### Basic research in renal tumours: Looking for the right treatment for the right patient

**Poster Session 10**

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

**Chairs:**
- T. Klatte, Vienna (AT)
- I. Mincik, Presov (SK)
- G. Stewart, Cambridge (GB)

**Aims and objectives of this presentation**

To explore the molecular mechanism of resistance of the different drugs available to treat advanced RCC as well as to select patients sensitive or resistant to the different drugs.

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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<th>Presentation Number</th>
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<td>Combination therapy using molecular-targeted drugs inhibiting platelet-derived growth factor receptors in the tumor microenvironment of renal cell carcinoma</td>
<td>Kitano H.¹, Teishima J.¹, Yuge R.², Shinmei S.¹, Nagamatsu H.¹, Goto K.³, Syoji K.¹, Inoue S.¹, Hayashi T.¹, Sentani K.³, Kitadai Y.³, Yasui W.³, Matsubara A.³</td>
<td>Hiroshima University, Dept. of Urology, Hiroshima, Japan, ¹Hiroshima University, Dept. of Gastroenterology, Hiroshima, Japan, ³Hiroshima University, Dept. of Molecular Pathology, Hiroshima, Japan</td>
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<td>111</td>
<td>Netrin-1 protein responsible for disease progression in renal cell carcinoma sunitinib resistant tumors</td>
<td>Frees S.K., Chavez-Munoz C., Zhou B., Wong A., Raven P., So A.I.</td>
<td>Vancouver Prostate Centre, Dept. of Urological Sciences, Vancouver, Canada</td>
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<td>112</td>
<td>Acquired resistance to tyrosine kinase inhibitor sunitinib is associated with functional alterations in renal cell carcinoma cell lines</td>
<td>Vynnytska-Myronovska B., Schendel D., Unteregger G., Stöckle M., Junker K.</td>
<td>Saarland University Medical Center, Dept. of Urology, Homburg/Saar, Germany</td>
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<td>113</td>
<td>Enhanced sensitivity to sorafenib by inhibition of Akt1 expression in human renal cell carcinoma ACHN cells both in vitro and in vivo</td>
<td>Imai S., Tei H., Miyake H., Fujisawa M.</td>
<td>Kobe University Graduate School of Medicine, Dept. of Urology, Kobe, Japan</td>
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<td>114</td>
<td>Clonal mTOR pathway activation as a predictive biomarker for mTOR inhibitor therapy in clear cell renal cell carcinoma</td>
<td>Stares M.¹, Nicol D.², O'Brien T.³, Challcombe B.³, Rowan A.¹, Horswell S.⁴, Salm M.⁴, Soultati A.³, Hazell S.³, Chandra A.¹, López J.³, Fisher R.³, Chowdhury S.³, Rudman S.³, Gore M.³, Matthews N.¹⁰, Fotiadis N.¹¹, Larkin J.³, Turajlic S.¹, Swanton C.¹</td>
<td>The Francis Crick Institute, Translational Cancer Therapeutics Laboratory, London, United Kingdom, ¹The Royal Marsden Hospital NHS Foundation Trust, Dept. of Urology, London, United Kingdom, ²Guy's and St Thomas' NHS Foundation Trust, Dept. of Urology, London, United Kingdom, ³The Francis Crick Institute, Bioinformatics and Biostatistics, London, United Kingdom, ⁴The Royal Marsden Hospital NHS Foundation Trust, Dept. of Pathology, London, United Kingdom, ⁵Guy's and St Thomas' NHS Foundation Trust, Dept. of Medicine, London, United Kingdom, ⁶The Royal Marsden Hospital NHS Foundation Trust, Dept. of Pathology, London, United Kingdom, ⁷Guy's and St Thomas' NHS Foundation Trust, Dept. of Pathology, London, United Kingdom, ⁸Cruces University Hospital, Dept. of Pathology, Bilbao, Spain, ⁹The Royal Marsden Hospital NHS Foundation Trust, Dept. of Medicine, London, United Kingdom, ¹⁰The Francis Crick Institute, Advanced Sequencing Facility, London, United Kingdom, ¹¹The Royal Marsden Hospital NHS</td>
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CMG-101: Novel selective mTOR 1/2 inhibitor for renal cell carcinoma
By: Park D.S., Seo J.B., Lee S.R., Hong Y.K., Hong J.Y., Choi K.H.
Institutes: Cha University, Dept. of Urology, Seongnam, South Korea

Acceleration of proteinuria without significant impact on renal function and its protection by angiotensin II receptor blocker in rats treated with axitinib
By: Imai S., Miyake H., Fujisawa M.
Institutes: Kobe University Graduate School Of Medicine, Dept. of Urology, Kobe, Japan

Predicting clinical response based on ex vivo drug treatment in renal cell carcinoma using kinase activity profiling
By: Oosterwijk-Wakka J.\(^1\), Ruijtenbeek R.\(^2\), Houkes L.\(^2\), Mulders P.\(^1\), Oosterwijk E.\(^1\)
Institutes: 1Radboud University Medical Center, Dept. of Urology, Nijmegen, The Netherlands, 2Pamgene International, Research & Development, ‘s Hertogenbosch, The Netherlands

Patient-derived avatar mouse models predicts prognosis in advanced renal cell carcinoma
By: Trilla E.\(^1\), Regis L.\(^1\), Lorente D.\(^1\), Servián P.\(^1\), Celmá A.\(^1\), Salvador C.\(^1\), Planas J.\(^1\), Placer J.\(^1\), Suarez C.\(^2\), Martinez M.\(^2\), Jimenez-Valero G.\(^2\), Detorres I.\(^3\), Morales R.\(^2\), Jimenez J.\(^4\), Vivancos A.\(^4\), Nuñez P.\(^3\), Carles J.\(^2\), Casanova O.\(^3\), Morote J.\(^1\)
Institutes: 1Hospital Universitari Vall d’Hebron, Dept. of Oncology, Barcelona, Spain, 2Hospital Universitari Vall d’Hebron, Dept. of Pathology, Barcelona, Spain, 3Vall D’Hebron Institute of Oncology, Cancer Genomic Group, Barcelona, Spain, 4Vall D’Hebron Institute of Oncology, Molecular Pathology Group, Barcelona, Spain

Interleukin-22 (IL-22), a T-cell secreted cytokine, contributes to renal cell carcinoma (RCC) progression and is associated with poor outcome in RCC patients
By: Rodler S.\(^2\), Shangqing S.\(^3\), Weidenbusch M.\(^2\), Staehler M.\(^5\), Seliger B.\(^4\), Stief C.G.\(^5\), Anders H-J.\(^2\), Nuhn P.\(^1\)
Institutes: 1University Medical Centre Mannheim, University of Heidelberg, Dept. of Urology, Mannheim, Germany, 2Klinikum Universität München, Nephrologisches Zentrum, Medizinische Klinik Und Poliklinik IV, Munich, Germany, 3Klinik der Universität München, Nephrologisches Zentrum, Medizinische Klinik Und Poliklinik IV, Munich, Germany, 4Martin-Luther-University Halle-Wittenberg Institute of Medical Immunology, Institute of Medical Immunology, Halle, Germany, 5Klinikum Universität München, Dept. of Urology, Munich, Germany

The Mediator complex subunit MED8 is implicated in the progression of papillary renal cell carcinoma
By: Syring I.\(^1\), Klümpner N.\(^2\), Shaikhbrahimzadeh Z.\(^2\), Offermann A.\(^2\), Braun M.\(^2\), Deng M.\(^2\), Böhme D.\(^2\), Queisser A.\(^2\), Von Mässenhagen A.\(^2\), Ellinger J.\(^3\), Müller S.\(^2\), Perner S.\(^4\)
Institutes: 1University Hospital of Bonn, Dept. of Urology and Pediatric Urology, Dept. of Prostate Cancer Research, Institute of Pathology, Bonn, Germany, 2University Hospital of Bonn, Dept. of Prostate Cancer Research, Institute of Pathology, Bonn, Germany, 3University Hospital of Bonn, Clinic For Urology and Pediatric Urology, Bonn, Germany, 4University Hospital of Bonn, Department of Prostate Cancer Research, Institute of Pathology; Pathology Network of The University Hospital of Luebeck and Leibniz Research Center Borstel, Bonn, Germany

TSPAN8 expression in renal cell carcinoma is a poor prognostic factor and a novel therapeutic target
By: Hayashi T.\(^1\), Sentani K.\(^2\), Black P.\(^2\), Goto K.\(^1\), Shinmei S.\(^1\), Anami K.\(^2\), Oo H.Z.\(^2\), Teishima J.\(^1\), Yasui W.\(^2\), Matsubara A.\(^1\)
Institutes: 1Hiroshima University, Dept. of Urology, Hiroshima, Japan, 2Hiroshima University, Dept. of Molecular Pathology, Hiroshima, Japan, 3Vancouver Prostate Centre, Dept. of Urology, Vancouver, Canada

Ritonavir and delanzomib inhibit renal cancer growth in vitro and in vivo by inducing endoplasmic
reticulum stress synergistically
By: Isono M.\textsuperscript{1}, Sato A.\textsuperscript{1}, Asano T.\textsuperscript{1}, Okubo K.\textsuperscript{1}, Ito K.\textsuperscript{1}, Schulz W.\textsuperscript{2}, Asano T.\textsuperscript{1}
Institutes: \textsuperscript{1}National Defense Medical College, Dept. of Urology, Tokorozawa, Japan, \textsuperscript{2}Heine University, Dept. of Urology, Düsseldorf, Germany

Experimental imaging in orthotopic xenograft models of renal cell carcinoma: Comparative evaluation of high-resolution ultrasonography, in-vivo micro-CT and 9.4T MRI
By: Linxweiler J.\textsuperscript{1}, Körbel C.\textsuperscript{2}, Müller A.\textsuperscript{3}, Jung V.\textsuperscript{1}, Jüngel E.\textsuperscript{4}, Siemer S.\textsuperscript{1}, Junker K.\textsuperscript{1}, Menger M.D.\textsuperscript{2}, Saar M.\textsuperscript{1}
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