
Cell Therapy at Evotec

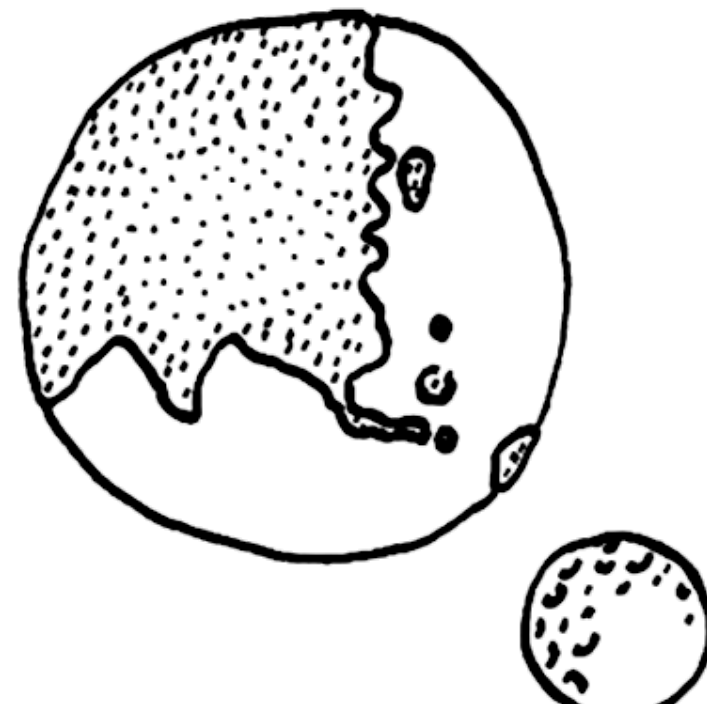
*Integrated approach to deliver
new therapies to patients*

Agenda

Cell therapy at Evotec

iPSC cell therapy platform

Manufacturing capabilities



Delivering cell therapies to patients through a world class integrated platform

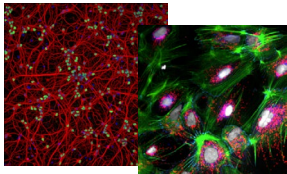
EVOcells: End-to-end solution for iPSC-based cell therapeutics



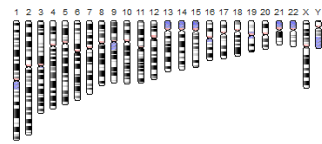
Partner

Handover points can be mutually agreed on a project-by-project basis

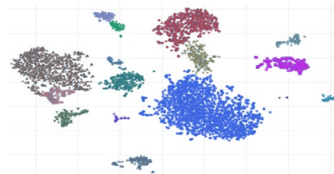
iPSC-derived cell types



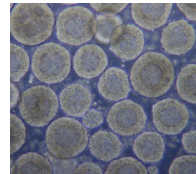
ArrayCGH, karyotyping, WGS



Single cell sequencing



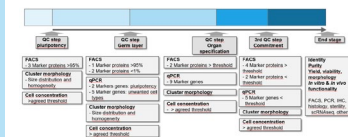
3D expansion



Upscaling



Cell QC



GMP production



Innovative iPSC-based cell therapy assets available for partnering

Internal pipeline spans a range of different cell types & disease areas

Field	Program/Project	Disease area	Exploratory	Pre-clinical research	Pre-clinical development	IND / Phase I
Oncology	iNK	IO ¹⁾	2)			
	iM	IO				
	$\gamma\delta$ iT	IO				
	$\alpha\beta$ iT	IO				
Regenerative Medicine	E.iBeta (gen 1)	Diabetes				
	QRbeta (gen 2)	Diabetes				
	iCM	Heart failure				
Immune-modulation	iMSC exosomes	Various				
	iNK, iTreg	Anti-fibrotic, auto-immune				

iPSC-derived cell types

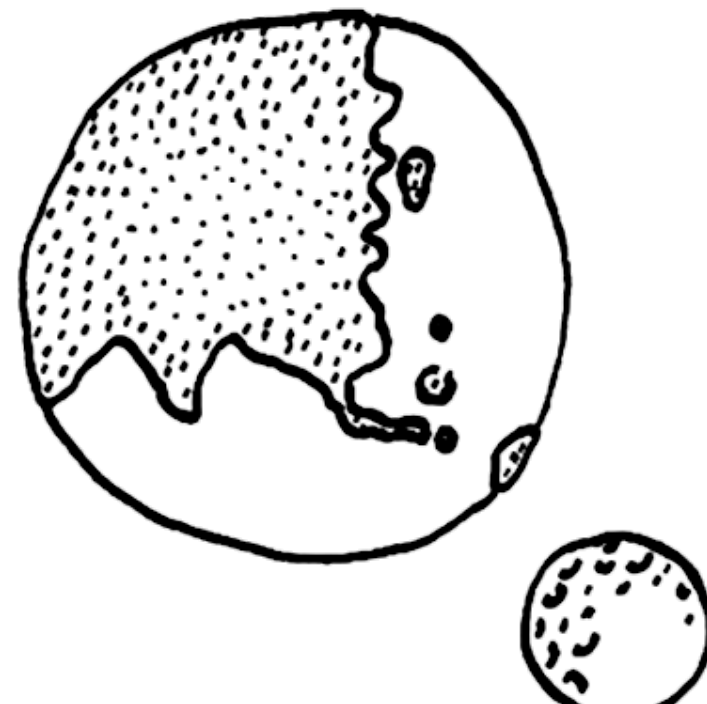
- iNK Natural killer cells
- iT $\alpha\beta$ - and $\gamma\delta$ - T cells
- iM Macrophages
- iBeta Pancreatic islets
- iCM Cardiomyocytes
- iMSC Mesenchymal stromal cells

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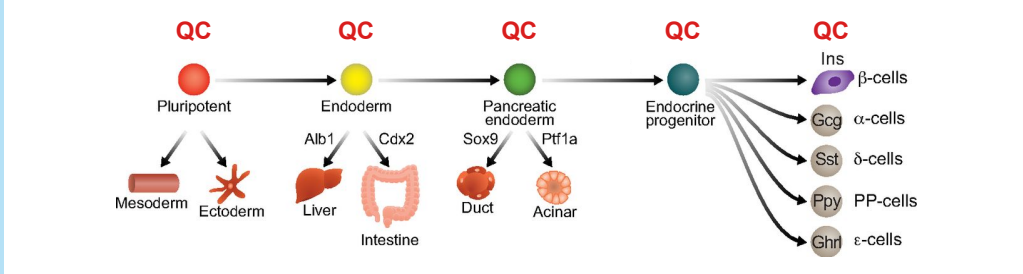
Manufacturing capabilities



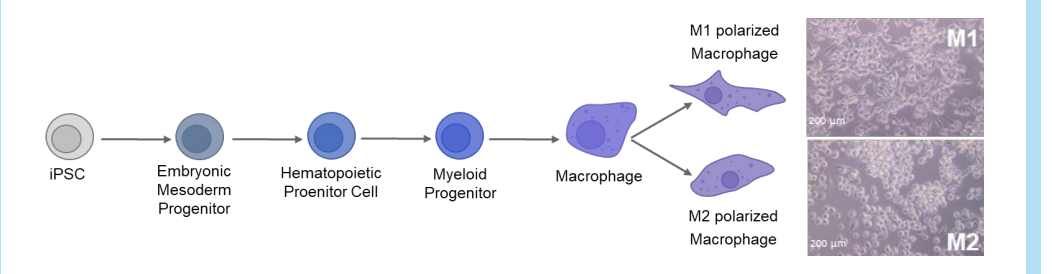
A decade of expertise with iPSC differentiation

Ability to produce a multitude different iPSC-derived cell types

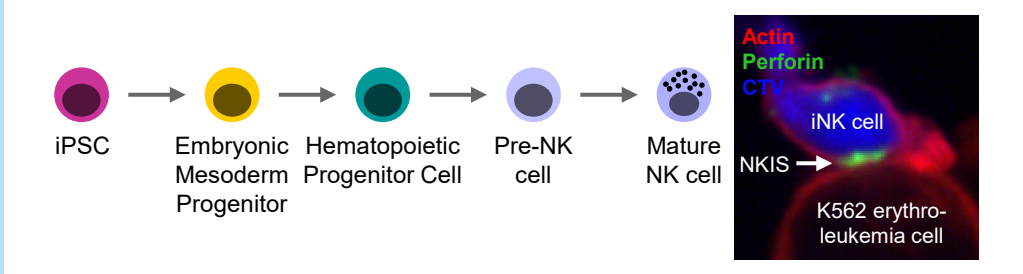
Islet cells (endodermal)



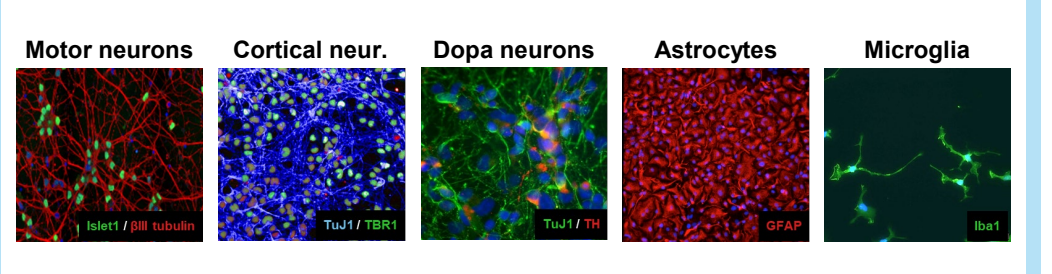
Macrophages (mesodermal)



Natural Killer cells (mesodermal)



Plus a multitude of other cell types to discover



Experience

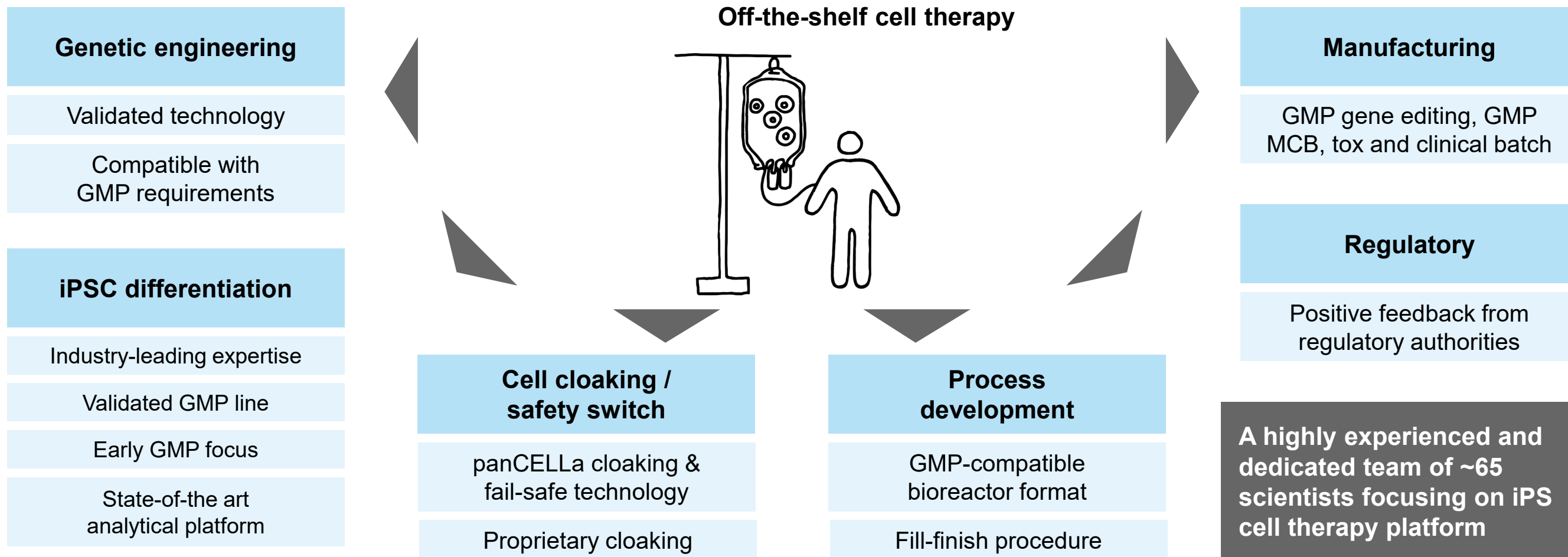
- > 10 years of iPSC biology experience
- Intricate know-how of developmental biology
- One of the largest iPSC platform groups in the industry with >100 people dedicated to developing iPSC-derived cells for drug discovery and cell therapy

Cell production for cell therapeutic approaches

- Focus on industrialization, robustness, scalability and GMP compatibility from day one
- Translation from R&D to full GMP
- Comprehensive QC at key intermediate stages & end stage as core element

Outstanding iPSC platform & expertise

Leading iPS cell therapy platform

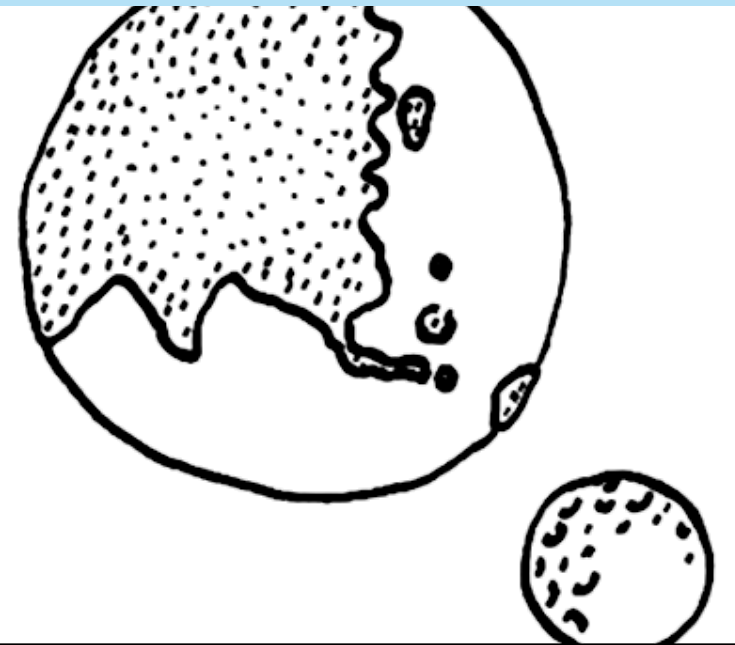


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Centre of excellence for cell therapeutics manufacturing

Evotec Modena

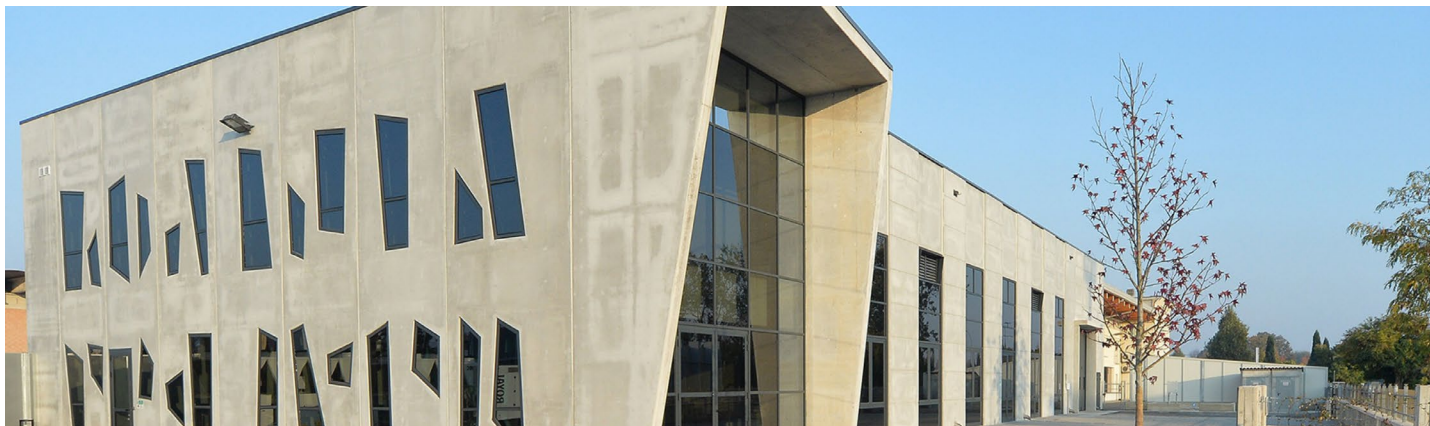


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NEWS RELEASE, 30 MAY 2022

EVOTEC ADDS CELL THERAPY MANUFACTURING FACILITY WITH ACQUISITION OF RIGENERAND

► EVOTEC'S **EVOC**CELLS PLATFORM INTEGRATES INNOVATIVE OFF-THE-SHELF IPSC CELL THERAPY DISCOVERY WITH DEVELOPMENT AND MANUFACTURING



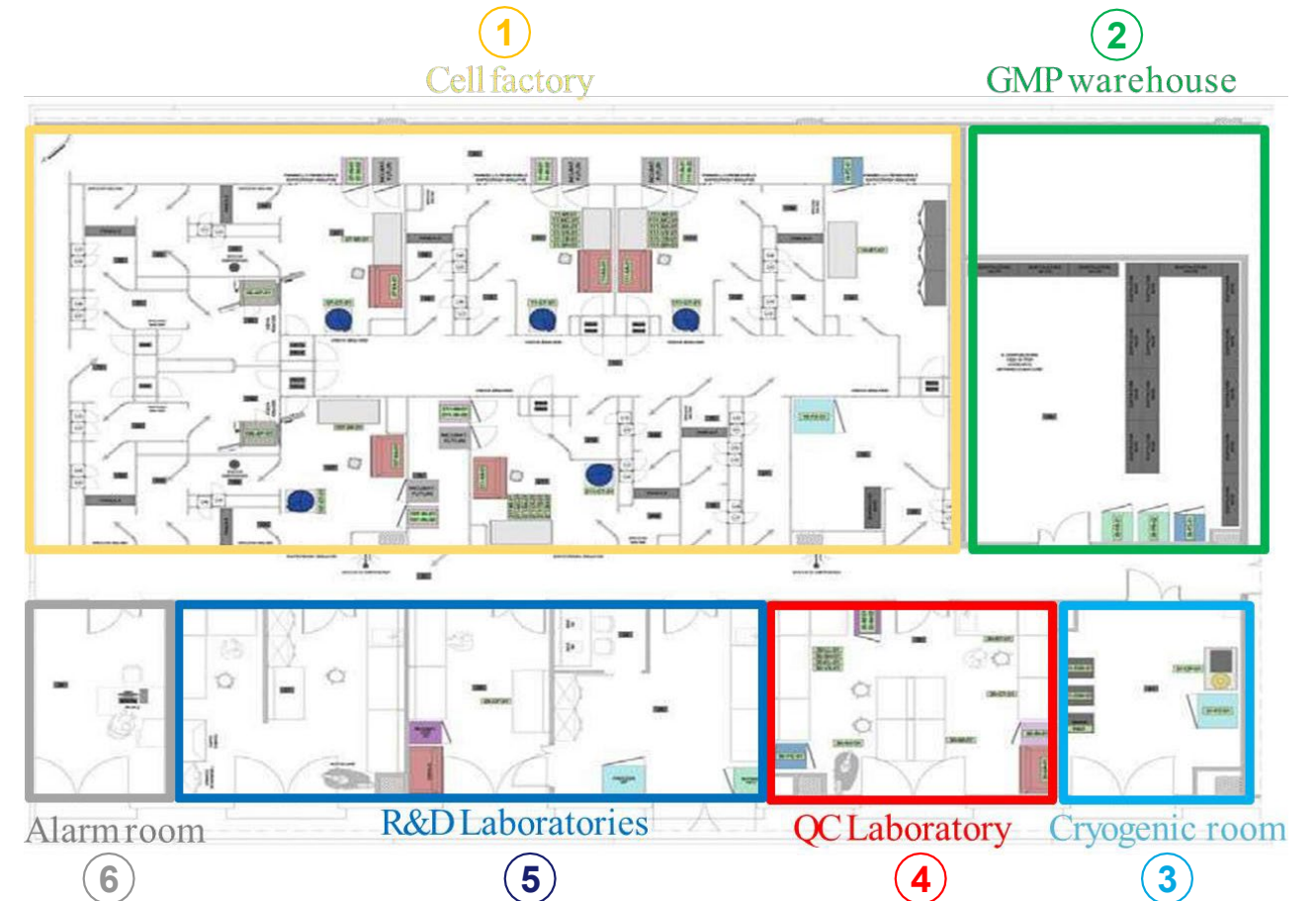
- Founded in 2009 as spin-off of the University of Modena and Reggio Emilia
- Scientific founder Prof. Massimo Dominici is one of the pioneers in clinical cell therapy
- State-of-the art GMP manufacturing facility (5 clean rooms, 350 m²) with room for significant expansion
- cGMP facility accredited by Italian Authority for the manufacturing of clinical stage cell and gene therapies
- Experienced to manufacture complex cell and gene therapies including pre-GMP optimization steps
- Experience with MSCs, TILs, CAR-T, dendritic cells and exosomes
- Tech transfer for manufacturing of iPSC-based therapeutics on-going

The EVOTEC Modena cell factory

Facility overview

EVOTEC MO Cell Factory

- The GMP manufacturing facility is composed of:
 - 1) A cell factory:** equipped with 5 sterile cleanroom / manufacturing suites, suitable for aseptic manipulation of sterile medicinal products (Grade A/B cleanroom) according to EU and US cGMP rules
 - 2) A class C GMP warehouse with ambient storage:** with a dedicated airlocks and a Grade D transfer material zone
 - 3) A cryogenic room:** for qualified controlled storage at -80°C to -196°C with vapor phase liquid nitrogen under 24-h remote control
 - 4) A QC laboratory:** equipped to perform microbiologic tests to monitor the classified rooms and to execute quality and safety controls on intermediate and final products
 - 5) A R&D laboratory:** for ATMP research purposes
 - 6) An alarm room:** enabling monitoring of the cryogenic room via SCADA
- Areas n°1 and n°2 i.e. cell factory and GMP warehouse are in a cleanroom space of 450m²



EVT MO can perform all production steps of ATMP manufacturing, from development to production, cold temperature storage and quality control in compliance with GMP requirements

Manufacturing suites

EVT MO has 5 class B manufacturing suites with 24/7 monitoring



EVOTEC MODENA manufacturing capacity

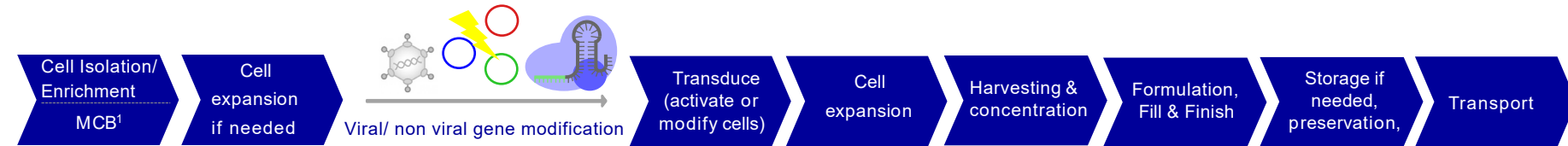
EVOTEC MO produces cell & gene therapies from procurement to patients

cGMP viral vector for ex-vivo gene modification



**Evotec Mo has an outsourced qualified partner for viral vector (VV) GMP manufacturing*

Gene Therapy



Human cell production



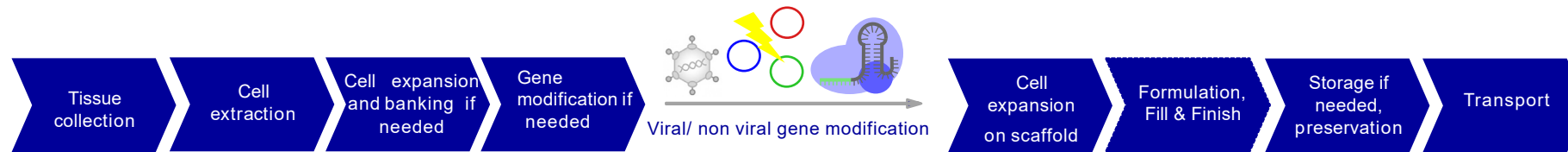
Cell Therapy



Cell tissue production



Tissue Engineering

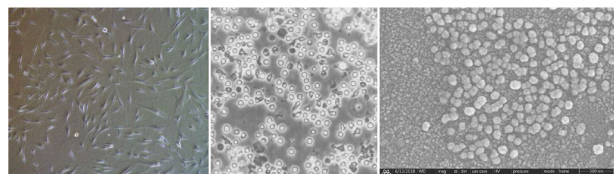


Note: ¹MCB: Master Cell Bank.

Evotec Mo manufacturing capabilities
 QC tests capability (partially outsourced to qualified partners)
 Gene modification with GMP grade VV or with non-viral methods

Elevating ideas to cell therapy products

Evotec Modena expertise for cell/gene therapy acceleration



Pharma/Biotech



SME/ Academia

