



Cellply launches its end-to-end single cell potency characterization platform VivaCyte

- Integrates potency analysis and immunophenotyping to streamline cell therapy R&D
- Fully automated, standalone platform with single-cell resolution

BOLOGNA, Italy, January 17, 2024 – Cellply S.r.l. ([Cellply](#)) a leading developer of analytical tools for research and quality control within the “Cell Therapy” sector, today announced the launch of its flagship product [VivaCyte](#).®

VivaCyte - a tool capable of reducing development times, costs, and risks - is the first fully integrated platform of its kind to characterize the complex functionality and mechanism of action of potential cellular immunotherapies rapidly and comprehensively.



Cellply leaders Emiliano Spagnolo and Massimo Bocchi launch the new VivaCyte®

VivaCyte enables rapid testing of multiple cell therapy candidates from multiple process options, against multiple target tumor cells. Unprecedented depth of analysis combined with parallel screening of multiple conditions in a single run, delivers reproducible immune cell characterization and single-cell functional characterization at a fraction of the time currently needed by existing analytical tools.

“Helping the biopharmaceutical industry to identify and develop the most effective versions of their cellular therapies is our goal,” stated Emiliano Spagnolo, CEO, Cellply. “We have seen an explosion in the demand for a characterization platform capable of rapidly measuring the potential effectiveness of these game-changing cellular immunotherapies and accelerating their development. With its ability to rapidly deliver actionable results with minimal hands-on time, we are excited to be launching VivaCyte to meet this need.”

At the heart of VivaCyte is the patented CC-Array® chip and microfluidic technology that generates up to 153,600 co-cultures per run. In combination with AI-powered automated image analysis, immune cell subpopulations containing higher numbers of active killer and serial killer cells can be rapidly identified and unified potency scores calculated.

Massimo Bocchi, PhD, co-founder and Chief Strategy Officer, Cellply, added: “Until now there has been no simple methodology to evaluate supercharged subpopulations within a heterogeneous cell therapy sample which retain a phenotype capable of serial killing. With the multiparametric capability of VivaCyte, single-cell cytotoxicity, serial killing, and phenotype can be determined on the same set of cells within a heterogeneous population. With this information, identification of donors or cell therapy batches or manufacturing processes featuring higher serial killing activity and better killing kinetics can enable the use of more potent products requiring fewer immune cells to generate a response in the patient.”

There are over 2,700 cellular therapies currently in development worldwide*. The ability to determine the potential effectiveness of these therapies, at scale, and to be able to directly compare their potency is an area of high unmet need.

* Saez-Ibañez, A. R. et al., Nature Reviews Drug Discovery 21, 631–632 (2022).

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About Cellply

Cellply is a biology-focused deep tech company developing analytical tools to unravel the complexity of the immune system and enable rapid development of new immunotherapies and cell-based therapies with enhanced potency and persistence.

Enhancing understanding of the complex machinery behind immune and cancer cells is what drives this 30-strong organization. Headquartered in Bologna, Italy, the team of seasoned engineers and expert biologist is creating state-of-the-art analytical solutions capable of robustly characterizing these exciting therapeutic modalities at single-cell resolution.

Cellply has combined patented microfluidic technology and AI-powered automated image analysis capability with comprehensive automation and dedicated software to create its flagship product [VivaCyte](#)®. Launched at Advanced Therapies Week Meeting 2024 in Miami, FL, USA, VivaCyte is a standalone platform that delivers rapid potency analysis and immunophenotyping at the single-cell level to streamline cell therapy across the therapeutic development cycle, from discovery to process development and quality control.

With the goal of making in-depth analysis a reality across the entire cell therapy development cycle, from discovery to process development and quality control, Emiliano

Spagnolo was appointed CEO in July 2023 to lead the next phase of commercial expansion.

Today Cellply is focused on research and development of cell therapies, tomorrow its ambition is to dramatically reduce cost and complexity of quality control for these promising innovative therapies.

Founded in 2013, to date the company has raised over €15 million in various seed rounds and grants. Most recently it [announced](#) the successful conclusion of an internal funding round of €3.6 million and extended the round to new investors.

To find out more visit: cellply.com