

## Using a Healthcare Platform to Accelerate the Business Transformation

Mitsubishi Chemical Holdings Corporation made Mitsubishi Tanabe Pharma Corporation a wholly owned subsidiary in March 2020 as part of its efforts to shift the Mitsubishi Chemical Holdings Group's technological and human resources into the growing healthcare industry. This special feature presents some of the Group's initiatives to generate synergies.



### Pursuing medical advances for the growing global healthcare market

The global healthcare market is confronting major issues today. Among them, various countries are struggling to fund their healthcare systems as costs rise due to either aging or growing populations. Meanwhile, life expectancy is expected to increase as a result of advancements in medical technologies. To respond to these trends, our Health Care domain must create new business models.

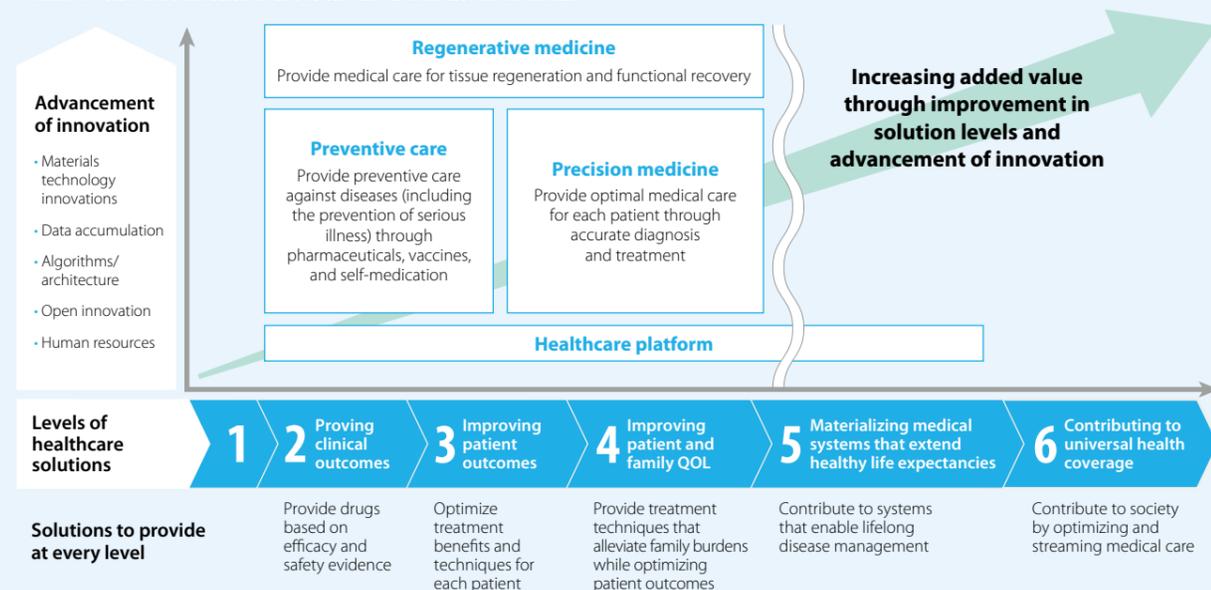
Since it was established in 2005, Mitsubishi Chemical Holdings recognized healthcare as a core business for generating stable earnings, and now designates medical advances as a key business in its medium- to long-term basic management strategy KAITEKI Vision 30 (KV30) formulated in response to the social needs and technological trends (see page 11). Specifically, the Company has targeted preventive care, precision medicine, and regenerative medicine as growth businesses that can contribute to medical advances after taking into consideration their market growth and scale as well as innovation potential.

Taking a major step forward, Mitsubishi Chemical Holdings made Mitsubishi Tanabe Pharma a wholly owned subsidiary

with a view to swiftly overcome the challenges ahead by making the most of the subsidiary's strengths. They include its unique and innovative ability to develop new drugs, extensive experience and expertise in meeting good practice guidelines and regulations related to clinical and manufacturing, etc. in the pharmaceutical industry, an established supply chain with pharmaceuticals distribution and sales networks, and an excellent reputation among medical professionals and patients.

Moreover, Mitsubishi Chemical Holdings has been promoting broader collaboration among its R&D organizations in an effort to spark further innovation. The Group's R&D has also focused on using chemicals to develop biocompatible materials, developing medical-use gas applications, and utilizing Multilineage-differentiating stress enduring cells (Muse cells) for regenerative medicine. To accelerate development for its three aforementioned growth businesses in the future, however, the Group plans to step up efforts to combine biotechnology and materials science, compile and analyze healthcare-related data, and utilize digital technologies for processes spanning from preventive care to treatment. By converting Mitsubishi Tanabe Pharma into a wholly owned subsidiary, Mitsubishi Chemical Holdings gained technologies, talent, and other resources for

### Business model reformation for medical advances domain



its operations involved in biotechnology, chemistry, and digitalization. By making the most of those resources while promoting Group-wide R&D, the Company is aiming to maximize returns from its steady investment in R&D and bolster its pipeline in the future.

### Creating an original healthcare platform as a solutions provider

To establish our medical advances businesses in line with KV30, the Group will work to apply digitalization to enable lifelong disease management and create a healthcare platform needed for promoting preventive care and precision medicine during the period of its next medium-term management plan. As a step in this direction, Life Science Institute, Inc. formed a strategic capital alliance with PHC Holdings Corporation, a major Japanese healthcare company in August 2019. Both companies will continue to actively promote collaboration through the alliance.

In addition, it will be necessary for the Group to reform its business model (as shown in the diagram below). Accordingly, while various deregulations and reforms will be essential for eventually contributing to universal health coverage, Mitsubishi Chemical Holdings intends to take the lead in promoting related systems while negotiating with relevant organizations as a key player in the industry. Furthermore, the Group will strive to improve healthcare systems designed to help people stay in good health over their entire lives by providing optimal and efficient services spanning from preventive care to treatment.

### Aiming to maximize synergies across the Group

Mitsubishi Chemical Holdings established a committee to explore ways to generate synergies in the Group's healthcare businesses in December 2019. The committee is examining Group-wide strategies and decision-making processes from the following points of view: business operations, corporate cooperation, and digital transformation (DX), and is taking steps toward executing concrete measures. The committee is also studying ways for the Group's businesses to help people deal with the COVID-19 pandemic.

As one example of how the Group can generate synergy effects, the four operating companies have begun collaborating to develop Muse cell-based products (see the table below). Specifically, Mitsubishi Chemical Corporation is producing cell scaffolding materials and other related materials, Taiyo Nippon Sanso Corporation is using its cold chain to preserve the cells, and Mitsubishi Tanabe Pharma is providing human resources and know-how in the development, production and marketing of pharmaceuticals. The Group is aiming to acquire approval for the product in fiscal 2021 and preparing to market it in the future.

The Group is also carrying out various other projects designed to generate synergies with the goal of increasing its corporate value of the medium to long term.

### Action items to generate Group synergies—Plan for operating companies to jointly develop Muse cell-based products

Activities		Mitsubishi Chemical	Mitsubishi Tanabe Pharma	Life Science Institute	Taiyo Nippon Sanso
Business operations	Regenerative medicine	Production of cell scaffolding materials and other culture peripheral materials, and development of mass culture equipment	Utilization of human resources and know-how in the development, manufacture, and sales of pharmaceuticals	Processing/culturing and formulating of Muse cells	Establishing a cold chain for frozen storage of Muse cells
	Pharmaceuticals + medical materials	Began studying the development of new materials and high-affinity materials			
	Marketing and sales collaboration	Started examining how to improve various products for hospitals and clinics, and strengthening marketing of services using each company's sales channels			
	R&D collaboration	Began examining research themes such as protein modeling and other technologies with a view to launch new businesses in the future			
	Microbiomes	Started researching microbiome analysis and control technologies while exploring new businesses			
	Development of an infectious disease prevention and pandemic response business	Planning for initiative studies on how to generate synergies			
Corporate cooperation		Centralized legal affairs department allowing for increased efficiency and enhanced capabilities			
DX/integrated healthcare platform		Began examining how to step up Group-wide collaboration			