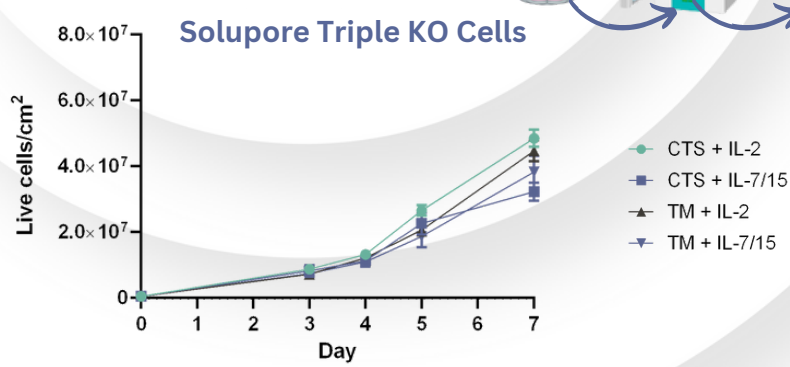
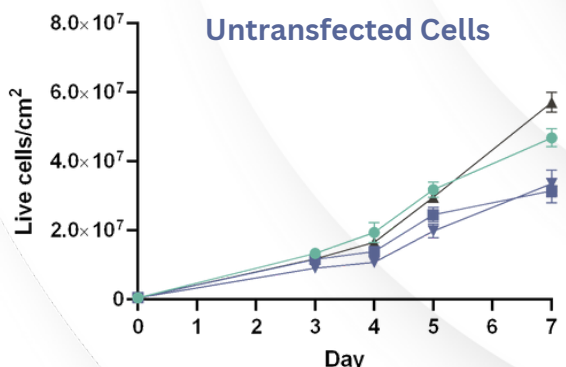
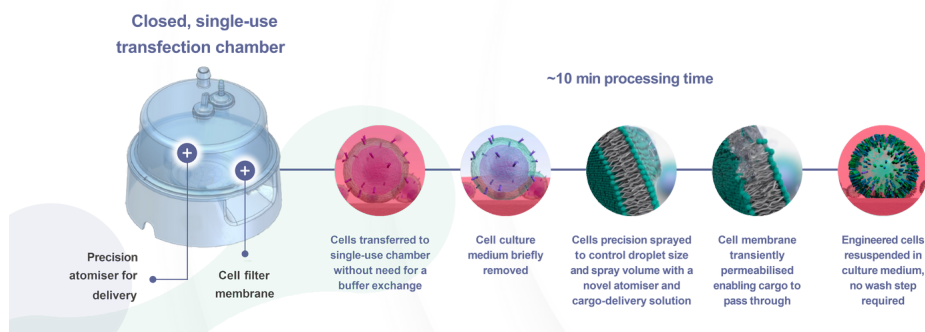


## Solupore® Triple Knock-Out Transfected T cell Expansion Equivalent to Untransfected in G-Rex® Platform

Solupore is a patented, automated, closed non-viral delivery platform used for cell engineering. Solupore utilizes a gentle and rapid physicochemical transfection technology, maintaining superior cell health and function.

In this application, the health of Triple Knock-Out (KO) transfected T-cells was evaluated by measuring cell expansion and viability in a Gas Permeable Rapid Expansion (G-Rex® - Wilson Wolf Manufacturing, LLC) platform using different cell culture media and cytokine supplement.

### Solupore® & G-Rex® Processes



(%mean±SD)	Triple KO Efficiency	TRAC KO	CD7 KO	β2m	Viability Pre-Solupore	Viability Post-Solupore	Viability G-rex
<b>Solupore</b>	52 ± 3	72 ± 3	68 ± 3	51 ± 4	98 ± 1	83 ± 2	≥98
<b>Untransfected</b>	n/a	n/a	n/a	n/a		n/a	

n/a - not applicable

## Results

Solupore multiplex Triple KO transfected T cells demonstrated comparable cell expansion to Untransfected cells (Figure 1a & 1b respectively, N=3 donors, mean ±SD). Following 7-day expansion in the G-Rex (seeded 0.5x10<sup>6</sup> cells/cm<sup>2</sup> post-transfection), Solupore-transfected cells and untransfected cells expanded 50-90 fold with the addition of IL-7 and IL-15 cytokines and 80-110 fold with IL-2 alone, independent of media (CTS OpTmizer (CTS) or TexMACs (TM) used in culture). Solupore transfected cells, maintain high viability immediately post-transfection (Figure 1c, %mean ±SD). Viability of Solupore transfected populations were also equivalent to the untransfected population when expanded in the G-rex platform, maintaining 98% viability for 3-7 days expansion (post-transfection) (Figure 1c).

Results demonstrate that Solupore® and G-Rex can be integrated into next-generation cell therapy manufacturing processes to achieve unparalleled cell health

