

## Initiatives for improved QOL

# Contract development and manufacturing organization for regenerative medical products

### Basic approach

Regenerative medicine represents an innovation-led business domain intended to present new treatment approaches for conditions that are difficult to cure using conventional therapies. It should be noted, however, that participants in this sector need to be equipped with highly technical capabilities to address the formidable challenge of effectively handling living cells in order to ensure stable production of high-quality products. In this context, with the hope of contributing to the promotion and development of regenerative medicine, Showa Denko Materials has developed a skilled technical workforce in cell cultivation and quality inspection, and established production bases in Japan, the United States and Europe to provide contract development and manufacturing services to the local pharmaceutical industries. The company's products are delivered to countless patients through its primary customers, pharmaceutical companies.



### Challenge toward 2030 and Showa Denko Materials' initiatives

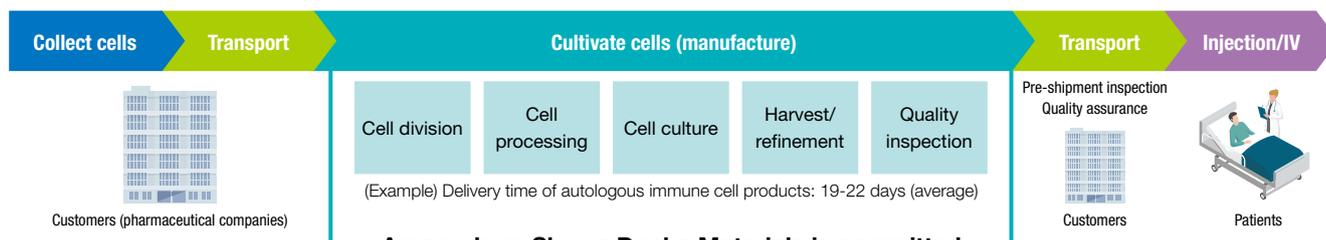
Showa Denko Materials, having established production bases in Japan, the United States and Europe, globally provides contract manufacturing services for regenerative medicine under the brand name of Minaris Regenerative Medicine, known for its stable supply of high-quality products. We are equipped to handle a broad range of cell types, including T cells\*1, mesenchymal stem cells\*2 and iPS cells\*3, regardless of whether autologous\*4 or allogeneic\*5, and manufacture regenerative medicine products with quality levels equivalent to those of conventional pharmaceuticals. By supplying safe and effective regenerative medicine products to our pharmaceutical company customers, we contribute to them directly as well as to patients indirectly. In pursuing the regenerative medicine business, we aim to help build a society that can offer options to treat diseases, such as cancer and hereditary disorders, that are difficult to treat using conventional therapies.

#### Challenges facing society

Promote regenerative medicine to provide treatment for diseases, such as cancer and hereditary disorders, that are difficult to treat with conventional approaches

#### Showa Denko Materials' initiatives

As a partner of pharmaceutical companies, provide contract manufacturing services for regenerative medicine from production bases in Japan, the United States and Europe, ensuring a high level of quality. In doing so, contribute to the promotion and development of regenerative medicine and work to support the health and well-being of people around the world.



#### Areas where Showa Denko Materials is committed



#### TARGET 16.3

Provide contract development and manufacturing services for regenerative medicine in compliance with laws and regulations



#### TARGET 9.2

Promote the comprehensive and sustainable industrialization of the new regenerative medicine sector



#### TARGET 3.4

Provide contract development and manufacturing services for regenerative medicine to pharmaceutical companies, and deliver treatment to patients through those companies



#### TARGET 3.8

Develop skilled technical personnel to be able to offer access to safe and high-quality pharmaceuticals at the lowest possible prices



#### TARGET 17.6

Participate in global technical development promotion mechanism to encourage knowledge sharing in the fields of science, technology and innovation



#### TARGET 17.16

Promote multi-stakeholder partnership activities to revitalize the global partnership

\*1 T cell: T-lymphocyte, a type of lymphocyte \*2 Mesenchymal stem cell: Somatic stem cell that is derived from the mesoderm \*3 iPS cell: Induced pluripotent stem cell  
\*4 Autologous: Derived from the same individual \*5 Allogeneic: Derived from individuals of the same species that are sufficiently unlike genetically to interact antigenically