

# The good decision early thanks to 3D testing

## The closest to an *ex-vivo* patient derived tumoroid model

### The new tool for the best decision making

Pearl BioSystem is a pioneer in compound validation assay development

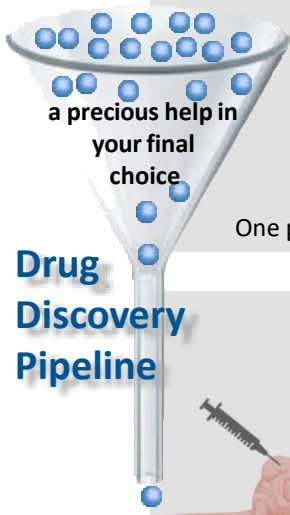
Reliable assessment of candidate molecules is key for the healthcare industry, as it's crucial for proper decision-making throughout the research process.

To address these preclinical research needs, Pearl BioSystem has developed a new spheroid model analysis, providing researchers with tailor-made assays.

## TECHNOLOGY

### High Content Screening Workflow

#### Pearl BioSystem



3D cultures equivalent to IP animal models  
=> NO animals harmed

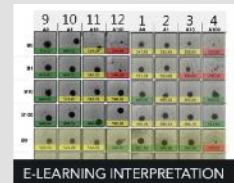
One pearl is equivalent to one mouse



Human cancerous organoids  
+ co-cultures with activated immune cells



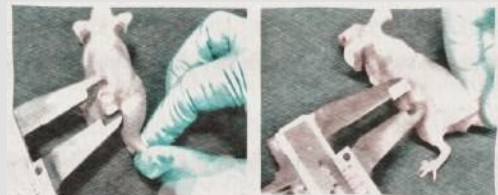
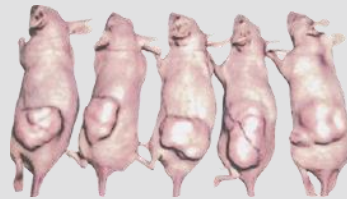
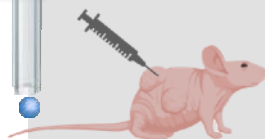
Dedicated device for daily readout of drug efficacy, checked by growth inhibition  
- staining optional -



E-learning Software for straightforward data interpretation

#### Standard Xenograft Mouse Method

Time and money consuming



14 DAYS

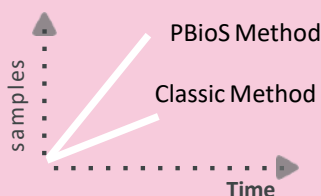
### Pearl BioSystem Benefits

#### Clearer Decision Making

- Faster
- Cheaper
- Easy EC<sub>50</sub>
- No animal harmed

Pearl BioSystem methodology

Reduced delays and cost



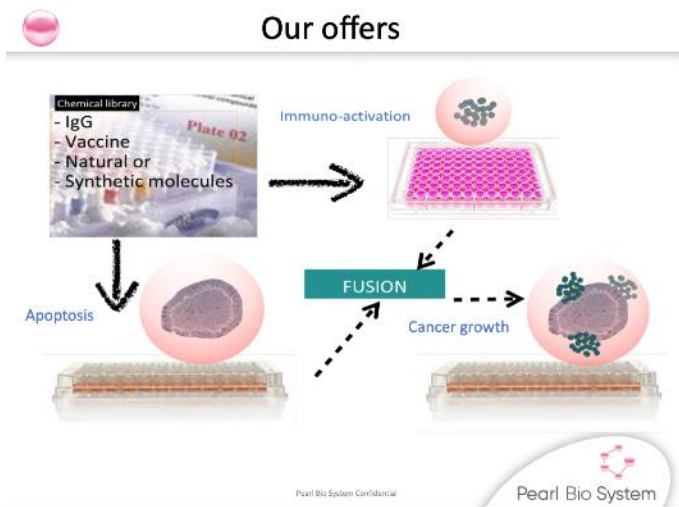
#### Easy-to-use solution

 Custom assays

 To suit your R&D process

# Pearl BioSystem's Catalog

Early access program: sample testing available in our oncology program  
breast – prostate – pancreatic – colorectal



## Sample Testing on our Prototyping & Validated Assay:

Pearl BioSystem R&D has already developed some assays directly accessible to our customer to evaluate rapidly the added value of the pearl's technology.

## Human cancerous cell lines :

Mammary MCF-7, (ATCC® HTB-22),  
Pancreatic AsPC-1 (ATCC® CRL-1682)  
Pancreatic BxPC-3 (ATCC® CRL-1687)  
Colon SW-620 (ATCC® CCL-227™)  
Testicular NT2/D1 (ATCC® CRL-1973)  
Monocytic leukemia cell line THP-1 (ATCC® TIB-202)

## Human control cell line

Fibroblasts BJ (ATCC® CRL-2522)

If your disease program is not accessible,  
Services - custom assay development program

## PHASE 1: custom assay development

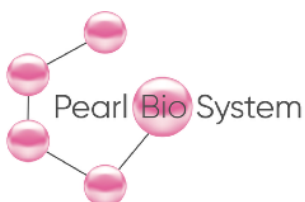
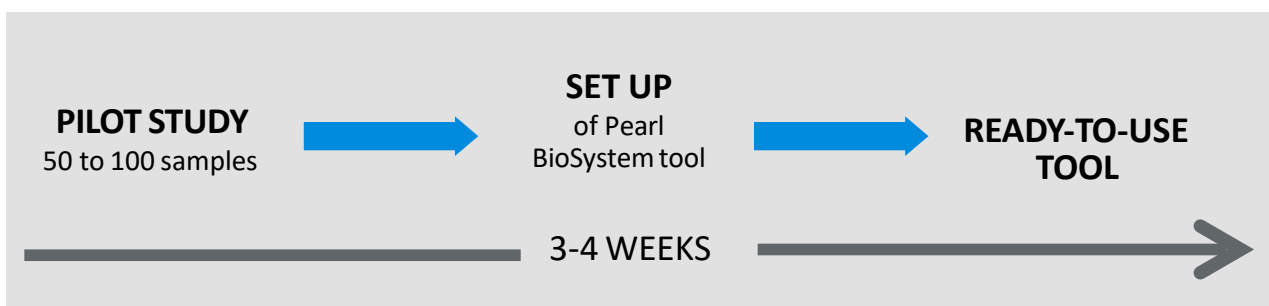
Develop the Pearl BioSystem assay to a specific phenotype.

It will give a proprietary Design Of Experiment (DOE) cost (DMSO / Pearls concentration / Molecule concentration...) that could be used to do sample testing.

PHASE 2: sample testing, Pearl BioSystem will offer to carry out molecule evaluations on the specific DOE assay developed in the first phase.

Sample testing: choose number of molecules investigated in order to receive a specific quote and to continue to evaluate your drugs in a secured way.

## Creation of a proprietary tailor-made assay



Pearl BioSystem technology:  
a boost for your preclinical assays