

# Actions against COVID-19

In January 2020, when novel coronavirus disease (COVID-19) spread rapidly through China and other Asian countries, the Daiichi Sankyo Group set up a task force consisting of relevant departments to prepare for a pandemic situation. In late February, prior to the issuance of the WHO Pandemic Declaration, we set up an emergency headquarters headed by CEO and shifted into crisis management system early on. We have taken global measures to prevent the spread of infection and ensure business continuity based on management-level discussions and decision making.

In April 2020, we also established a task force to promote the research and development of vaccines and therapeutic agents on a Group-wide scale, and have been engaged actively in the effort.

## Ensure business continuity

### Provide a stable supply of pharmaceutical products

Under the impact of COVID-19, the Group continues its production activities and provides a stable supply of products while taking measures to prevent infection, in order to fulfill our mission as a pharmaceutical company.

### Take measures to ensure the safety of employees

As part of safety measures against the spread of COVID-19, the Group decided to allow more employees to work from home. As the Group had introduced a work-from-home system for some employees before the spread of the virus, we were able to make this swift decision during the COVID crisis. In addition, the Group removed the limitation on the number of times employees can work from home.

### Reduce the burden on medical institutions

Since the outbreak of COVID-19, medical representative (MR) activities have shifted to non-face-to-face information provision with web communication tools in each country. In an effort to reduce the burden on medical institutions, customer visits are prohibited unless requested or unless important information, such as urgent safety information, information on quality issues that may cause serious health hazards, and information on recall, needs to be communicated.

We see the situation as an opportunity to discuss how we should operate in the “with/post-corona” era.

### Continue clinical studies

With the highest priority placed on the safety of patients, we continue to perform clinical studies in consideration of notifications from regulatory authorities and the situation of study sites and areas in each country, as well as the reduction of the burden on medical institutions. For patients on medication, we work with investigators and

other relevant parties to ensure that the highest priority is given to the safety of patients in the course of continued treatment.

In this connection, some institutions suspended the enrollment of new patients following the spread of infection, however they have begun to resume patient enrollment gradually.

## Combat against COVID-19

### Research and development of vaccines

#### Domestic supply of foreign vaccines

AstraZeneca and the government of Japan agreed to holding concrete discussions over the introduction of a COVID-19 vaccine in Japan. The vaccine is currently under development by AstraZeneca and the University of Oxford in the United Kingdom. In response, Daiichi Sankyo has decided to hold discussions with AstraZeneca regarding the formulation of the vaccine in Japan (vial filling, packaging, storage, and other processes), among others. One of our subsidiaries, Daiichi Sankyo Biotech Co., Ltd. (DSBT) will receive undiluted solution of the vaccine and perform formulation procedures. We consider using DSBT's facilities for “New Influenza Vaccine Development and Production System Development Project”.



Daiichi Sankyo Biotech Kitamoto Plant

### In-house development of vaccine

Daiichi Sankyo participates in the “Fundamental Research on the Control of a Novel Coronavirus (2019-nCoV)”, which is supported by the Japan Agency for Medical Research and Development. We take charge of the development of an mRNA vaccine using the new nucleic acid delivery technology invented by Daiichi Sankyo. We achieved an increase in antibody titers to the novel coronavirus in a pharmacological evaluation of a prototype mRNA vaccine using animal models. Leveraging this result, we positioned the development of the mRNA vaccine (DS-5670) as a priority project. We intend to initiate clinical studies of DS-5670 around March 2021. We will build the supply system by utilizing the Ministry of Health, Labour and Welfare’s “Emergent Initiative to Build Production Capacity for COVID-19 Vaccines (First Round)” adopted in August 2020.

### Research and development of therapeutic agents

In June 2020, Daiichi Sankyo have reached a basic agreement with the University of Tokyo, RIKEN, and Nichi-Iko Pharmaceutical Co., Ltd for collaborative research and development on a Nafamostat inhalation formulation. The Institute of Medical Science, the University of Tokyo discovered that Nafamostat could efficiently inhibit the viral entry process. Daiichi Sankyo utilizes the technology acquired through the development of the anti-influenza agent *Inavir* to promote the research and development for producing the inhalation formulation of Nafamostat with the aim to proceeding to clinical studies by March 2021.

### Drug repositioning

Daiichi Sankyo is taking a drug repositioning approach to explore drug candidates for COVID-19 treatment. Drug repositioning is the process of reusing an existing product or a substance in an R&D project for a new indication. We are conducting a drug repositioning to search for COVID-19 treatments by evaluating the potential applications of our existing products for COVID-19 treatment and focusing on selecting potential target molecules and chemical compounds for COVID-19 therapeutics using the knowledge and experience of our past and current R&D projects in collaboration with academia and others.

### Global relief efforts for COVID-19-affected people

Considering the risk of rapid spread of COVID-19 in areas with undeveloped access to healthcare, Daiichi Sankyo contributed \$1 million through Japan Center for International Exchange to the COVID-19 Solidarity Response Fund for WHO, which was established by the United Nations Foundation and other organizations to support WHO in its activities. We also sponsored a matching gift program, whereby the Company donates the

same amount as the donation from employees, to make contributions to non-governmental organizations and other bodies for supporting their activities in Japan. In addition, we have hosted a webinar on COVID-19 topics and undertaken various other relief efforts for those affected by the virus in Japan and overseas. As for support, we keep information updated on our website.



Webinar on cardiovascular diseases and COVID-19 (Daiichi Sankyo Portugal)

## Future policy

The recent COVID-19 pandemic has brought renewed awareness to the need for vaccines that end the pandemic earlier and help us restore safety and peace in society as well as the importance of preventive care.

With the aim of improving public health, the Daiichi Sankyo Group has been committed to providing a stable supply of seasonal influenza vaccines and enhancing its vaccine supply system for pandemic influenza. We leverage our vaccine business infrastructure that we have built up over the years and our strengths in cutting-edge science and technology to deliver vaccines for COVID-19 and other diseases for which medical needs are high from the perspective of preventive care. In this way, we will continue to pursue our mission of contributing to the enrichment of quality of life.

With regard to the development of therapeutic agents for infectious diseases, we are pursuing research and development to address the field of infectious diseases such as antimicrobial resistance (AMR) and neglected tropical diseases through partnership with external organizations, utilizing knowledge and other resources acquired from our activities to date. For AMR, Daiichi Sankyo decided in July this year to support the development of therapeutic agents for AMR infectious diseases through a contribution of \$20 million in total to the AMR Action Fund.\*

We will remain committed to creating therapeutic agents for infectious diseases that are highly demanded by society through partnership with external organizations.

\*A fund intended to promote the development of new antimicrobial agents for AMR