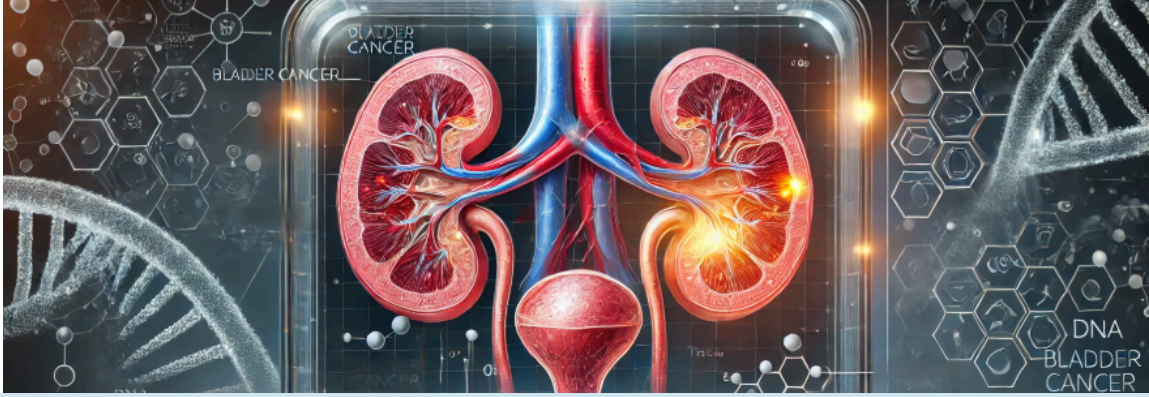
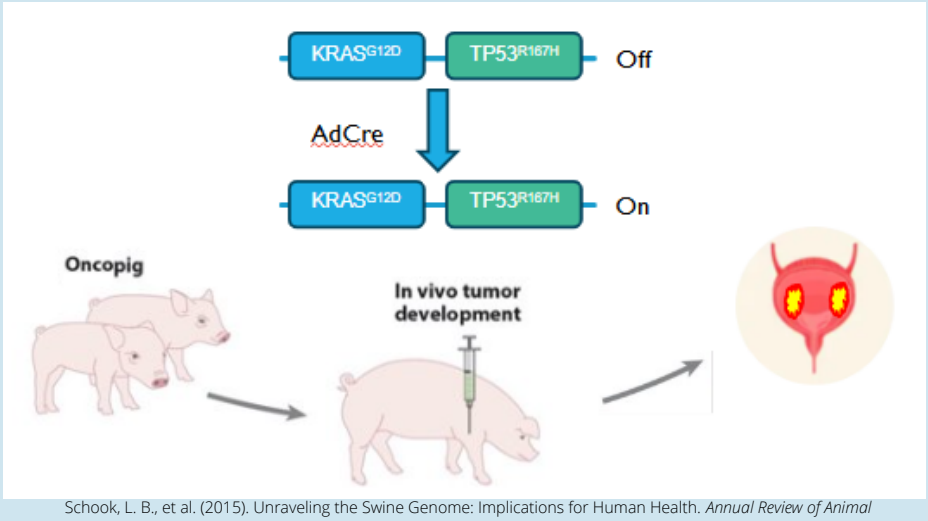
Sus Clinicals

Oncopig® Bladder Cancer Model



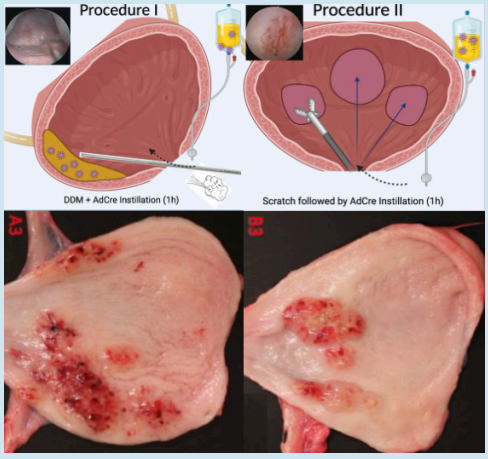
Oncopig®: A Preclinical Model for Cancer Research

- **The Oncopig® :** A transgenic model that enables precise induction of diverse tumor types in specific tissues or cell types at targeted times.
- Tumors expresses KRAS G12D and TP53 R167H driver mutations, with additional tumor customization possible through CRISPR-based mutation editing.
- **Human-Like Characteristics:** Tumors have remarkably comparable size, anatomy, histology and drug metabolism
- **Comorbidity Models:** Ability to include clinically relevant comorbidities like alcohol induced liver cirrhosis.



Schook, L. B., et al. (2015). Unraveling the Swine Genome: Implications for Human Health. *Annual Review of Animal Biosciences*, 3, 219–244. https://doi.org/10.1146/annurev-animal-022114-110815

100% of Oncopigs with Tumor Formation

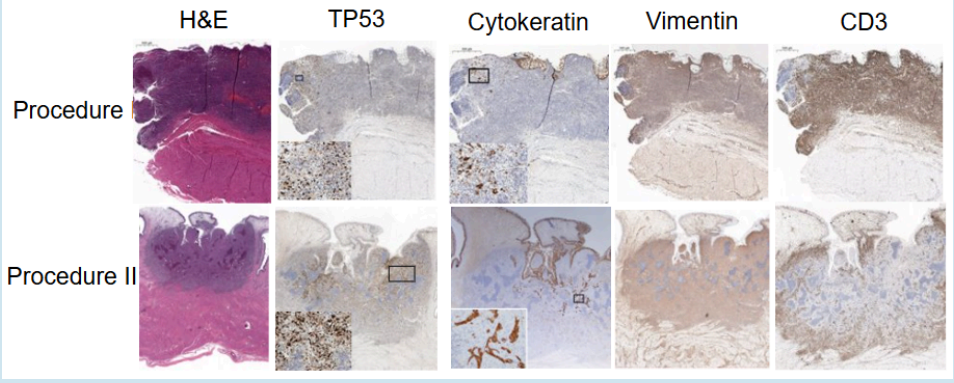


Oncopig® Bladder Tumor Induction

- **On-Demand Tumor Generation:**
  - Cytoscope-guided instillation of AdCre and DDM into the bladder.
  - Cytoscope-guided superficial denucing of the bladder urothelium and subsequent AdCre installation into the bladder.
- **Tumor Formation:** Multifocal tumors form in 67% of pigs and reach a size of 0.2 - 2 cm within 2 week.
- **Muscle Invasion:** 71% of procedure I tumors are non-invasive (<pT2), while 100% of procedure II tumors are muscle-invasive (pT2).

Neoplastic Tumor Masses With Non-Specific Histology

- Tumors resemble human urothelial bladder cancer with sarcomatoid variant.
- Tumors are accompanied by inflammation including CD3+ T cell infiltration.
- Presence of epithelial (cytokeratin) and mesenchymal (vimentin) differentiation.



Reach out for more information!
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