick Institute, Advanced Sequencing Facility, London, United Kingdom,
- ¹⁰Royal Marsden Hospital NHS Foundation Trust, Dept. of Medicine, London, United Kingdom

### 218

**Intermittent hypoxia increases tumor angiogenesis in a mouse model of kidney cancer**

**By:** Vilaseca Cabo A.¹, Musquera M.¹, Torres M.², Campillo N.², Gozal D.³, Montserrat J.⁴, Touijer K.⁵, Farré R.², Almendros I.², Alcaraz A.¹

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- ²Universitat De Barcelona, Dept. of Biophysics and Bioengineering, Barcelona, Spain,
- ³University of Chicago, Dept. of Sleep Disorders, Chicago, United States of America,
- ⁴Hospital Clinic De Barcelona, Dept. of Pneumology, Barcelona, Spain,
- ⁵Memorial Sloan-Kettering Cancer Center, Dept. of Urology, New York, United States of America

### 219

**Quantification, culture and characterization of circulating endothelial progenitor cells in patients with renal cell carcinoma**

**By:** Yang B., Gu W., Sun W., Guo C., Yao X., Zheng J.

**Institutes:** Shanghai Tenth People's Hospital, Tongji University School Of Medicine, Dept. of Urology, Shanghai, China

### 220

**Tumour-derived vascular endothelial growth factor mobilizes circulating endothelial progenitor cells and contributes to vasculogenesis of renal cell carcinoma**

**By:** Yang B., Gu W., Guo C., Sun W., Che J., Liu M., Yao X., Zheng J.

**Institutes:** Shanghai Tenth People's Hospital, Tongji University School of Medicine, Dept. of Urology, Shanghai, China

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**Multi-region whole exome sequencing reveals monoclonal nature of inferior vena cava tumour thrombus extension in clear cell renal cell carcinoma**
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Accumulation of tolerogenic human 6-sulfo LacNAc dendritic cells is associated with poor prognosis in clear cell renal cell carcinoma

By: Stares M.1, Nicol D.2, O’Brien T.3, Challacombe B.3, Rowan A.1, Horswell S.4, Salm M.4, Soultati A.5, Hazel S.6, Chandra A.7, López J.8, Fisher R.9, Chowdhury S.5, Rudman S.5, Gore M.9, Larkin J.9, Matthews N.10, Turašić S.1, Swanton C.1

Identification and validation of soluble carrier family expression signature for predicting poor outcome of renal cell carcinoma

By: Wan F., Ma C., Zhang H., Shi G., Zhu Y., Ye D.

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Genetic alterations in specific chromosomal regions indicate metastatic potential in ccRCC patients

By: Grimm J.1, Janssen M.1, Hartmann A.2, Kunath F.3, Stöhr C.2, Stöckle M.1, Junker K.1

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Identification and validation of an 8-gene expression signature for predicting high Fuhrman grade renal cell carcinoma

By: Wan F.1, Zhu Y.2, Han C.2, Xu Q.3, Zhang H.2, Shi G.2, Gu W.2, Ye D.2

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Myopodin methylation correlates to tumour progression and predicts antiangiogenic response in kidney cancer

By: Perez-Lonzac A.2, Pompas-Veganzones N.2, Beltran M.3, Beardo P.4, Vazquez F.5, Cozar J.M.5, Alvarez-Ossorio J.L.6, Sanchez-Carbayo M.1

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Circulating free genomic and mitochondrial DNA fragments and their diagnostic and prognostic potential in clear cell renal cell carcinoma patients

By: Ralla B.1, Hongbiao L.1, Jung M.1, Rabenhorst S.1, Kilic E.1, Budach N.2, Fendler A.1, Jung K.1, Busch J.1

Institutes: Charité - Universitätsmedizin Berlin, Dept. of Urology, Berlin, Germany, 2Charité - Universitätsmedizin Berlin, Dept. of Radiology, Berlin, Germany
Predictive molecular biomarkers of renal clear cell carcinoma


Institutes: IRCCS Ospedale San Raffaele, Dept. of Oncology, Department of Urology, URI, Milan, Italy, IOR - Institute of Oncology Research, Lymphoma and Genomics Research Program Bioinformatics Core Unit, Bellinzona, Switzerland, Hospital of Cremona, Dept. of Oncology, Cremona, Italy, Institute of Cancer Research, Laboratory of Gastrointestinal Cancer Biology and Genomics, London, United Kingdom, University of Padua, Dept. of Pathology, Padua, Italy, IRCCS Ospedale San Raffaele, Division of Pathology, Milan, Italy, University of Padua, Dept. of Surgical Science, Milan, Italy

Significance of TERT variants in renal cell carcinoma


Institutes: Memorial Sloan Kettering Cancer Center, Human Oncology and Pathogenesis Program, New York City, United States of America, Memorial Sloan Kettering Cancer Center, Dept. of Medicine, New York City, United States of America, Memorial Sloan Kettering Cancer Center, Dept. of Surgery, New York City, United States of America

Blood based exosomal miRNAs as biomarkers for diagnosis and prognosis of clear cell renal cell cancer

By: Heinzelmann J., Baumgart S., Hoelters S., Janssen M., Stöckle M., Junker K.

Institutes: Saarland University Medical Center, Dept. of Urology and Pediatric Urology, Hamburg, Germany, Saarland University Medical Center, Dept. of Urology and Pediatric Urology, Homburg, Germany