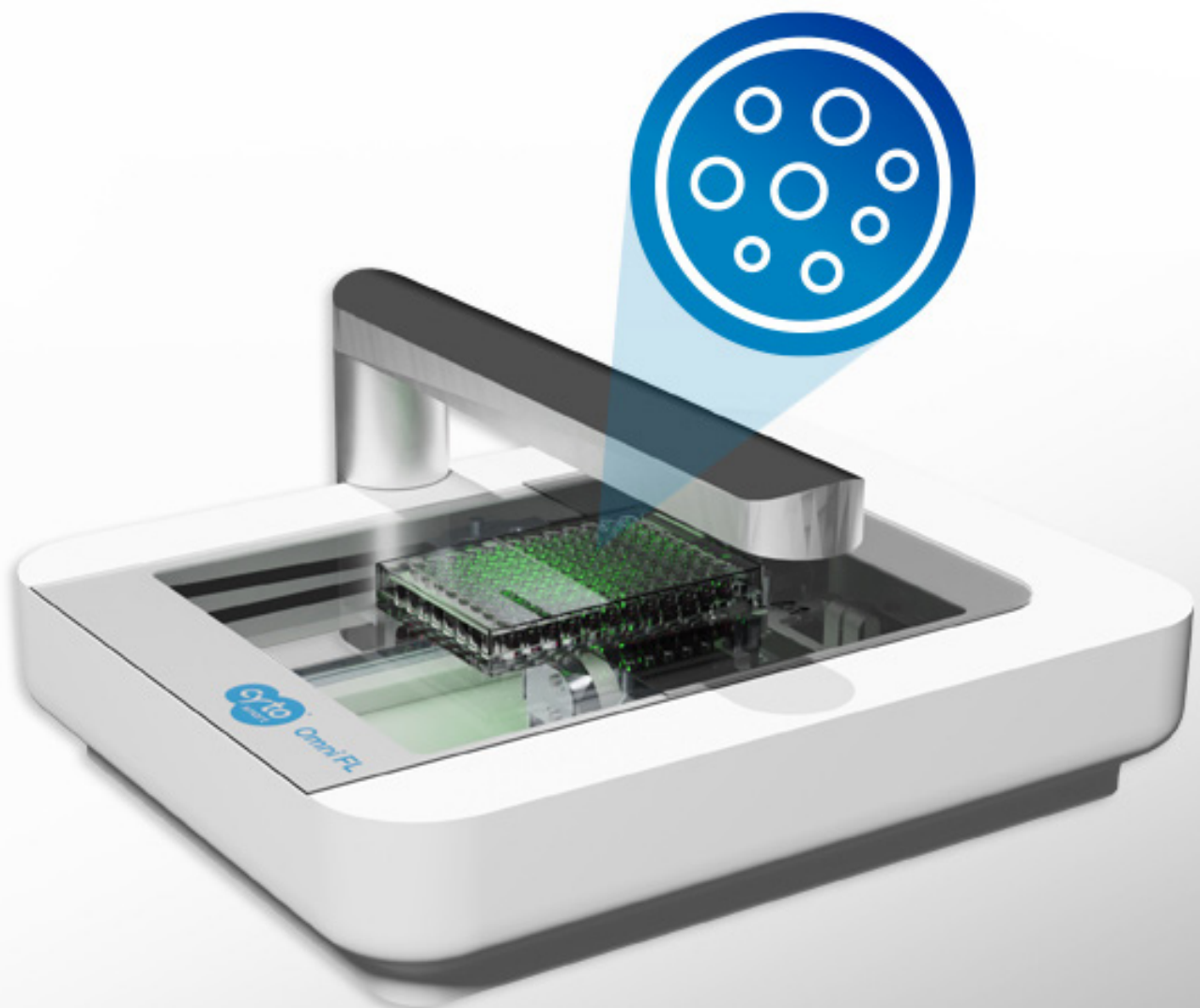




AN AXION BIO COMPANY

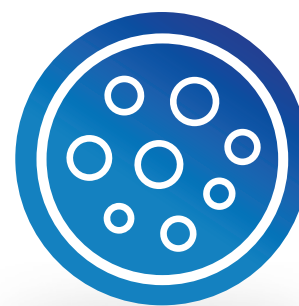
Organoid Analysis Module

Robust organoid quantification and monitoring



Organoid Analysis Module

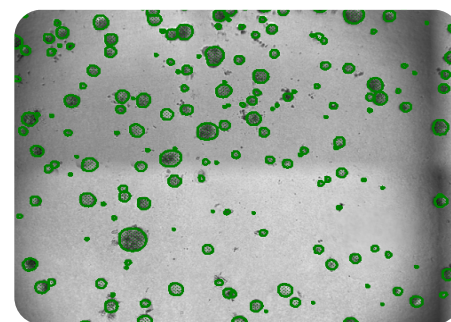
Robust organoid quantification and monitoring



Complex models don't have to mean complex analysis. Organoids represent an exciting avenue for disease research and discovery, bridging the gap between traditional 2D cell cultures and animal models.

The Organoid Analysis Module for the **CytoSMART Omni** adds advanced organoid detection and quantification to the versatile imaging platform.

Advanced machine-learning algorithms *take out the guesswork*

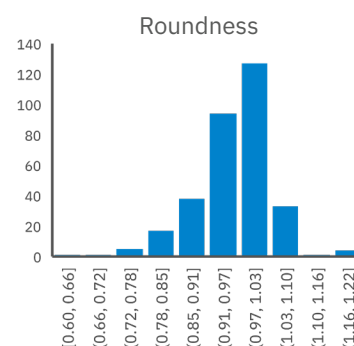
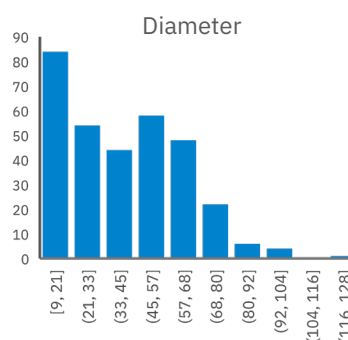


Quickly identify organoids, compare conditions, create population distributions, and chart development over time.

Measure:

- Number
- Size
- Shape

	Mean±SD
<i>Number</i>	321
<i>Diameter</i>	1626±1619 μm
<i>Area</i>	40±22 μm^2
<i>Roundness</i>	0.96±.08
<i>Circularity</i>	0.88±.02



A better model starts with *a better platform*

- Track long-term development, label-free
- Analyze undisturbed biology from within the incubator
- Evaluate organoids in any type of culture vessel, from flasks to microwell plates

[Learn more](#)



Case study: [tracking organoid growth](#) *in a Matrigel dome*

Organoids are cultured in environments that allow for 3D expansion and self-organization of their cells. A Matrigel dome is a common technique but monitoring growth and development can be difficult.

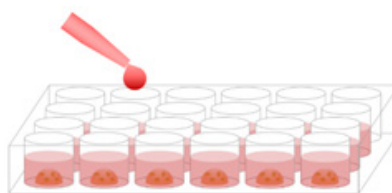
In this experiment, organoids were seeded in Matrigel domes in a 24-well plate. They were cultured in different conditions to monitor organoid growth. Over 140 hours, hourly high-resolution, whole-well scans were made in the incubator with the **CytoSMART Omni**. The images were analyzed using the Organoid Analysis Module.

Experiment setup



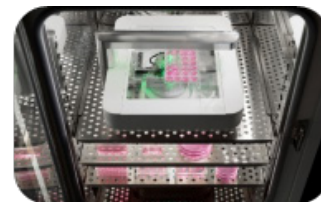
1

Seed organoids in Matrigel



2

Add test conditions

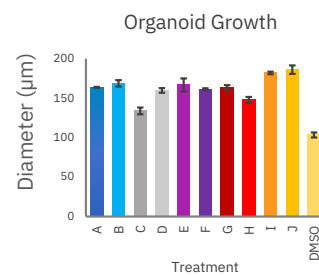
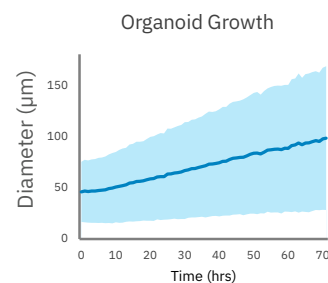
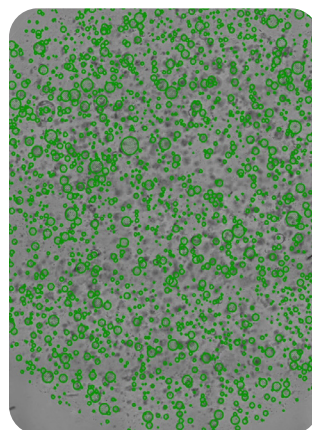


3

Automatically acquire images

Results

The Organoid Analysis Module simultaneously tracked hundreds of organoids and plotted average size for the duration of the experiment. Each condition tested **increased organoid diameter** relative to the DMSO control with condition J and C showing the largest and smallest increases, respectively.



Accelerate your organoid research *and see more*

The Organoid Analysis Module for the CytoSMART Omni can identify, track, and analyze large numbers of organoids across an array of culture vessels with advanced machine-learning algorithms for faster, more accurate results. With the latest in live-cell imaging technology, **take your research further.**

Learn more:

cytosmart.com/products/organoid-analysis-module

Contact us:

cytosmart.com/contact

Office locations:

North America & Europe

For pricing and ordering:

sales@cytosmart.com or scan the QR code



AN AXION BIO COMPANY

For research use only. Not for use in diagnostic procedures.
This information is subject to change without notice. © CytoSMART, 2022.