

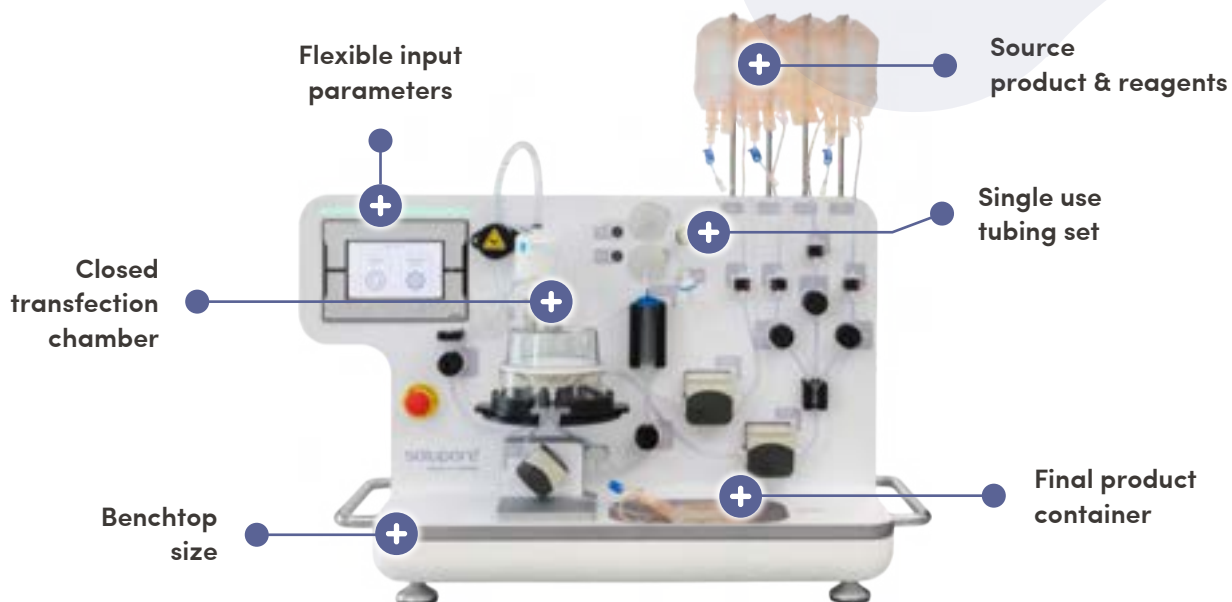


solupore[®]

**Non-viral delivery platform
for cell engineering**

The solupore[®] technology

Current gene delivery technologies for cell therapy applications rely on harsh mechanisms which negatively impact cell quality. This impact to cell health results in reduced proliferative capacity and cell function following the delivery of cargos. By enhancing cell quality through improved cell health, Solupore has the potential to enhance *in vitro* and *in vivo* cell function and enables the manufacture of next generation gene-modified cell therapies.



✓ Automated, reproducible transfection

A closed, simple and robust process where cells are maintained at normal physiological concentrations

✓ Versatile delivery of cargo

Transfection of a broad range of cargo and gene editing tools including mRNA, RNP, CRISPR/CAS9 and plasmids

✓ Full GMP support by 2H 2023

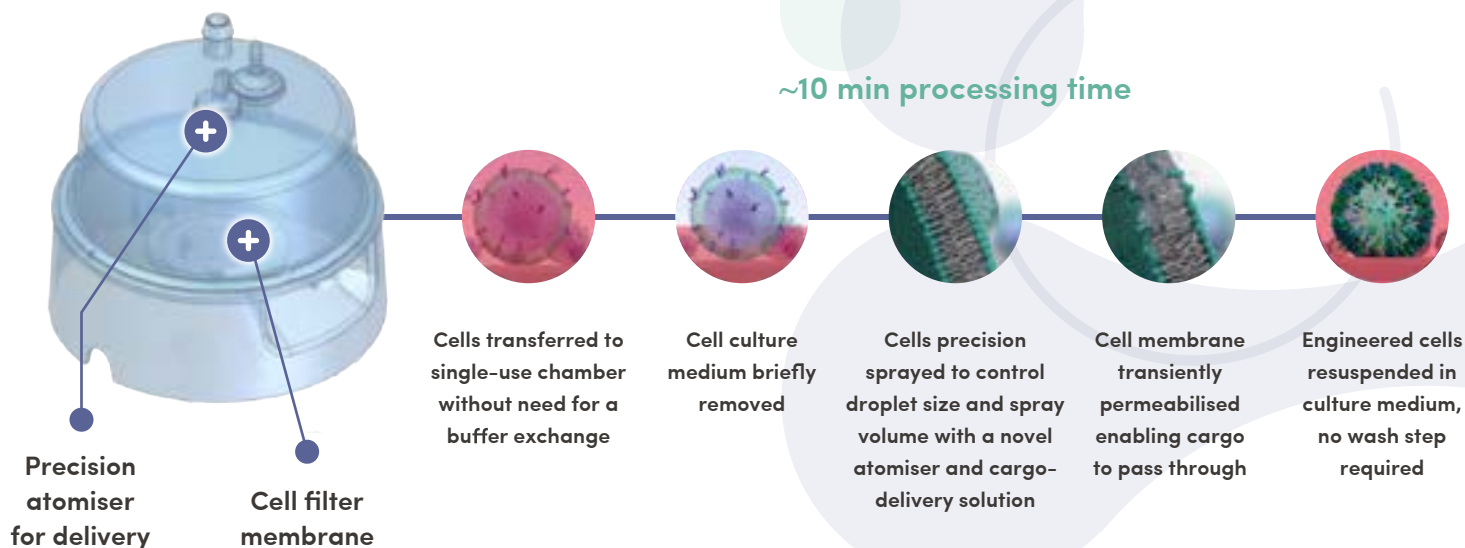
GMP instrument on existing platform supported by appropriate documentation for regulatory filings.

✓ Commercialization

Partner access to technology under a co- development and licensing agreement.

How solupore[®] works

Closed, single-use transfection chamber



solupore[®] Benefits

Solupore is accelerating the future of cell therapies through healthier and more functional cells for patients

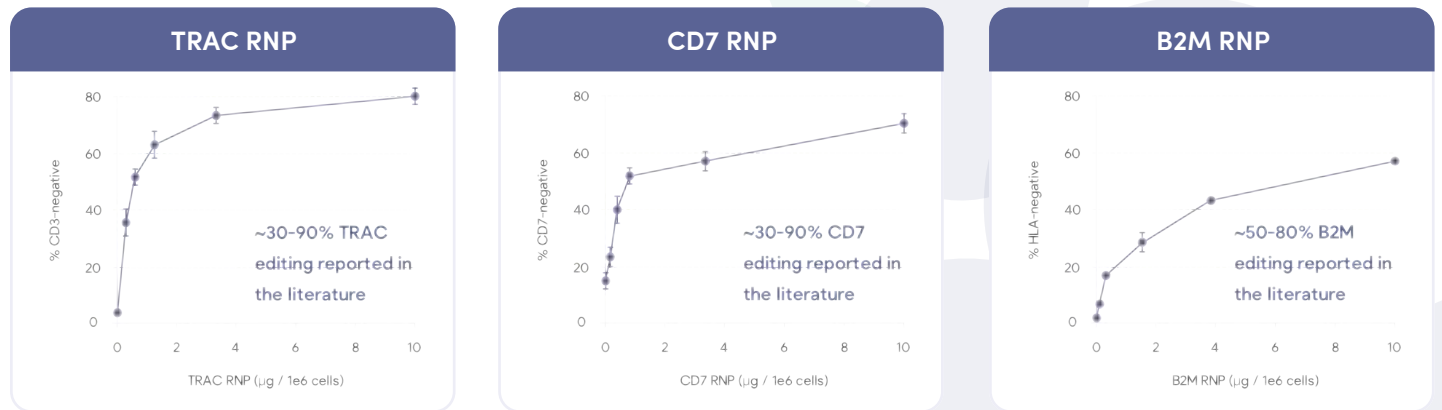


solupore[®] resolves key manufacturing limitations associated with viral and non-viral cell modification approaches

Manufacturing Challenges	Problem	Solution – Solupore
Cell health & phenotype	Electroporation unintentionally activates and exhaust cells, negatively impacting cell viability	Younger memory phenotype and reduced apoptosis leading to improved proliferative capacity
Cell function	Poor cell function post editing negatively impacts clinical efficacy, safety, and tumor killing capability	Due to improved cell health and proliferative capacity, T cells are highly functional in vitro and in vivo
Complex gene-editing	Constraints around processing time, inflexibility and yield for sequential edits	Improved cell health and function enable the complex editing needed for the next generation of cell therapies
Ease of adoption and use	Time consuming to scale up and cell processing requires highly skilled operators with batch-to-batch variability	Automated and closed system with minimal cell processing, flexible input parameters and ease of use

solupore® can deliver functional cargo to primary T cells

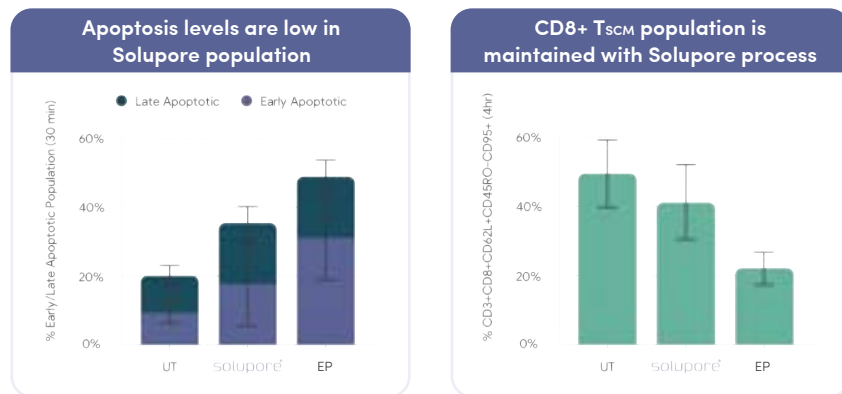
Efficient CRISPR/Cas9 RNP editing in primary human T cells



System: Solupore, Cell Type: T cells, Cargo: Single RNP (TRAC, CD7, β 2M), Number of Donors: 1, Post process cell viability >80%

solupore® demonstrates superior cell health and phenotype

Cells engineered using the Solupore system are less apoptotic than cells engineered using electroporation and retain a younger memory phenotype



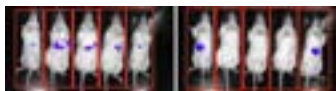
TscM = stem cell memory T cells
EP = ELECTROPORATION
UT = UNTREATED

System: solupore® Cell Type: T cells, Cargo: Multiplex RNP (TRAC, CD7, β 2M), Cargo Loading: 3 μ g/M cells (each RNP), Number of Donors: 3

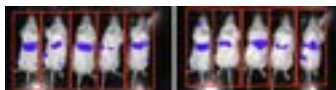
solupore® demonstrates enhanced *in vivo* cell functionality

Evidence of disease-free mice at highest dose of Solupore CAR T cells and superior engraftment of Solupore CAR T cells

Solupore CAR T-cells



Electroporation CAR T-cells



PBS Control



Dose: 4 x 10⁶ cells/mouse

