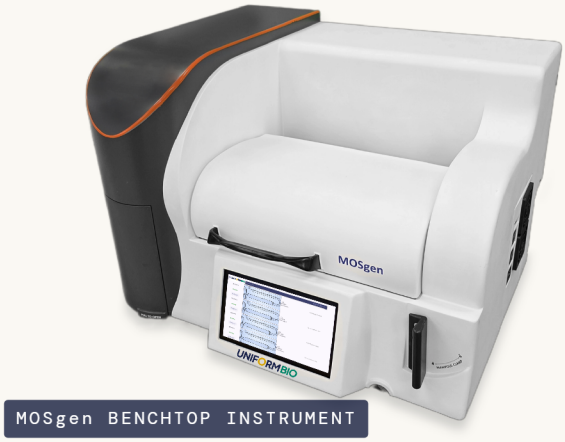
3D biology with a 2D workflow.

3D models capture human biology that 2D misses — but building them by hand is slow, variable, and impossible to screen at scale. So most labs stay on 2D, or wait months for a service.

MOSgen fixes that. It produces MicroOrganoSpheres (MOS): uniform matrix droplets that each grow a 3D model, made on a benchtop instrument at screening scale. You get patient-relevant 3D biology that runs in the plates, liquid handlers, and readers you already own.

SCALE — STANDARDIZED — SIMPLE



MOSgen BENCHTOP INSTRUMENT

70k models / lane

Over eighteen 384-well plates, per run. 1-4 lanes, 15 minutes end-to-end.

< 3 % CV diameter

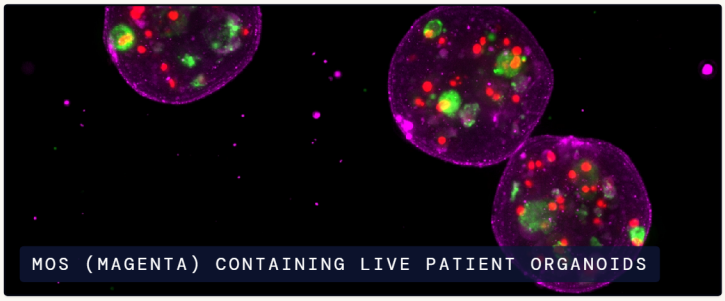
Uniform droplet to droplet, so dose-response is reproducible enough to screen on.

Drop-in workflow

Compatible with your existing workflows. MOS pipette like a liquid, simply dropping into your existing 96/384/1536 plates.

What are MOS®?

Each MOS (MicroOrganoSphere) is a **miniaturized 3D culture**: a matrix droplet that grows a 3D model from as few as 1 up to 400 cells, so you can tailor single-cell or population-level studies. Permeable to stains, antibodies, and T-cells, with a high surface-to-volume ratio that prevents necrotic cores.

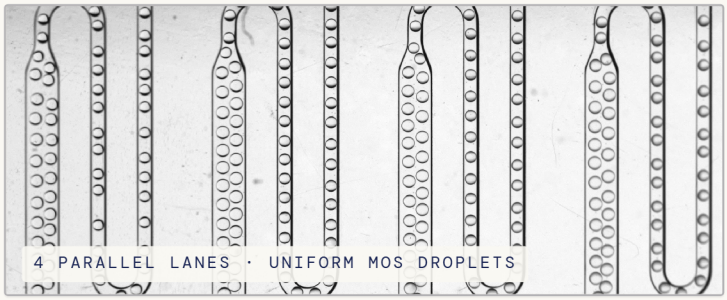

MOS (MAGENTA) CONTAINING LIVE PATIENT ORGANOIDS

Test any modality.

Small molecules, **antibody-drug conjugates (ADCs)**, **T-cell engagers (TCEs)**, cell therapies (**TILs, CAR-T**), and other advanced therapeutics — with co-cultured or **endogenous immune cells from primary tissue**.

What is MOSgen™?

MOSgen makes **3D screening affordable and flexible**: **under $1 per well**, on virtually any cell type and matrix you work with. The **automated benchtop engine** holds < 3% CV across 4 parallel lanes, with single-use consumables and zero dead volume. Generate **rapid 3D cultures** from iPSC-derived organoids, clonal cell lines, patient-derived organoids, and primary tissues.

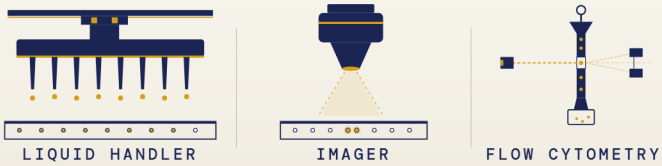

4 PARALLEL LANES · UNIFORM MOS DROPLETS

Now in Early Access.

Now placing units with HTS cores, pharma R&D, and translational research programs. Includes a benchtop instrument plus single-use consumable kits.

Plug into the instruments you already own.

No new assay instrumentation required. MOS handle like a liquid. Standard pipettes, multi-channel heads, and liquid handlers dispense MOS into any plate format. Downstream: high-content imaging, flow cytometry, plate readers, and sequencers.


LIQUID HANDLER
IMAGER
FLOW CYTOMETRY

Proven. Published. Protected.

Demonstrated clinical correlation

Gobits et. al, JCO Precision Oncology, 2026

7 peer-reviewed papers

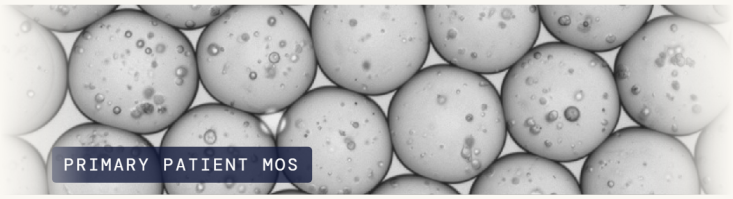
In *Cell*, *Cell Stem Cell*, and more — two in 2026.

14 issued patents

Foundational MOS & MOSgen intellectual property.

Demonstrated across treatment modalities.

Cancer and **normal tissue** (lung, liver, colon) bringing tox and efficacy testing much earlier in the pipeline.



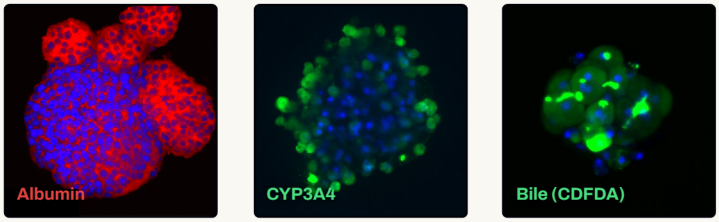
CASE A · LIVER TOXICITY

Functional liver tissue that detects toxicity.

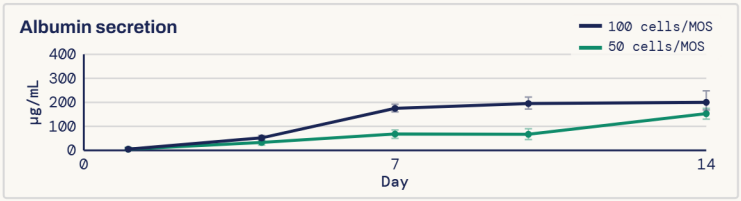
Primary human hepatocytes in MOS (PHH-MOS) preserve hepatic function for weeks **(left)** and detect DILI compounds with greater sensitivity than conventional spheroids **(right)**.

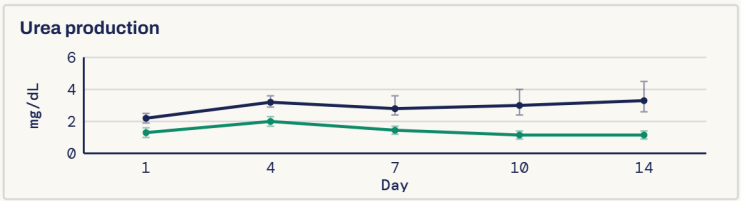
MAINTAINED HEPATOCYTE IDENTITY

BILE CANALICULI FORMATION

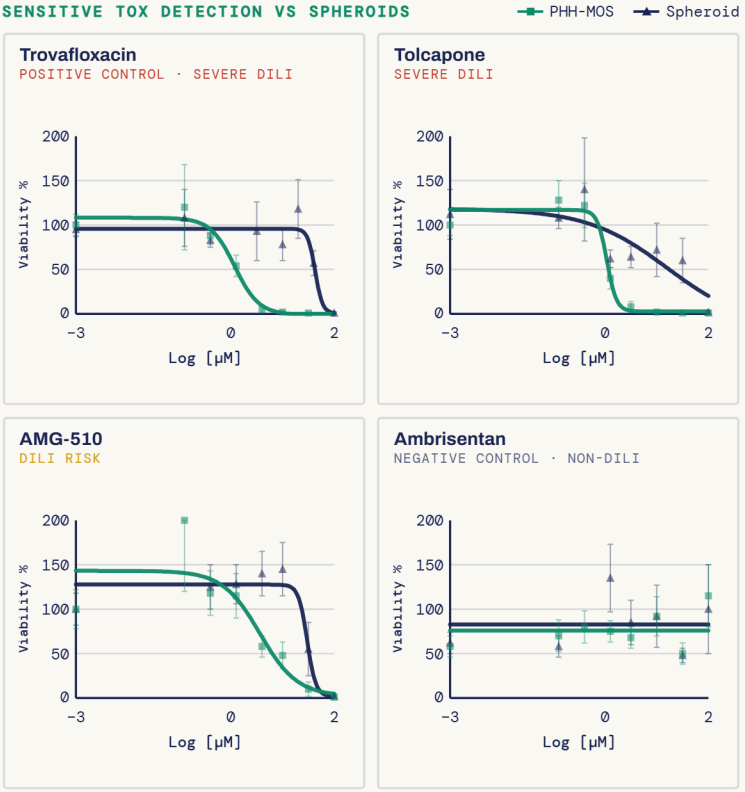


DAPI · nuclei (blue) in all panels





SENSITIVE TOX DETECTION VS SPHEROIDS



Functional liver tissue at screening scale: detecting DILI compounds earlier with more sensitivity than spheroids (5 µL domes).

CASE B · HIGH-THROUGHPUT SCREENING

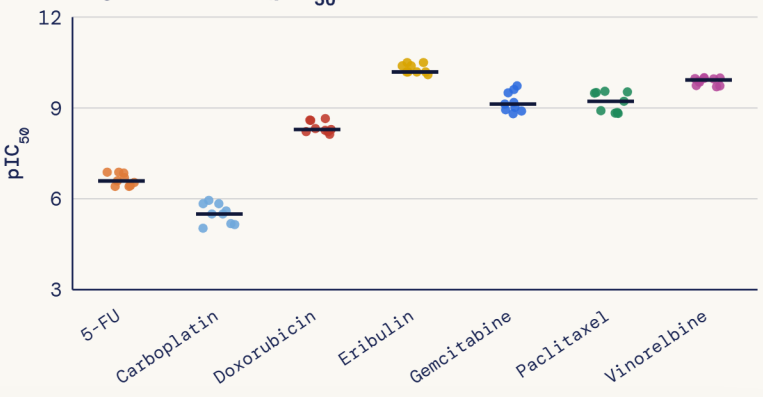
7 standard-of-care drugs, one HTS-ready screen.

Patient-derived breast cancer organoids in MOS, screened against **7 standard-of-care chemotherapies** across an 8-point dose range with biological triplicates in 384-well plates. Potency (pIC_{50}) clusters tightly across replicates.

2,790 total wells	< 8% CV	Z′ = 0.56	SSMD −7.64

HTS-grade quality (Z′ = 0.56, <8% CV) on patient-derived tumor organoids — tight, reproducible dose-response across every drug and replicate.

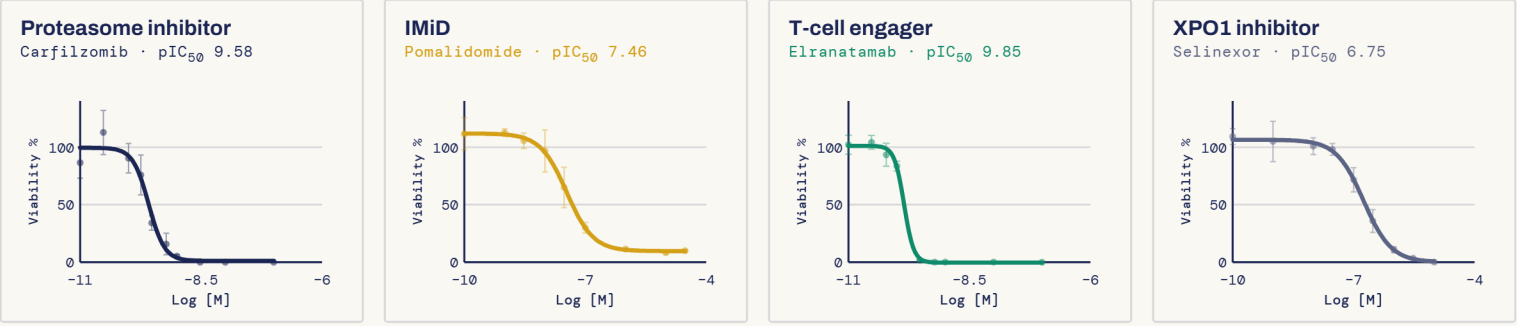
Potency distribution (pIC_{50})



CASE C · THERAPEUTIC MODALITIES

One standardized format for testing every drug.

Multiple-myeloma patient MOS were dosed against four standard-of-care drug classes — each panel shows a clean, MOS dose-response curve with a well-defined pIC_{50}.

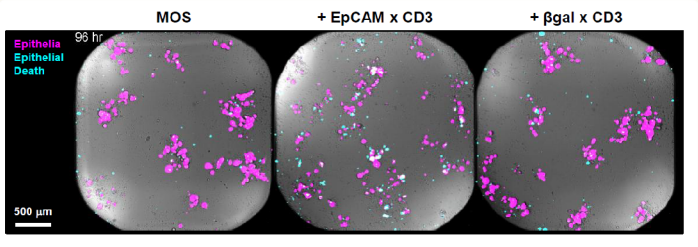


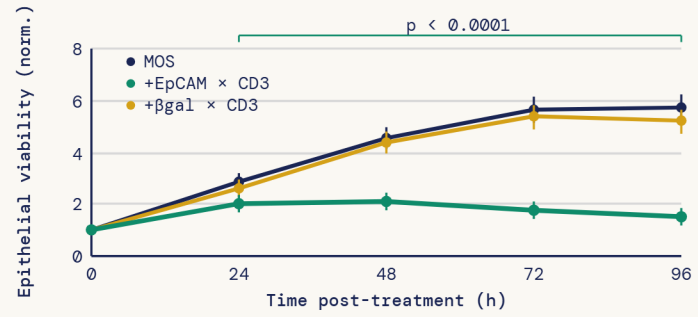
The MM MOS assay responds across proteasome inhibitors, IMiDs, XPO1 inhibitors, and T-cell engagers — covering cell-intrinsic and immuno-modulatory MOAs in a single platform.

CASE D · IMMUNO-ONCOLOGY

Functional immune killing, measured in a patient sample.

MOS preserve functional tumor biology, including the **native immune compartment**. Endogenous T-cell killing mediated in an NSCLC patient tumor sample treated with **EpCAM x CD3 bispecific** versus control (βgal x CD3). Longitudinal imaging quantified from 384-well plate over 96 hrs.



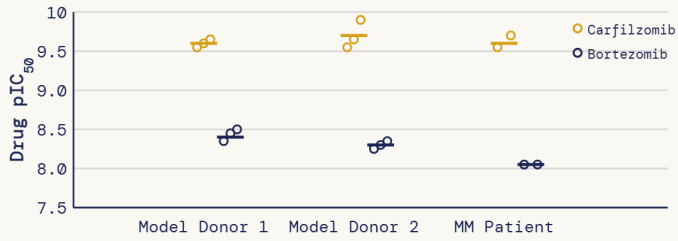


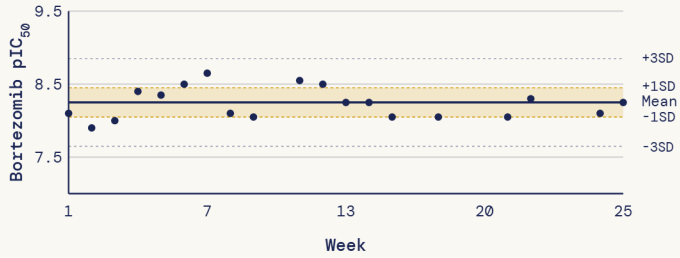
Patient's own T cells respond on-target in NSCLC MOS — tumor biology and functional immune compartment preserved.

CASE E · REPRODUCIBILITY

Validated MOS assay, reliable over months.

MOS deliver **reproducible drug-response profiles over time**. Two MM models and a patient sample reproduce IC_{50}s with **MSR < 2.5** — MSR (Minimum Significant Ratio) is the assay's run-to-run reproducibility threshold — across two standard-of-care drugs (top), and a **25-week** Bortezomib stability study holds **MSR = 4.3** (bottom) — same answer every run, every month.





Pharma-grade reproducibility — consistent IC_{50} every replicate, same takeaway across 25 weeks. HTS-ready assay reliability.

From any sample to screen-ready data.

CONTACT@UNIFORMBIO.COM

Bring any sample.
Patient, iPSC, organoid, clonal line, PDXO.

Push-button generation.
280k uniform MOS in 15 min across 4 lanes.

Drop into your assay.
Your modalities, your labware, your reagents.

Your standard readouts.
Imaging, flow, viability — at single-MOS resolution.