

Oncology

Combining classic and cutting-edge
in vitro and *in vivo* research

Animal models play an important role in helping us understand tumor biology. In preclinical oncology, animal models simplify the discovery and validation of drug targets and biomarkers.

Utilizing the most effective tools to identify promising compounds, we work with our partners to design the study by selecting from a wide range of well-characterized xenograft, patient-derived xenograft (PDX), and syngeneic tumor models. Our experience covers subcutaneous and orthotopic models, as well as testing a range of therapeutics from small and large molecules, biologics, cell therapies, oncolytic viruses, to cancer vaccines. Each of our models are supported by a range of translational tools, including biomarker, *in vitro/ex vivo* assays, and *in silico* modeling, to optimize lead candidates.

Available Oncology Models

- Syngeneic models
- Orthotopic models
- Metastatic cancer models
- Immuno-oncology pharmacodynamic models
- Xenograft models
- Humanized mice
- Patient-derived xenografts (PDX)
- Genetically engineered mouse models (GEMMs)

Service Highlights



Delivering therapeutics to animal models via different administration routes



Monitoring and analyzing tumor development including weekly body weight measurements, tumor burden scoring and general health status monitoring



In vivo optical bioluminescent and fluorescent imaging







Completing necropsy and collecting tissues for histology, as well as performing biochemical analysis

Further Capabilities

- ▶ Magnetic cell enrichment
- ▶ High-throughput screening
- ▶ High-content imaging
- ▶ Flow cytometry
- ▶ Confocal microscopy
- ▶ *In vitro/In vivo* irradiator
- ▶ Histopathology
- ▶ Bioanalytical services

Advantages

-  Experienced scientific team with a strong background in cancer biology
-  First-class drug development expertise and advanced laboratory equipment
-  Combination of classic and cutting-edge cancer research models and platforms
-  Integrated drug discovery solutions with medicinal chemistry, DMPK, and formulation development
-  Flexible approach to collaborate with your team