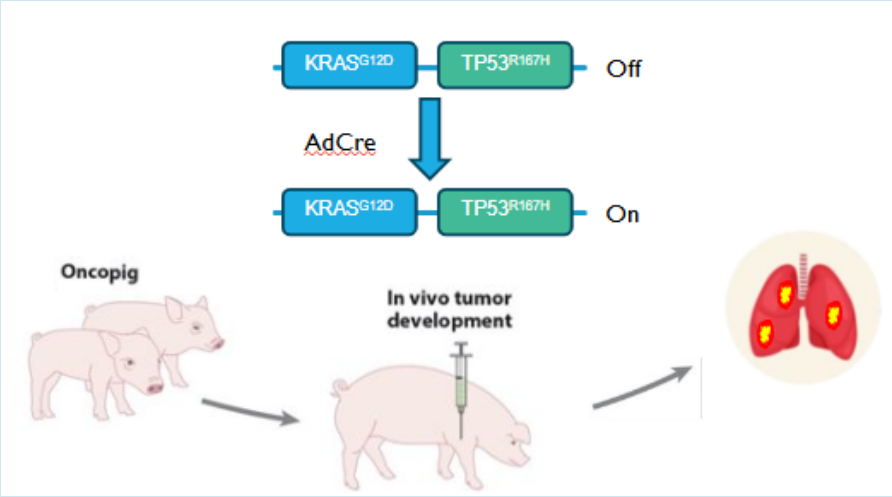
Sus Clinicals

Oncopig® Lung Cancer Model

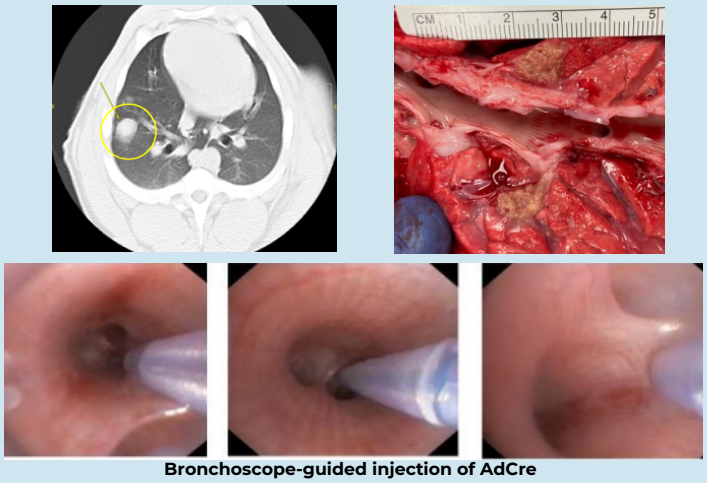
The Oncopig®: A Preclinical Model for Cancer Research

- **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



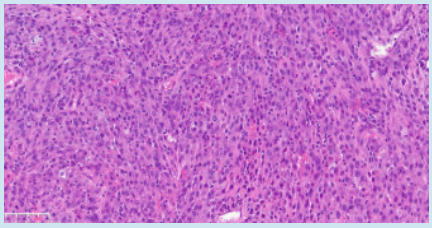
Bronchoscope-guided injection of AdCre

Oncopig® Lung Tumor Induction

- **On-Demand Tumor Generation:** Bronchoscope-guided AdCre into the lung parenchyma results in neoplastic tumors at defined locations within the lung.
- **Tumor Formation:** Tumors form at 85% of injection sites and reach a size of 0.5 - 4 cm within 2 weeks.
- **Imaging Capabilities:** Tumors are targetable using CT , MRI, and angiography.

Neoplastic Tumor Masses With Non-Specific Histology

- Neoplastic cells exhibit a polygonal morphology forming large sheets.
- KRAS G12D staining confirms transgene expression consistent with malignancy.
- Tumors are accompanied by a major inflammatory component.



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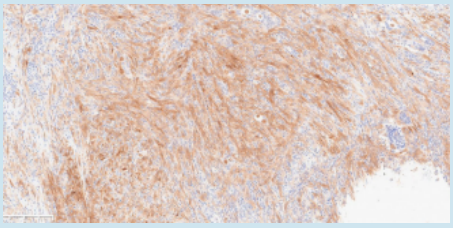

KRAS G12D

Reach out for more information!
info@susclinicals.com

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