CROWN BIOSCIENCE

Organoids for Preclinical Oncology Drug Development and Validation

A JSR Life Sciences Company

FACTSHEET

Using HUB Tumor Organoids for Oncology Drug Development

Work with our team of experts to learn about our custom service offerings, including access to models and equipment not available at other facilities

- Assay Ready Screening: Fast-track your oncology drug candidate development with **Organoid**Xplore™, our recurring screening platform, designed for in-depth exploration through comprehensive organoid panel assessments.
- Simultaneously select lead candidates and identify target patient populations in a matrix high throughput screen
- Quantitatively evaluate compound efficacy across multiple models and indications, recapitulating patient population heterogeneity
- Rapidly test agent efficacy and off-target effects by running patient tumor and healthy tissue-derived organoids concurrently
- Large scale screens: Evaluate efficacy and test multiple drug combination strategies simultaneously
- Evaluate anticancer agent activity on a range of models across various patient ethnicities, different disease stages, as well as on primary tumor derived and metastatic models
- Make better informed decisions when transitioning from *in vitro* screening to *in vivo* validation with matched organoids and PDX models offering a range of patient-relevant mutational and pharmacological profiles
- Assess immunotherapies using the only *in vitro* I/O platform harnessing clinically-relevant organoid models in co-culture with TME components
- Evaluate resistance mechanisms and track drug response in real time with engineered organoids expressing rare human mutations, or bioluminescent or fluorescent probes
- Screen organoid panels in traditional viability assays or leverage our high content imaging capabilities to visualize drug effects across 500 morphological and phenotypic data points

Select your organoid screening panel using OrganoidBase, our online database collating model characterization data including:

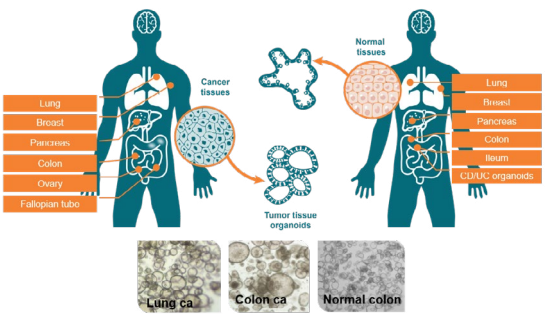
- PDXO patient information, light microscopy, histopathology, genomic (RNAseq and WES), and treatment response data
- PDO gene expression levels (RNAseq) and annotated somatic mutations (WES/WGS)

The Only Tumor Organoid Platform Available for Oncology Drug Discovery

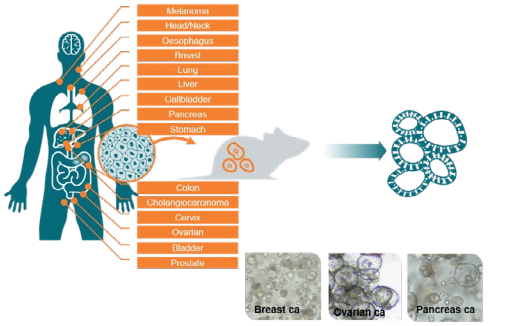
A partnership that combines breakthrough organoid technology with the world's largest PDX collection to create a unique patient-derived translational research platform

Crown Bioscience holds an exclusive license to provide preclinical oncology drug development and validation services using HUB Organoid Technology, including access to HUB's highly characterized tumor organoid biobank.

Patient-derived organoids (PDO)



PDX-derived organoids (PDXO)

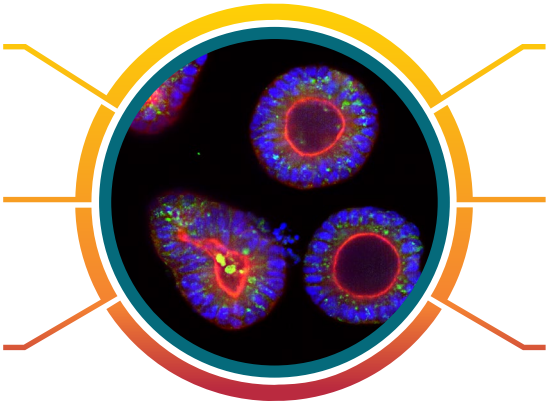


Organoid Applications in Drug Discovery

Explore the Efficacy of Novel Compounds (e.g. ADCs, oncolytic viruses) in Physiologically Suitable Context

Assess Drug Response in an Immune-relevant Setup

Investigate Off-target Effects with Paired Normal-tumor Models



Revolutionize Drug Discovery Workflow: From Target Validation to Clinical Trials

Evaluate New Combination Therapies

Identify Predictive Biomarkers

Organoid Platform Highlights

- Exclusive license from HUB
- Industry leader in breadth of well characterized models in biobank with a comprehensive organoid database
- Matched organoids and *in vivo* PDX models for ease of transition from *in vitro* to *in vivo* with more relevant models
- Flexibility in study design including normal vs disease matched pairs, extensive co-culture options and assay readouts
- Made-to-order studies based on your specific research needs
- Genetic engineering: Use of RNAi and CRISPR/Cas for target identification and biomarker discovery
- Advanced Imaging: Enhanced 3D imaging to study cell dynamics and drug responses
- Capabilities for combined drug-radiation testing.

Get in touch

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