

Allogeneic iPSCs: Getting ready for the future of cell therapy

The development of iPSC-derived allogeneic cell therapies offers the possibility of effective treatments for many diseases, extending beyond the inherent inefficiencies and expense of today's autologous "one-batch-for-one-patient" cell therapies. However, there are several requirements to consider to successfully deliver on the promise of iPSC-based allogeneic cell therapy.

Advantages of iPSC-based allogeneic cell therapy:



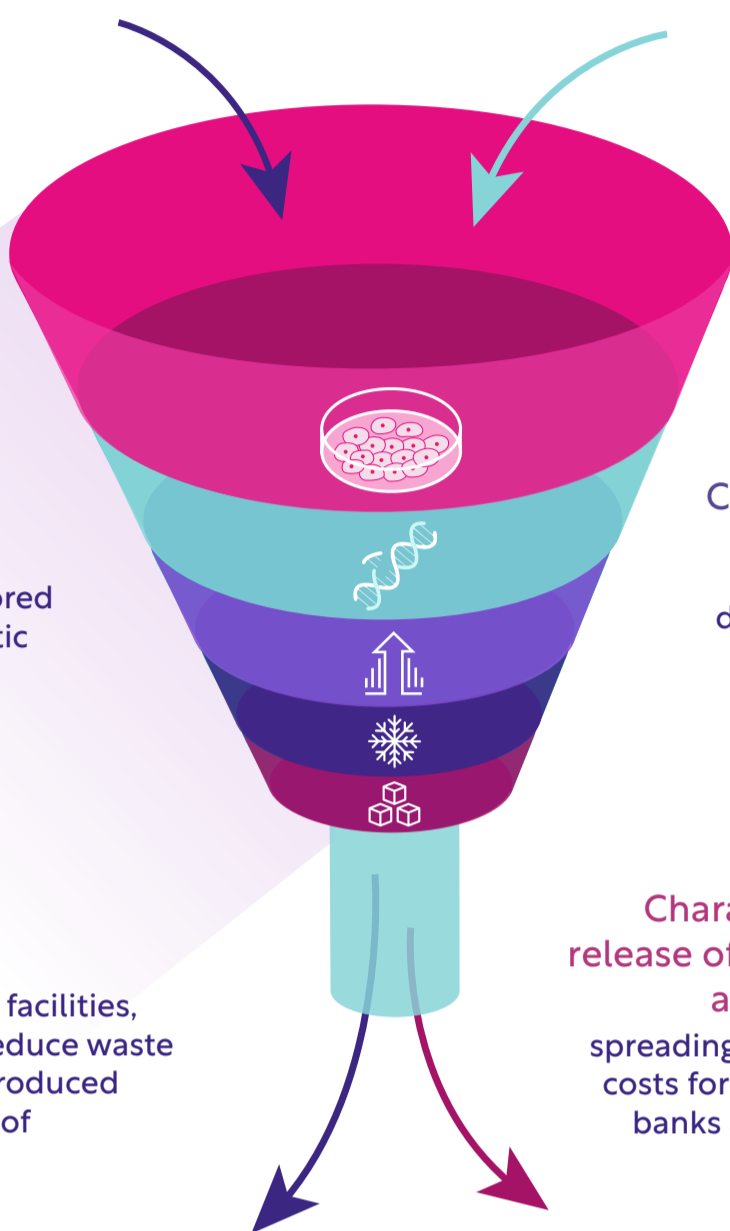
Robust starting materials
coming from healthy donors, and with a lower variability in starting materials.



Multiple rounds of gene edits possible
generating a highly tailored and powerful therapeutic in a large-scale master cell bank.



Ability to scale up
enabling a better use of facilities, time and materials to reduce waste and have more doses produced from the same amount of manufacturing space.



Cryopreservation
eases logistical challenges and delivery-to-patient timelines.



Characterization and release of multiple doses at the same time
spreading expensive testing costs for raw materials, cell banks and drug products over more doses.

Ultimately leading to:



Lower cost of goods and labour



Greater production efficiencies



Better characterization



Fewer logistical hurdles in delivering to patients

Successful iPSC manufacturing starts here

Key requirements for your next iPSC-based allogeneic cell therapy manufacturing initiative:

Deep knowledge and expertise of iPSC and true human biology

creating an effective therapeutic not only requires intimate knowledge of the disease being targeted, but also deep understanding of the processes required to generate the most relevant cell type to treat the disease.

Scalability expertise and experience

enabling a better use of facilities, time and materials to reduce waste and have more doses produced from the same amount of manufacturing space.

The right technology and team

to meet the significant unmet needs in allogeneic cell therapy development, including:

- immediate access to a broad range of differentiation and bioreactor-based expansion protocols
- comprehensive and scalable cGMP capacity
- analytical support and clinical readiness support for global regulatory submissions



Cellistic is integrating these offerings in complete workflows based on proprietary cell-specific manufacturing platforms, which will offer therapeutic developers support for investigational new drug-filings (INDs) and will include good manufacturing practice (GMP) capacity to commercialise the iPSC-based therapies of the future.

This infographic has been created as part of a RegMedNet In Focus feature in association with Cellistic.

Connect with Cellistic.

Let's discover together if our approach to scaling allogeneic cell therapies is a good fit for advancing your therapeutic.

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