

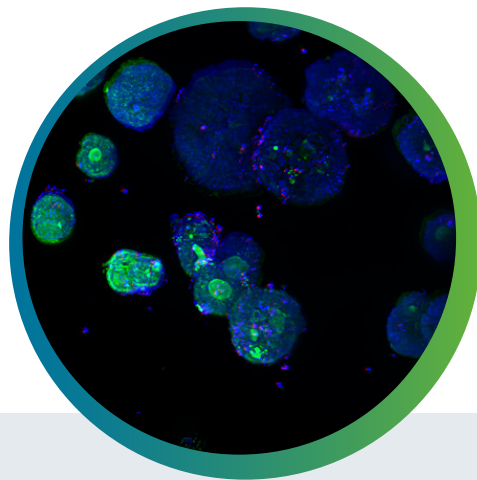
## 3D Ready Organoid Expansion Service

Molecular Devices has global leadership in the scale-up and industrial manufacture of human-derived 3D organoids using our proprietary bioprocess. Organoids offer significant benefits over 2D monolayer cultures as a research platform, as they can recapitulate the architecture, physiology, and underlying genetic signature of primary tissues.

Organoids can model complex *in vivo* processes *in vitro*. Using human materials, such as Patient Derived Organoids (PDOs), earlier in research and development provides biotech and pharma with patient-centric models that give more applicable results, potentially enabling a reduction in the use of animals and animal tissues.

**Molecular Devices offers a unique, bespoke service for the scale-up of your own organoid lines using our patented bioprocess.**

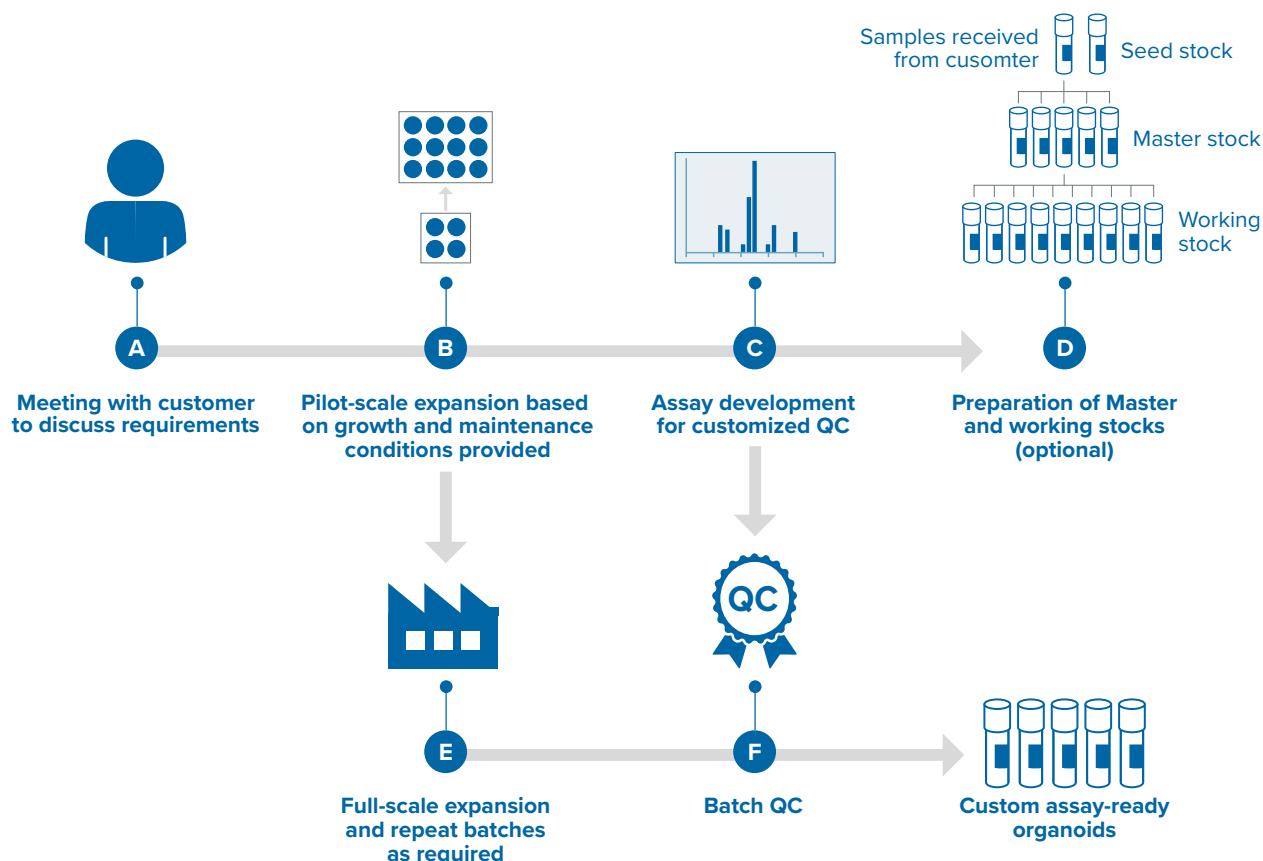
Our service can produce over six million organoids per batch. Such large batches can enable hundreds to thousands of drug candidates to be screened or increase the statistical power of an assay. The bioprocess-grown organoids are supplied back to you as customized assay-ready vials which can be thawed and used as you require them.



### What we can do

- Expand organoids at scale using our patented bioprocess technology
- Custom vialling
- Prepare Master and Working stocks
- Provide replicate batches
- Perform a storage and stability study
- Optimise and perform custom QC including:
  - Sizing
  - Cell line authentication (STR analysis)
  - Sterility and pathogen testing
  - Post-thaw recovery
  - Validation of drug/tool compound responses
  - WES/RNA sequencing

Our semi-automated bioprocess minimises handling and reduces operator variability. This enables us to produce consistent and reproducible batches of homogeneous organoids.



**Figure 1: 3D Ready organoid expansion workflow.** (A) Molecular Devices Development Scientists meet with the client to discuss their project-specific requirements. (B) Assessment of customer lines, bioprocess optimisation and pilot-scale expansion. (C) Assay development for bespoke QC (D) Preparation of Master and Working stocks (E) Full-scale expansion and custom vialling. (F) Batch QC testing and validation.

Molecular Devices technology is at the forefront of the implementation of 3D organoid models. We facilitate the provision of patient-derived organoids at scale for pharmaceutical companies, contract research organizations, and academic institutions. We specialise in applications such as drug discovery, that require large quantities of high-quality, standardized organoids in reproducible batches.



If you are interested in talking to one of our development scientists about a particular custom project that you have in mind, we would be happy to discuss this with you. Please contact us using the email address or the phone number below.

#### Contact Us

Phone: +1.800.635.5577  
 Web: [www.moleculardevices.com](http://www.moleculardevices.com)  
 Email: [info@moldev.com](mailto:info@moldev.com)  
 Check our website for a current listing of worldwide distributors.

#### Regional Offices

USA and Canada	+1.800.635.5577	Taiwan/Hong Kong	+886.2.2656.7585
United Kingdom	+44.118.944.8000	Japan	+81.3.6362.9109
Europe*	00800.665.32860	South Korea	+82.2.3471.9531
China	+86.4008203586	India	+91.73.8661.1198

\*Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, Switzerland and United Kingdom