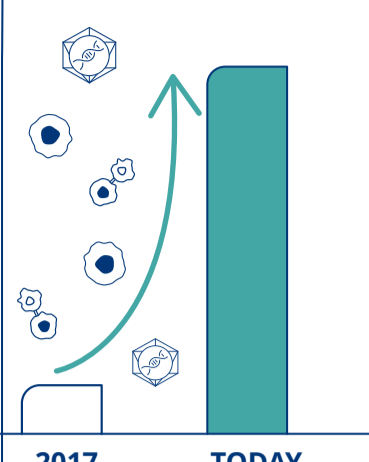
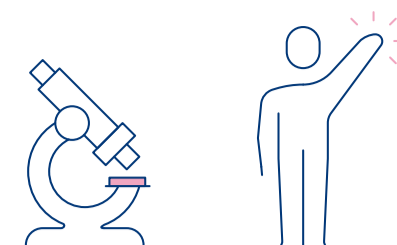


From lab to patient:

Ensure high quality to Regenerative Medicine development



Regenerative Medicine is a growing field

Since the first approved gene therapy in 2017, for the treatment of eye disease, an explosive growth in research and clinical studies has characterized the field of cell and gene therapies.

Cell and gene therapies reach a growing number of patients



Cell and gene therapy modalities were initially developed to treat rare diseases affecting small groups of patients but have expanded to treat more diffuse diseases (i.e., cancer and cardiovascular disorders), reaching millions of patients worldwide.

Cell culture – the election tool for Regenerative Medicine

Various categories under the Regenerative Medicine umbrella rely on advanced cell culture techniques (i.e., iPSC, mesenchymal stem cells, CAR-T, HEK293)

- Cell Therapy for Tissue Regeneration
- Cell-based Immunotherapy
- Cell-based Gene Therapy

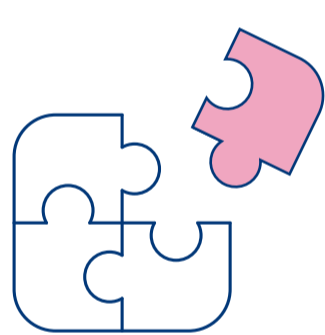
Stringent quality requirements apply to raw materials used to develop cell and gene therapies

- Safety
- Identity and purity
- Documentation
- Functionality
- Consistency

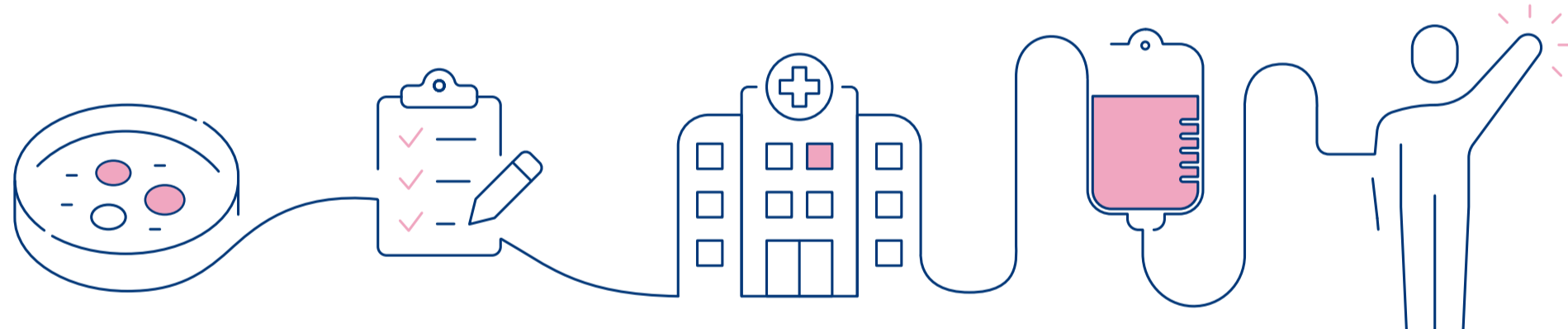
Cell culture raw materials (i.e., growth factors and culture media) directly affect cell behaviour and the final product's quality. Contamination in these raw materials lead to safety concerns or reduced efficacy. Regulatory agencies (i.e., FDA and EMA) have established strict guidelines and requirements for manufacturing cell culture raw materials for use in advanced therapies.



Stringent regulatory processes **impede** the approval of new therapeutic options, causing **longer lead time to the patient.**

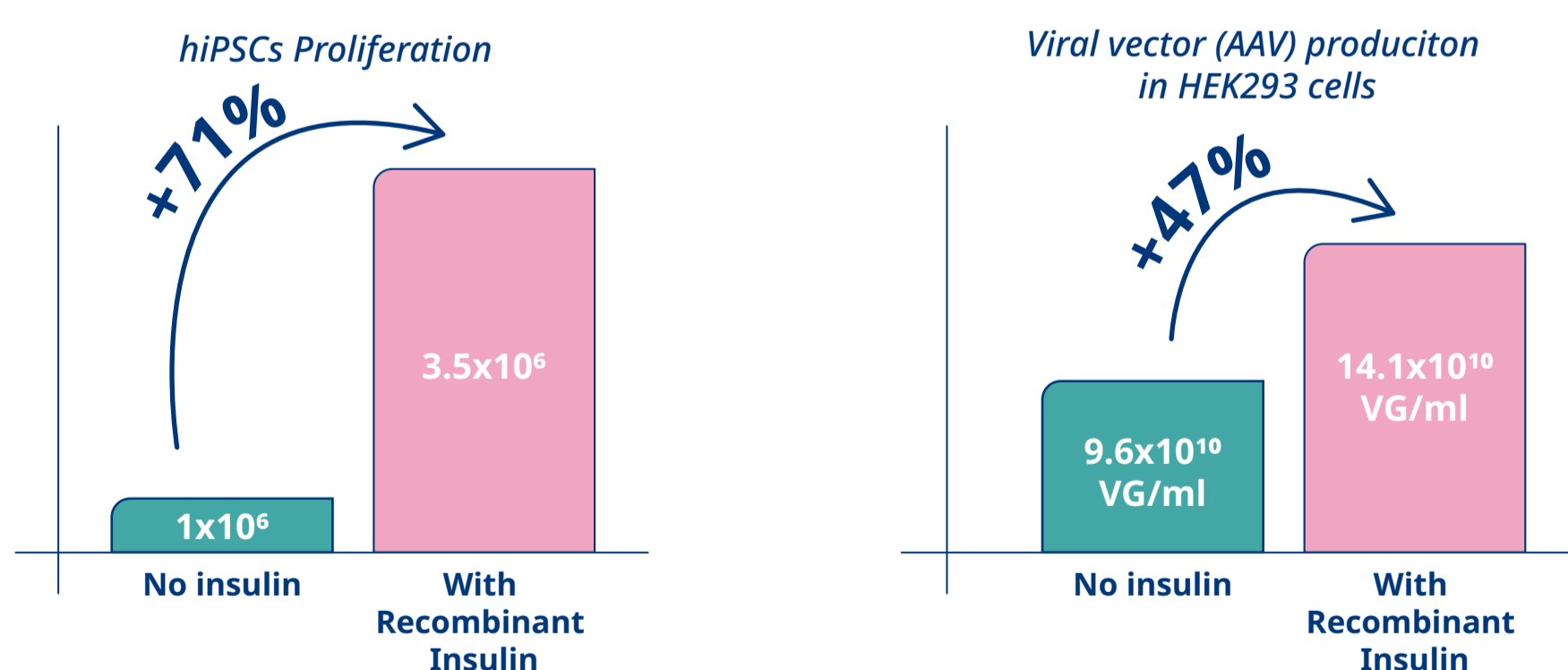


Integrating **high-quality** and **safe** raw materials into the early stage of development can **accelerate the process.**



Supplement your cell culture media with **Recombinant Insulin** and...

...you will **improve** your process performance...



The addition of Recombinant Insulin to serum-free cell culture media formulations significantly boosts cell proliferation (i.e., hiPSC) and cell productivity of viral vectors (i.e., AAV in HEK293).

...while maintaining **high-quality standards.**

- 100+ years of experience with insulin
- Manufactured under **GMP standards**
- Animal-free**
- Proven** batch-to-batch consistency
- Secure** global supply chain
- Traceability** and **quality** documentation



Do you want to test Recombinant Insulin in your cell culture? Contact us at nnprinfo@novonordisk.com