

FDA IS PROMOTING NON-ANIMAL MODELS FOR SUBMISSIONS !!!

PATIENT DERIVED
ORGANOIDS ARE
EXCELLENT CHOICE...

OrgCan - Patient Derived Cancer Organoids Panels from **Biodimension**

Revolutionizing Cancer Drug Discovery: Patient-Specific Insights for Targeted Therapies

In the fight against cancer, one size rarely fits all. OrgCan, Biodimension's cutting-edge platform, empowers you with patient-derived cancer organoids (PDCOs), offering a powerful and translational in vitro system for truly personalized drug development



Patient Derived Organoids for better Clinical Relevance

Harness the Power of OrgCan:

▲ Unparalleled Patient Relevance:

OrgCan organoids are directly derived from patient tumor biopsies, faithfully preserving the unique genetic, genomic, and phenotypic characteristics of the original cancer.

→ Predictive Preclinical Models:

Screen drug candidates in a system that mirrors individual patient tumor biology, leading to more accurate predictions of clinical response and reduced attrition rates.

→ Accelerate Drug Discovery:

Streamline your preclinical pipeline by identifying promising drug candidates and understanding resistance mechanisms in a patient-specific context.

Personalized Medicine Strategies:

Develop and validate targeted therapies tailored to the specific molecular profile of individual patient tumors.

Study Tumor Heterogeneity:

Investigate the diverse cellular populations within a single tumor and their differential responses to treatment.

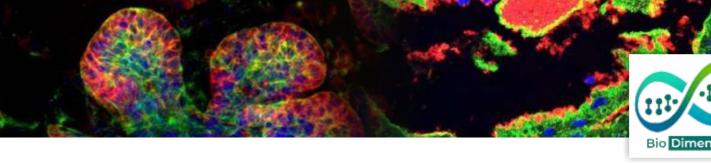
A Explore Novel Biomarkers:

dentify predictive and prognostic biomarkers associated with drug sensitivity and resistance in patient-relevant models.

Customizable Solutions:

Biodimension offers flexible services, from organoid generation and expansion to customized drug screening assays and multiomics analysis.

We Create Cancer Panel for you and any type of Cancer Organoids can be developed with Orgcan

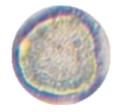


Breast Cancer Spheroids

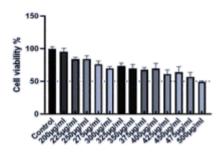
Breast cancer, with its diverse presentations and intricate pathways, has long challenged researchers seeking effective therapies. Traditional models, while valuable, often fall short of capturing the full tumor microenvironment and intricate interactions responsible for its aggressiveness.

Organoids faithfully recapitulate the architecture and genetic diversity of human breast cancers. These living models, meticulously crafted from patient tissues, hold the key to unlocking new avenues for drug development. No longer confined to simplified cell cultures or animal models, researchers can now study drug response in an environment that closely mirrors the complexities of actual human tumors.





Horizontal view for 7 days Breast Cancer Spheroids

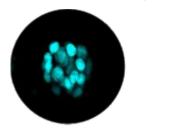


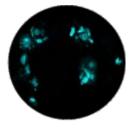
Tamoxifen treatment with the organoids at varied concentration

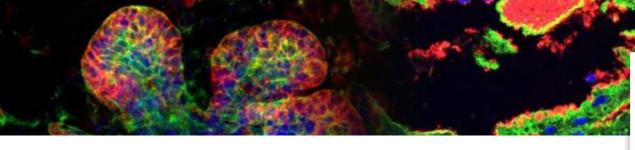
SEM images of spheroids (dose dependent changes)

Control 300 ug/ml 500 ug/ml

Fluorescent labelled - Organoid treated with 500µg/ml









Why Choose OrgCan?

True Patient Fidelity:

Our robust protocols ensure high fidelity between patient tumors and the derived organoids.

Comprehensive Characterization:

We offer comprehensive molecular and histological characterization of OrgCan models.

Scalable and Reproducible:

Our platform enables the generation of sufficient organoid material for robust and reproducible drug screening.

Expert Scientific Support:

Benefit from the expertise of Biodimension's experienced team in organoid biology, drug screening, and data analysis.

Integrated Solutions:

Seamlessly integrate OrgCan with our BioD reconstructed human tissue platform for even more complex and translational studies (see our BioDOrg integrated solution)

MODELS WE ARE BUILDING

Breast Cancer Panel:

We are developing a panel of 15 patient derived organoids for tumor heterogeneity & consistent models throughout your research journey.

Liver Organoids:

Focused for better clinical relevance with panels of PDOs







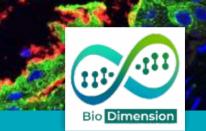
Cells Isolation from Patients



Organoids Formation



Library of Organoids for Drug Screening





- ▲ **High-throughput screening (HTS) of large compound libraries:** Identifying novel drug candidates with anti-cancer activity.
- Assessing drug toxicity and off-target effects:

 Examining the impact of drugs on cancer cells within the organoid model.
- ▲ Identifying predictive biomarkers: Correlating organoid drug response with the patient's genomic, transcriptomic, or proteomic profiles to discover markers of sensitivity or resistance.
- ▲ Studying the tumor microenvironment (TME):
 Co-culturing organoids with immune cells, fibroblasts, and endothelial cells to investigate their interactions and impact on drug response



For more product inquires: Customer.Support@NanoGenHealthCare.com



www.NanoGenHealthCare.com

Biodimension Technology Private Limited

- Plot no.63, KIADB Industrial Area, Bommasandra Jigani Road, Bangalore - 562104
- +91-8973530955
- (t) info@biodimension.in
- www.biodimension.in