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Contribution ID: 3

Type: Pillar 1: Therapeutic Innovations

Pre-clinical therapeutic target identification for renal and bladder cancers

Monday 7 July 2025 13:10 (15 minutes)

Clear cell renal cell carcinomas (ccRCC) are partly responsive to immune checkpoint inhibitor therapies that are based on inhibition of PD-1 and CTLA-4. We have described an autochthonous mouse model of ccRCC that is resistant to immune checkpoint inhibitor therapies and have identified numerous candidate immunosuppressive molecular pathways in ccRCC cells and in infiltrating myeloid lineage cells. Our ongoing work aims to systematically inhibit these pathways to identify the most promising approaches of improving anti-tumour immunity to guide the development of the next generation of immune-based ccRCC therapies.

Bladder urothelial carcinomas are characterised by recurrent mutations in several epigenetic tumour suppressor genes, highlighting that altered cellular epigenetics is a fundamental driver of these tumours. The UcarE Forschungsgruppe seeks to exploit epigenetic vulnerabilities of urothelial carcinomas though pharmacological and genetic screenings, genetic engineering of mouse and human cellular models and through pre-clinical testing of epigenetic drugs using human organoid and slice culture systems.

Preferred type of presentation

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