**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.

---

**217**

**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.\(^3\), Nicol D.\(^4\), Horswell S.\(^4\), Xu H.\(^5\), Rowan A. J.\(^6\), Lopez J. I.\(^7\), Stares M.\(^8\), Chandra A.\(^7\), Chowdhury S.\(^9\), Rudman S.\(^8\), Matthews N.\(^9\), Larkin J.\(^10\), Turajlic S.\(^5\), Swanton C.\(^5\)

**Institutes:**  
1. Guy’s and St Thomas NHS Foundation Trust, Dept. of Oncology, London, United Kingdom,  
2. Guy’s and St Thomas NHS Foundation Trust, Dept. of Urology, London, United Kingdom,  
3. Royal Marsden Hospital NHS Foundation Trust, Dept. of Urology, London, United Kingdom,  
4. The Francis Crick Institute, Translational Cancer Therapeutics Laboratory, London, United Kingdom,  
5. Cruces University Hospital, Dept. of Pathology, Bilbao, Spain,  
6. Guy’s and St Thomas NHS Foundation Trust, Dept. of Pathology, London, United Kingdom,  
7. The Francis Crick Institute, Advanced Sequencing Facility, 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.\(^1\)

**Institutes:**  
1. Hospital Clinic De Barcelona, Dept. of Urology, Barcelona, Spain,  
2. Universitat De Barcelona, Dept. of Biophysics and Bioengineering, Barcelona, Spain,  
3. University of Chicago, Dept. of Sleep Disorders, Chicago, United States of America,  
4. Hospital Clinic De Barcelona, Dept. of Pneumology, Barcelona, Spain,  
5. Memorial 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

---

**221**

**Multi-region whole exome sequencing reveals monoclonal nature of inferior vena cava tumour thrombus extension in clear cell renal cell carcinoma**
Accumulation of tolerogenic human 6-sulfo LacNAc dendritic cells is associated with poor prognosis in clear cell renal cell carcinoma
By: Füssel S.1, Toma M.2, Erdmann K.1, Wehner R.3, Kloß G.2, Barretton G.2, Wirth M.P.1, Schmitz M.3
Institutes:1Universitätsklinikum Carl Gustav Carus an der Technischen Universität Dresden, Dept. of Urology, Dresden, Germany, 2Universitätsklinikum Carl Gustav Carus an der Technischen Universität Dresden, Dept. of Pathology, Dresden, Germany, 3Universitätsklinikum Carl Gustav Carus an der Technischen Universität Dresden, Dept. of Immunology, Dresden, Germany

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.
Institutes:Fudan University Shanghai Cancer Center, Dept. of Urology, Shanghai, China

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
Institutes:1UKS Universitätsklinikum des Saarlandes, Dept. of Urology and Pediatric Urology, Homburg/Saar, Germany, 2University Hospital Erlangen, Dept. of Pathology, Erlangen, Germany, 3University Hospital Erlangen, Dept. of Urology, Erlangen, Germany

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
Institutes:1Shanghai Medical College, Fudan University, Dept. of Oncology, Shanghai, China, 2Fudan University Shanghai Cancer Center, Dept. of Urology, Shanghai, China, 3Fudan University Shanghai Cancer Center, Dept. of Pathology, Shanghai, China

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
Institutes:1University of the Basque Country, Bladder Cancer Group, Vitoria-Gasteiz, Spain, 2University of the Basque Country, Translational Oncology Lab, Vitoria-Gasteiz, Spain, 3Hospital Puerta Del Mar, Dept. of Pathology, Cadiz, Spain, 4Hospital De Jerez, Dept. of Urology, Cadiz, Spain, 5Hospital Virgen De Las Nieves, Dept. of Urology, Cadiz, Spain, 6Hospital Puerta Del Mar, Dept. of Urology, Cadiz, Spain

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:1Charité - Universitätsmedizin Berlin, Dept. of Urology, Berlin, Germany, 2Charité - Universitätsmedizin Berlin, Dept. of Radiology, Berlin, Germany
228 Predictive molecular biomarkers of renal clear cell carcinoma
By: Trevisani F.¹, Cascione L.², Ghidini M.³, Lampis A.⁴, Fassan M.⁵, Hanhe J.K.⁶, Dell’Antonia G.⁵, Rigotti P.⁷, Larcher A.¹, Capitanio U.¹, Benigni F.¹, Briganti A.¹, Bertini R.¹, Salonia A.¹, Montorsi F.¹, Valeri N.¹
Institutes: ¹IRCCS Ospedale San Raffaele, Dept. of Oncology, Department of Urology, URI, Milan, Italy, ²IOR - Institute of Oncology Research, Lymphoma and Genomics Research Program Bioinformatics Core Unit, Bellinzona, Switzerland, ³Hospital of Cremona, Dept. of Oncology, Cremona, Italy, ⁴Institute of Cancer Research, Laboratory of Gastrointestinal Cancer Biology and Genomics, London, United Kingdom, ⁵University of Padua, Dept. of Pathology, Padua, Italy, ⁶IRCCS Ospedale San Raffaele, Division of Pathology, Milan, Italy, ⁷University of Padua, Dept. of Surgical Science, Milan, Italy

229 Significance of TERT variants in renal cell carcinoma
By: Casuscelli J.¹, Manley B.¹, Redzematovic A.¹, Becerra M.¹, Tennenbaum D.¹, Arcila M.¹, Voss M.², Feldman D.², Motzer R.², Coleman J.², Russo P.², Hsieh J.¹, Hakimi A.A.³
Institutes: ¹Memorial Sloan Kettering Cancer Center, Human Oncology and Pathogenesis Program, New York City, United States of America, ²Memorial Sloan Kettering Cancer Center, Dept. of Medicine, New York City, United States of America, ³Memorial Sloan Kettering Cancer Center, Dept. of Surgery, New York City, United States of America

230 Blood based exosomal miRNAs as biomarkers for diagnosis and prognosis of clear cell renal cell cancer
By: Heinzelmann J.¹, Baumgart S.², Hoelters S.², Janssen M.², Stöckle M.², Junker K.²
Institutes: ¹Saarland University Medical Center, Dept. of Urology and Pediatric Urology, Hamburg, Germany, ²Saarland University Medical Center, Dept. of Urology and Pediatric Urology, Homburg, Germany