

lncRNA in the regulation of renal T-ICs remains unknown. lncARSR (lncRNA Activated in RCC with Sunitinib Resistance, ENST00000424980) was a newly identified lncRNA to promote the sunitinib resistance of RCC in our previous study. Accumulating evidence indicated that T-ICs surviving from drug therapy and giving rise to tumour regrowth might be a major culprit for therapeutic resistance. Indeed, the expression signature of stem cell or targets of Nanog, Oct4, Sox2 and c-Myc (NOSM) in human ESCs were significantly enriched in our mRNA profile of sunitinib-resistant RCC cells (GSE69535), prompting us to explore the role of lncARSR in renal T-ICs.

**Results:** In this study, we first find that lncARSR is highly expressed in primary renal T-ICs and predicts poor prognosis. Next, by using loss-of-function analysis in T-ICs and gain-of-function analysis in RCC cells, we demonstrate that lncARSR promotes the self-renewal capacity, tumorigenicity and metastasis of renal T-ICs. Further mechanism study reveals that lncARSR interacts with Yes-associated protein (YAP) to block its phosphorylation by LATS1, facilitating YAP nuclear translocation. Interestingly, we find that YAP in turn promotes the transcription of lncARSR, forming a feed-forward loop. Clinical investigation also confirms the correlation between lncARSR and YAP, and demonstrates the value of combining lncARSR and YAP to improve the prognostic accuracy for RCC patients.

**Conclusions:** Altogether, we discover that lncARSR promotes the expansion of renal T-ICs via interacting with YAP.

**Keywords:** Tumour initiating cells (T-ICs); renal cell carcinoma (RCC); Yes-associated protein; lncRNA

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## AB073. Clinicopathologic characteristics, therapy and outcomes of primary ureteral small cell carcinoma: a case series and systematic review of the literature

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**Background:** To review the experience of diagnosis and treatment of primary small cell carcinoma (SCC) in our institution and discuss the clinicopathologic characteristics, treatments and outcomes of patients with primary ureteral SCC.

**Methods:** Patients diagnosed with ureteral SCC in our institution from January, 2007 to December, 2016 were reviewed. In addition, we performed a systematic literature review in October 2016 on case reports and case series of ureteral SCC. The clinicopathologic characteristics, treatments and outcomes of this rare disease were analyzed.

**Results:** A total of 32 patients were included in our analysis (4 cases from our institution and 28 cases from the literature). Most patients (71.0%) were male with an average age of 66.6 years (range, 48–80 years). The most common symptoms were hematuria (n=14, 48.3%) and flank pain (n=14, 48.3%). All patients received surgery, with 12 (37.5%) patients underwent multimodality therapy. Regional or distant recurrence occurred in 11 patients, among which only 1 patient presented bladder recurrence. The overall median survival for the patients was 17 months, with a 1- and 3-year survival rates 51.9% and 30.3%, respectively. In a univariate analysis, female (P=0.009), pure SCC (P=0.03), advanced T stage (P=0.04) were associated with worse overall survival.

**Conclusions:** Ureteral SCCs are extremely rare neoplasms with aggressive natural history and poor prognosis. T stage, tumor components and gender may be important factors influencing prognosis. A multimodality treatment is recommended for the management. However, further studies are needed to improve the treatment strategy.

**Keywords:** Small cell; ureteral carcinoma; systematic review; neuroendocrine

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## AB074. Indications, techniques and outcomes for ileal ureter replacement: a multicenter experience in China

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**Background:** Ileal ureter replacement is a selective technique for ureteral reconstruction without being limited by the defect length. This study aim to present the techniques, experiences, and outcomes related to ileal ureter replacement among patients in a multicenter in China.

**Methods:** A multicenter retrospective study of patients with long ureteral defects who underwent ileal ureter replacement was conducted from January 2010 to January 2015. Patient characteristics, indications for surgery, intraoperative variables, surgical complications, and postoperative outcomes were reviewed. Follow-ups, including clinical evaluation, serum creatinine, electrolyte level, urine routine test, and radiographic examination were performed.

**Results:** A total of 23 patients in 7 tertiary care centers underwent ileal ureter replacement. Specifically, 20 underwent unilateral ileal ureter replacement, 2 received combined ileal-ureter substitution and Boari flap-psoas hitch, and 1 had bilateral ileal ureter replacement. The main indication for surgical intervention was presence of iatrogenic injuries (n=15), the majority of which resulted from a urologic surgical procedure (n=11). Median follow-

up time was 45 months. Six early complications (grade 2) and 6 late complications occurred postoperatively. Small bowel-related complication occurred in only 1 patient with incomplete ileus, which was resolved by conservative treatment. Renal function improved or remained stable in 22 patients (95.7%). Metabolic acidosis was detected in only 1 patient who underwent bilateral ureteral replacement.

**Conclusions:** Ileal ureter replacement remains feasible and safe for the treatment of long ureteral defects. Technical considerations described in the study may ease and reduce complications following the procedure.

**Keywords:** Ileum; reconstructive surgical procedures; iatrogenic injury; ureter

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## AB075. The application of internal suspension technique in retroperitoneal laparoscopic partial nephrectomy for renal ventral tumors

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**Background:** To evaluate the feasibility of our novel technique using natural suspension technique in retroperitoneal laparoscopic partial nephrectomy for the management of renal ventral tumors.

**Methods:** Between January 2013 and July 2016, a total of 145 patients underwent retroperitoneal laparoscopic partial nephrectomy with or without our natural suspension technique. For patients underwent natural suspension technique, surgeons preserved the external fat of the renal