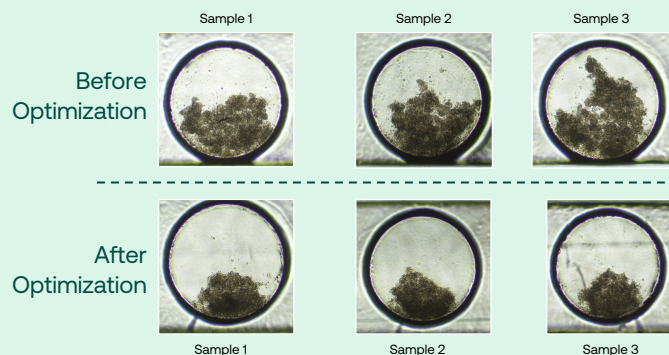


Case Study: human immune-mediated tumour killing quantified with μ Mass™ before going in vivo

Objective: investigate potency of peptide engager with 3D ovarian tumour and PBMCs

Step 1: Aggregate culture



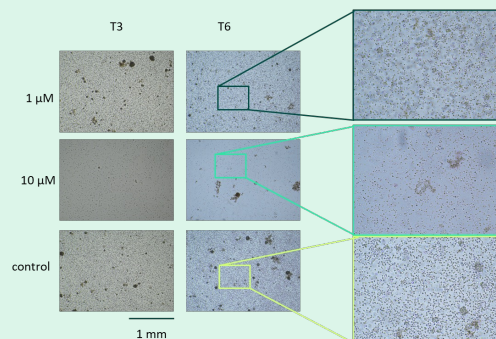
Repeatable ovarian-tumour aggregates established for size and metabolic consistency

3D ovarian cancer aggregates (OVCAR-3) formed with consistent size and metabolic behaviour, verified by MTT and PrestoBlue. Reproducibility underpins a trustworthy potency readout

Aggregate optimization: 2 weeks

*OVCAR-3: human ovarian carcinoma cell line

Step 2: Concentration optimization



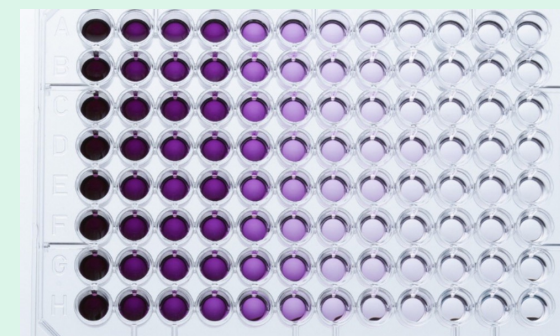
Peptide engager titrated to optimize concentration for maximum NK-mediated killing

Peptide engager tested at 0.1, 1, and 2 μ M with cytokine priming to find the concentration that maximizes NK-mediated killing. Peptide and cytokines alone confirmed non-toxic.

Peptide titration: 1 week

*NK: natural killer cells

Step 3: Immune-tumour potency assay



MTT assay of co-culture metabolic activity, immune-mediated killing quantified

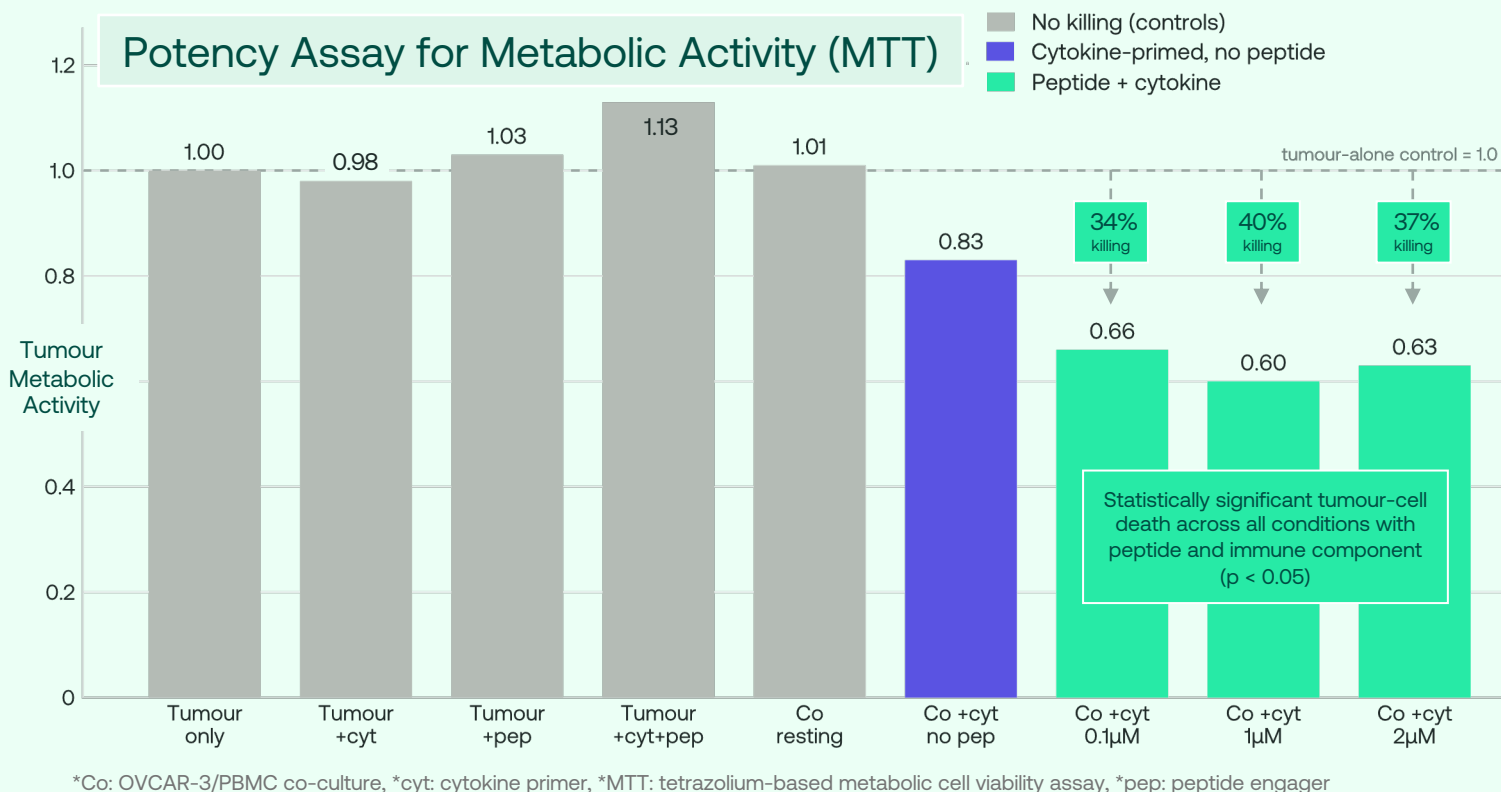
MTT performed on OVCAR-3/PBMC co-culture. Resting PBMCs were non-reactive against tumour, ruling out allogeneic background. Tumour killing occurred only with activated immune cells

Results assays: 1 week

*MTT: tetrazolium-based metabolic cell viability assay

*PBMC: peripheral blood mononuclear cells

Outcome: the peptide doubled the kill— μ Mass™ showed that the immune system triggered it



How it was tested

Human ovarian-tumour aggregates (OVCAR-3) co-cultured with activated PBMCs in μ Mass™. The non-adherent immune cells (PBMCs) were retained in culture throughout full assay—same experiment would not be possible in ULA plate

What the data showed

Neither peptide nor cytokines are directly toxic; tumour killing requires immune cells

Cytokine alone: 17% killing

Peptide and cytokines: 34 – 40% killing ($p < 0.05$)

The peptide engager roughly doubles the immune-mediated tumour killing

*OVCAR-3: human ovarian carcinoma cell line, *PBMC: peripheral blood mononuclear cells

*ULA: ultra-low attachment plate

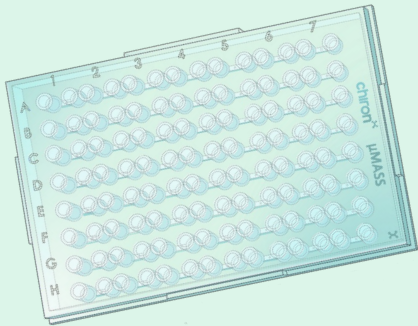
Next steps for the program

Confirm receptor-specificity — Map efficacy across tumour types — Test durability and immune exhaustion

Assay results within four weeks — GLP-like, SOP-based workflows — ISO-certified facilities

Gain access to μ Mass™ for your program

Whether you need study execution, in-house platform access, or a tailor-made solution—chiron offers multiple ways to engage



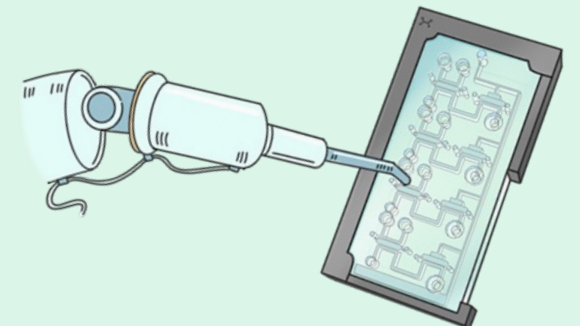
Device Sales

Device sales via technology transfer: bring μ Mass™ into your own laboratory as a consumable platform; compatible with standard workflows and equipment



Contract Research Services

Outsource studies to chiron for rapid, expert execution, generating human-relevant, decision-ready data with no internal burden



Model Co-development

Co-develop a bespoke model with chiron that fits your specific therapeutic, disease, or translational application

Why work with chiron?

Human-relevant insights, for more informed decision making, resulting in lower a financial burden for drug development

Difficult-to-access insights, made measurable

- Direct comparison of multiple treatments and donors on one platform
- Cell-therapy and advanced-modality testing where animal models are poorly predictive
- 3D solid tumour models that better capture tumour structure

More learning, at a lower cost per data point

- Generate large, comparable datasets that can be fed to predictive platforms
- Enable leaner clinical trials, reducing the development timeline
- Rapid application development and assay processing

Thank You

