



## Coming soon: Breast cancer organoid lines

Breast cancer is one of the most common types of cancer. Cellesce has invented and patented a unique bioprocess for the expansion of human-derived, cancer organoids for applications in cancer drug discovery and in collaboration with Cardiff University, is finalising the development of a range of breast cancer organoid lines. These will be available off-the-shelf towards the end of 2020.

Cellesce's organoid expansion technologies minimise manual handling time and maximise reproducibility, to position organoid technology as a cost-effective and accurate tool in early-stage drug discovery.

A number of new and unique breast cancer organoid lines representing the key molecular subtypes of breast cancer have been established from primary patient biopsies or from Patient-Derived Xenograft (PDX) tissue.

The organoid lines have never been cultured in 2D adherent conditions, and faithfully represent the tumour from which they were derived.

Breast cancer organoids expanded at scale by Cellesce have been shown in pilot studies to generate more reproducible data than their manually grown counterparts, while maintaining the phenotype and genotype of the starting tissue.

### Features:

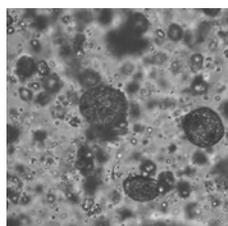
#### **Well characterised:**

- Mutation profiling (WES)
- Immunohistochemistry: ER, PR, Her2, p53, CK14, CK18
- Paraffin-embedded sections also available for purchase from each line
- In-house validation against a number of known SOC and targeted agents
- Mycoplasma free
- HIV-1, HIV-2, HBV, CMV, EBV, HPV free

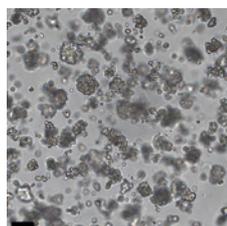
#### **Easy to use format:**

- Organoids provided frozen in cryovials ready for seeding into assays
- Media conditions established
- Large scale batches enable maximum consistency and reproducibility
- Full protocols for use provided
- Technical support available.

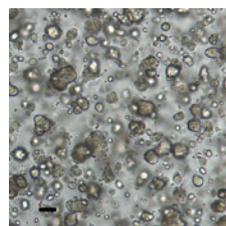
*A range of breast cancer subtypes and TNM stages, including ER+, Her2+ and triple negative*



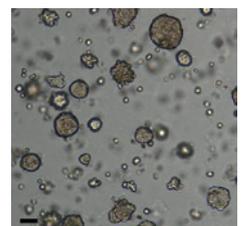
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*Donor 2*



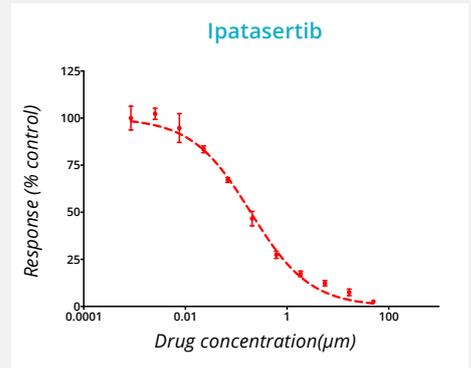
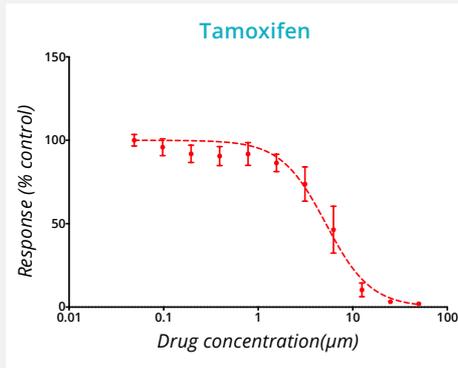
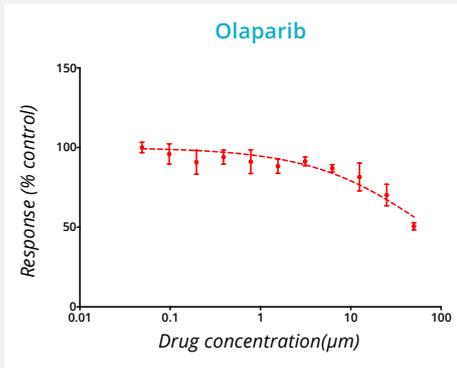
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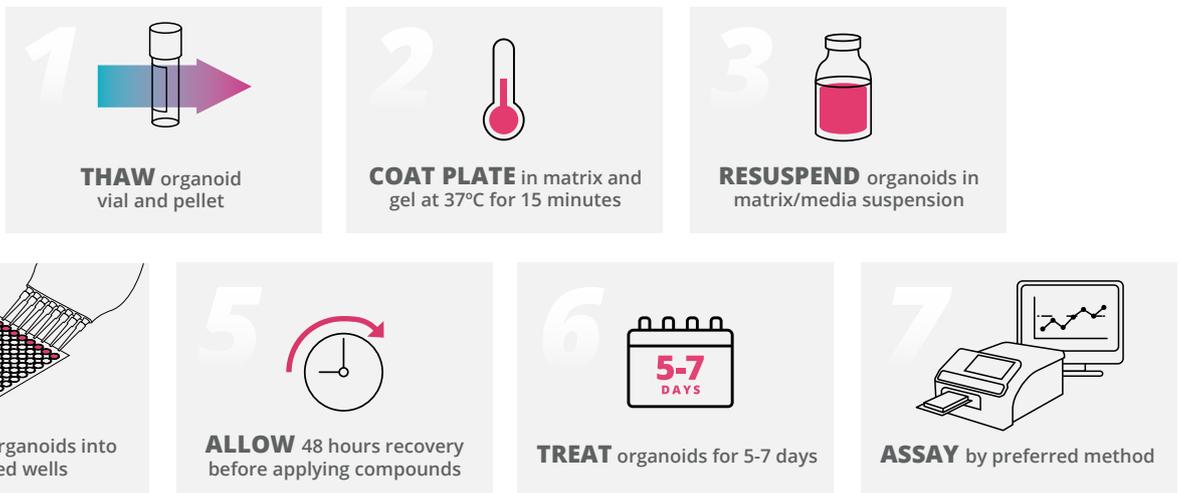
*"The availability of breast cancer organoids will enable a step change in cancer drug discovery workflows."*

Professor Trevor Dale, Cardiff University



Bioreactor expanded organoids can be thawed and seeded directly into assays. Organoids demonstrate varied responses to known breast cancer therapeutics.

**Organoid drug assay workflow:**



Please contact us to find out more by emailing [info@cellesce.com](mailto:info@cellesce.com) or by visiting our website at [www.cellesce.com](http://www.cellesce.com)

The project to establish a range of breast cancer organoid lines was co-funded by Innovate UK.

