New therapeutic approaches in targeted therapy for renal cell carcinoma

**Location:** Room Berlin, North Hall (Level 1)

**Chairs:**
- N. Kröger, Greifswald (DE)
- A. Necchi, Milan (IT)
- G. Stewart, Cambridge (GB)

**Aims and objectives of this session**
To discuss new therapeutic approaches based on basic research results.

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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**Impact of intratumoral heterogeneity of renal cancer on drug response and development of resistance in patient derived xenografts**
**By:** Bedke J.¹, Flechsig S.², Hennenlotter J.¹, Wulf-Goldenberg A.², Jandrig A.³, Schostak M.³, Becker M.², Fichtner I.², Zeisig R.², Hoffmann J.², Schmees C.², Stenzl A.¹
**Institutes:** University of Tübingen, Dept. of Urology, Tübingen, Germany, ²EPO GmbH, Berlin-Buch, Berlin, Germany, ³University of Magdeburg, Dept. of Urology, Magdeburg, Germany, ⁴Natural and Medical Sciences Institute, Dept. of Molecular Biology, Reutlingen, Germany

**Pathological and prognostic significance of densities of CD57+ (natural killer cells), CD68+ (macrophage), and mast cells in renal cell carcinoma tissues**
**By:** Mochizuki Y., Miyata Y., Yasuda T., Nakamura Y., Matsuo T., Oba K., Sakai H.
**Institutes:** Nagasaki University Hospital, Dept. of Urology and Renal Transplantation, Nagasaki, Japan

**A microplate co-culture assay allows individualised compound efficacy testing in patients derived 3D tumour spheroids and autologous immune cells**
**By:** Bedke J.¹, Bodenhöfer M.², Harland N.¹, Hennenlotter J.¹, Anderle N.², Schmees C.², Stenzl A.¹
**Institutes:** University of Tübingen, Dept. of Urology, Tübingen, Germany, ²Natural and Medical Sciences Institute At The University of Tübingen, Dept. of Molecular Biology, Reutlingen, Germany

**Enhanced RCC cell killing with natural killer cells generated from CD34+ hematopoietic progenitor cells combined with mAb cG250**
**By:** Oosterwijk-Wakka J.¹, Cany J.², Sabata Pérez H.¹, Dolstra H.², Mulders P.¹, Oosterwijk E.¹
**Institutes:** Radboudumc, Dept. of Urology, Nijmegen, The Netherlands, ²Radboudumc, Dept. of Hematology, Nijmegen, The Netherlands

**Orthotopic sunitinib resistant renal cell carcinoma xenograft mouse model**
**By:** Frees S., Moskalev I., Raven P., D’Costa N., Tan Z., Struss W., Chavez-Munoz C., So A.
**Institutes:** The Vancouver Prostate Centre, Dept. of Urology, Vancouver, Canada

**Inhibition of semaphorin 3C augments the anti-cancer effect of sunitinib in renal cancer**
**By:** Dejima T.¹, Takeuchi A.¹, Eto M.¹, Naito S.¹, Gleave M.², Ong C.²
**Institutes:** Kyushu University, Dept. of Urology, Fukuoka, Japan, ²The Vancouver Prostate Centre, Dept. of Urologic Sciences, Vancouver, Canada

**Expression pattern of immune checkpoint-associated molecules in radical nephrectomy specimens as a prognostic predictor in patients with metastatic renal cell carcinoma treated with tyrosine kinase inhibitors**
**By:**
Targeting heat-shock protein 27 enhances sensitivity to sorafenib treatment in renal cancer in vitro and in vivo
By: Frees S.¹, Chavez-Munoz C.¹, Zhou B.¹, Raven P.¹, Fazli L.¹, Chi K.¹, Lawson K.², Finelli A.², Gleave M.¹, So A.¹
Institutes:¹The Vancouver Prostate Centre, Dept. of Urology, Vancouver, Canada, ²University of Toronto, Dept. of Surgical Oncology, Toronto, Canada

Metformin drives synergistic effect and overcomes the treatment resistance of molecular targeted drugs for renal cell carcinoma
By: Matsumoto H., Mori J., Shimizu K., Fujii N., Kawai Y., Inoue R., Yamamoto Y., Hirata H., Shimabukuro T., Matsuyama H.
Institutes: Yamaguchi University, Graduate School of Medicine, Dept. of Urology, Ube, Japan

Panobinostat interacts with nelfinavir to inhibit renal cancer growth by causing endoplasmic reticulum stress
By: Okubo K., Sato A., Asano T., Isono M., Asano T.
Institutes: National Defense Medical College, Dept. of Urology, Tokorozawa, Japan

Improving the efficacy of proteasome inhibitors in the treatment of renal cell carcinoma
By: Abt D.¹, Kraus M.², Bader J.², Besse A.², Schmid H.-P.¹, Engeler D.S.¹, Driessen C.², Besse L.²
Institutes:¹Kantonsspital St. Gallen, Dept. of Urology, St. Gallen, Switzerland, ²Kantonsspital St. Gallen, Dept. of Medical Oncology and Hematology, St. Gallen, Switzerland

Ritonavir, a potent inhibitor of P-glycoprotein, enhances the anticancer effects of romidepsin in renal cancer cells
By: Sato A., Asano T., Okubo K., Isono M., Asano T.
Institutes: National Defense Medical College, Dept. of Urology, Tokorozawa, Japan

Transcriptomic-metabolomic profiling revealed that fatty acid oxidation-induced stress causes cancer Cachexia
By: Fukawa T.¹, Yan-Jiang B.C.⁴, Kanayama H.-O.², Teh B.T.³, Shyh-Chang N.⁴
Institutes:¹Tokushima University Graduated School, Dept. of Urology, Tokushima, Japan, ²Tokushima University Graduated School, Dept. Of Urology, Tokushima, Japan, ³National Cancer Centre Singapore, Laboratory of Cancer Epigenome, Singapore, Singapore, ⁴Genome Institute of Singapore, Agency For Science Technology and Research, Singapore, Singapore

Summary
G. Stewart, Cambridge (GB)