**Urothelial tumours: Innovative therapies and resistance mechanisms**

**Poster Session 34**

**Sunday 18 March**

**12:15 - 13:45**

**Location:** Green Area, Room 2 (Level 0)

**Chairs:**
- M. Babjuk, Prague (CZ)
- C. Jeronimo, Porto (PT)
- M. Knowles, Leeds (GB)

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.

---

**State-of-the-art lecture**

**Signaling pathways implicated in therapy: Resistance in urothelium cancer**

C. Jeronimo, Porto (PT)

---

**454**

**Low dose gemcitabine increases the cytotoxicity of human γδT cell in vitro and in an orthotopic xenograft model in bladder cancer**

By: Shimizu T.¹, Miyashita M.¹, Tomogane M.², Ukimura O.¹, Ashihara E.²

¹Kyoto Prefectural University of Medicine, Dept. of Urology, Kyoto, Japan, ²Kyoto Pharmaceutical University, Dept. of Clinical and Translational Physiology, Kyoto, Japan

---

**455**

**Therapeutic and diagnostic implications of the NOTCH and MAPK pathways in urothelial bladder cancer**

By: Schulz G.B.¹, Grimm T.¹, Jokisch F.¹, Casuscelli J.¹, Buchner A.¹, Kretschmer A.¹, Stief C.¹, Horst D.², Karl A.¹

¹Ludwig-Maximilians-University, Dept. of Urology, Munich, Germany, ²Ludwig-Maximilians-University, Dept. of Pathology, Munich, Germany

---

**456**

**The ataxia telangiectasia and Rad3 related kinase inhibitor AZD6738 sensitizes bladder cancer cells to gemcitabine**

By: Isono M., Sato A., Asano T., Okubo K., Asano T.
National Defense Medical College, Dept. of Urology, Tokorozawa, Japan

---

**457**

**Targeting HRAS as a potential therapeutic target through RAS inhibitor salirasib in bladder cancer**

By: Satoshi S., Yoshino H., Miyamoto K., Yonemori M., Sakaguchi T., Osako Y., Enokida H., Nakagawa M.
Kagoshima University, Dept. of Urology, Kagoshima, Japan
**458**

4N1K-peptide derived from thrombospondins acts as a tumour suppressor in bladder cancer in vivo and in vitro: Potential therapeutic agents for intra-vesical therapy

By: Miyata Y., Asai A., Yasuda T., Nakamura Y., Sagara Y., Matsuo T., Ohba K., Sakai H.
Nagasaki University Graduate School of Biomedical Sciences, Dept. of Urology, Nagasaki, Japan

**459**

Ritonavir and oprozomib cause bladder cancer apoptosis synergistically by inducing endoplasmic reticulum stress

By: Sato A., Asano T., Okubo K., Isono M., Asano T.
National Defense Medical College, Dept. of Urology, Tokorozawa, Japan

**460**

Biological characterization of cisplatin-resistant bladder cancer: Implications for second-line treatments?

By: Seiler R.¹, Gibb E.², Wang N.Q.³, Lam H-M.⁴, Takhar M.², Erho N.², Van Kessel K.⁶, Winters B.⁵, Douglas J.⁷, Lopez F.V.⁵, Crabb S.⁸, Van Rhijn B.⁹, Fransen Van De Putte E.⁹, Zwarthoff E.⁶, Sjödahl G.¹⁰, Thalmann G.¹, Davicioni E.², Boormans J.¹¹, Dall’Era M.¹², Van Der Heijden M.¹³, Wright J.⁵, Black P.⁴
¹University of Bern, Dept. of Urology, Bern, Switzerland, ²GenomeDx Biosciences, Dept. of Research and Development, Vancouver, Canada, ³GenomeDx Biosciences, Dept. of Biostatistics, Vancouver, Canada, ⁴University of British Columbia, Dept. of Urologic Sciences, Vancouver, Canada, ⁵University of Washington School of Medicine, Dept. of Urology, Seattle, United States of America, ⁶University Medical Center Rotterdam, Dept. of Pathology, Rotterdam, Netherlands, The, ⁷University Hospital of Southampton, Dept. of Urology, Hampshire, United Kingdom, ⁸University Hospital of Southampton, Dept. of Medical Oncology, Hampshire, United Kingdom, ⁹The Netherlands Cancer Institute, Dept. of Urology, Amsterdam, Netherlands, The, ¹⁰Lund University, Dept. of Translational Medicine, Malmö, Sweden, ¹¹University Medical Center Rotterdam, Dept. of Urology, Rotterdam, Netherlands, The, ¹²UC Davis Comprehensive Cancer Center, Dept. of Urology, Sacramento, United States of America, ¹³The Netherlands Cancer Institute, Dept. of Medical Oncology, Amsterdam, Netherlands, The

**461**

TGFβ1 promotes gemcitabine resistance through regulating the LncRNA-LET/NF90/miR-145 signaling axis in bladder cancer

By: Zhuang J.¹, Shen L.², Yang L.¹, Yan J.², Guo H.¹
¹Drum Tower Hospital, Medical School of Nanjing University, Dept. of Urology, Nanjing, China, ²State Key Laboratory of Pharmaceutical Biotechnology and MOE Key Laboratory of Model Animals for Disease Study, Model Animal Research Center, Dept. of Genetics, Nanjing, China

**462**

High-throughput drug screening using conditionally reprogrammed patient-derived cell lines in bladder cancer

By: Boström P.¹, Kettunen K.², Lamminen T.³, Heinosalo T.⁴, West G.², Poutanen
Targeting of BRD4 with JQ1, combined with mitomycin C as a novel combination therapy for non-muscle invasive bladder cancer


1University of Birmingham, School of Biosciences, Birmingham, United Kingdom, 2University of Birmingham, Institute of Cancer & Genomic Sciences, Birmingham, United Kingdom, 3University of Oxford, Structural Genomics Consortium, Oxford, United Kingdom

Oxygen generating manganese dioxide nanoparticles for enhanced photodynamic therapy to bladder cancer by ameliorating hypoxia

By: Lin T.
Nanjing Drum Tower Hospital, Dept. of Urology, Nanjing, China

Metformin augments panobinostat’s antineoplastic activity in bladder cancer cells by activating AMP-activated protein kinase

By: Okubo K., Sato A., Asano T., Isono M., Asano T.
National Defense Medical College, Dept. of Urology, Tokorozawa, Japan

Summary

M. Babjuk, Prague (CZ)