Protect People Worldwide from the Threat of Infectious Diseases

Materiality

One of the material issues (materiality) that SHIONOGI prioritizes in particular is "protect people worldwide from the threat of infectious diseases." We feel that above anything else, the realization of that materiality constitutes our mission as a leading company in the area of infectious diseases. At SHIONOGI, we aim to simultaneously achieve the resolution of challenges surrounding such diseases and the establishment of a sustainable business model.

Initiatives	Related Indicators	Current Progress	-	Remaining Issues/Needs
Providing products and services for acute infectious diseases	 Number of acute infectious disease-related pipelines: 4 products Number of serious infectious disease-related pipelines: 2 products Number of countries adopting subscription-type reimbursement model: 2 Number of countries where cefiderocol can be supplied through partnership with GARDP and CHAI: 135 Number of contracts for wastewater-based epidemiology (WBE) survey services 	 (1) R&D for solutions for a wide range of acute infectious diseases • Influenza virus, SARS-CoV-2, norovirus, RS virus, and other diseases. • Stockpiling of Xofluza by the national government (2) Handling of antimicrobial resistance (AMR) • Launch of cefiderocol in U.S. and Europe • Adopting subscription model for cefiderocol in two countries 	>	 (1) Provide solutions for a wide range of acute infectious diseases Provide solutions for various viruses Provide therapeutic drugs that are effective and safe against COVID-19 Maximize the value of Xofluza and prepare against mass outbreaks of influenza virus infections (2) Further handle serious infectious diseases that include AMR bacteria Expand the number of countries of sale and countries adopting the subscription model Create new solutions
Providing products and services for chronic infectious diseases	 Number of HIV-related products in pipeline: 1 product Contributing to improvement of QOL with cabotegravir Developing antimycobacterial disease drugs, antimalarial drugs and a malaria vaccine 	(1) Initiatives targeting HIV infections • Launch of long-acting therapeutic and preventive drugs (2) Initiatives targeting mycobacterium tuberculosis (TB)/Nontuberculous Mycobacterial (NTM) diseases • Research into new action mechanism mycobacterial treatments (3) Initiatives targeting malaria • Research into innovative antimalarial drugs)	(1) Initiatives targeting HIV infections • Further improving QOL through remedying side-effects and drug administration frequency (2) Initiatives targeting mycobacterium tuberculosis (TB)/ Nontuberculous Mycobacterial (NTM) diseases • Providing therapeutic drugs that are effective against resistant bacteria (3) Initiatives targeting malaria • Handling resistance to antimalarial drugs • Providing an effective vaccine
Building a vaccine business	 Providing a COVID-19 vaccine Establishing vaccine manufacturing facilities 	 (1) Building a vaccine business Developing a COVID-19 vaccine Establishing manufacturing facilities aimed at stable supply)	(1) Building and bolstering a vaccine business • Providing a COVID-19 vaccine • Providing a nasal vaccine • Providing a combined, polyvalent vaccine • Providing a universal vaccine • Expanding the vaccine to cover other illnesses



Provision of wide-ranging solutions and contributions to protect people worldwide from the threat of infection through total care as a leading company in the area of infectious diseases

Initiatives targeting acute infectious diseases

SHIONOGI continues to create innovative infectious disease treatment drugs and provide them to society. These include the anti-HIV drug dolutegravir and cabotegravir, the influenza antiviral drug Xofluza, and the siderophore cephalosporin antibiotic cefiderocol. It is the possession of knowhow cultivated over more than 60 years of continued research and development for infectious diseases that has enabled us to bring forth new drugs in that domain on an ongoing basis. Today, we continue to leverage that knowhow in promoting initiatives targeting the creation and provision of wide-ranging solutions that include the likes of wastewater-based epidemiology, preventive vaccines and diagnostic drugs in addition to therapeutic drugs to counter acute infectious disease pathogens such as the influenza virus, the norovirus, the RS virus and the like.

Help to tackle serious infectious diseases including AMR bacteria

By bringing forth new drugs to counter serious infectious diseases that include AMR bacteria, while simultaneously promoting the proper use of infectious disease treatments, SHIONOGI prevents the outbreak of new resistant bacteria and viruses and continuously works towards ensuring that patients can keep receiving treatment both now and in the future.

AMR is a real, pressing global threat. It is estimated that if there continues to be no measures taken against it, the number of resulting deaths will exceed those from cancer by the year 2050, and will reach 10 million people per year. As a leading company in the area of infectious diseases, SHIONOGI is reinforcing its cooperation with national governments, international agencies, pharmaceutical companies, doctors who prescribe antibiotics and other stakeholders to push forward with initiatives geared towards AMR countermeasures.

Providing cefiderocol

Among AMR, gram-negative bacteria, which has gained resistance to existing drugs, has a high incidence rate and is exhibiting a greater trend of infection, is cited as a priority

challenge in healthcare. As a promising treatment option to address that challenge, we created cefiderocol, the world's first siderophore cephalosporin antibiotic. We initiated sales of cefiderocol in the U.S. and Europe in 2020, after which it was included on the WHO's Model List of Essential Medicines.

Moreover, cefiderocol was granted application of New Technology Add-on Payment (NTAP), a system of reimbursing hospitalization and treatment costs to hospitals for encouraging the introduction of new medical technology, by the U.S. Department of Health and Human Services. This is leading to improved access to drugs for patients who require cefiderocol. Furthermore, a subscription-type reimbursement model (a system in which countries can receive antibiotics as necessary in exchange for the payment of fixed remuneration from their national government to SHIONOGI) was adopted in both the UK and Sweden.

Up until now, numerous patients, particularly those in the U.S. and Europe, have benefited from the use of cefiderocol. Meanwhile, however, AMR has been exerting even more serious effects on low- and middle-income countries, not just their developed countries. We therefore executed a partnership agreement with GARDP and CHAI for the global provision of cefiderocol to low- and middle-income countries as well. This represents the first agreement that a pharmaceutical company and NGOs that tackle public health as a priority issue have entered with respect to therapeutic drugs for serious bacterial infections. We believe it to be a significant step towards addressing the challenges posed by AMR. While also promoting initiatives by the three parties to this agreement, going forward, we will continue to endeavor towards ensuring that we can get such medicines into the hands of patients who need them without delay.

Please see p. 65 for details on initiatives for promoting proper use and p. 63 for details on improving access to cefiderocol.

Initiatives targeting serious infectious diseases

In May 2022, SHIONOGI executed a new agreement with F2G for the development and exclusive distribution of olorofim, a

Actions that SHIONOGI believes are necessary in order to tackle the problems posed by AMR



Creating predicable, sustainable markets for AMR therapeutic drugs with the introduction of new value evaluation for pull incentives and insurance reimbursement



Harmonizing international regulations on the development and approval of new antibiotics



Building networks that enable clinical trials and research with greater efficiency



Promoting the proper use and management of antibiotics, including that for animals, and surveying resistant bacteria epidemiology over time



Creating new effective antibiotics on our own or in cooperation with other companies



Mitigating the impact of antibiotic manufacturing processes on the environment

Protect People Worldwide from the Threat of Infectious Diseases

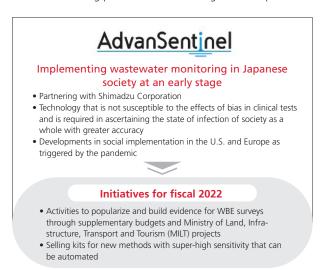
new antifungal drug intended to treat invasive aspergillosis, in the European and Asian regions. Invasive aspergillosis is a fungus infection with a high case mortality rate that occurs when the functions of the immune system decline. Expectations are that olorofim, given its new action mechanism, will provide a new treatment option for patients who cannot use existing therapeutic drugs due to having resistance to them or for tolerance or drug interaction-based reasons.

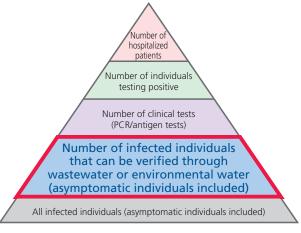
Initiatives geared towards wastewater-based epidemiology (WBE)

It is difficult to predict exactly when and where pandemics of infectious diseases will occur and what kind of pathogens will be behind them. Wastewater-based epidemiology (WBE) surveys are an effective method of detecting such signs early on. As such, they are anticipated to be used as an objective indicator when taking preventive measures against the spread of

infections. Viewing outbreak projections as a key element in realizing total care for infectious diseases, in June 2021, we commenced the provision of WBE survey services for COVID-19. Through these services, using high-sensitivity detection technology developed through joint research with Hokkaido University, we regularly monitor the concentration of the virus content in wastewater and survey the state of infection in the affected region. These surveys were also implemented in the Tokyo 2020 Olympic and Paralympic Village, and was reported to have prevented cluster infections from occurring when paired with individual tests.

Additionally, in January 2022, SHIONOGI and Shimadzu Corporation established AdvanSentinel, a joint venture intended to monitor wastewater and otherwise assess public health risk. AdvanSentinel aims to do its part for infection countermeasures by establishing an all-Japan framework aimed at efforts such as ascertaining the next pandemic beyond COVID-19 and the risk to public health that it poses.





^{*}From "WHO: Environmental surveillance for SARS-COV-2 to complement public health surveillance – Interim Guidance" following partial modification

Developing solutions for the three major and other chronic infectious diseases

Among chronic infectious diseases, the three major infectious diseases in particular constitute a massive threat and challenge from the standpoint of global health, and are positioned as infectious diseases that necessitate countermeasures in order to achieve SDG Goal 3: Good Health and Well-Being. As a leading company in the area of infectious diseases, in addition to expanding its preexisting forte of HIV research to that on the three major infectious diseases, SHIONOGI tackles these challenges through various forms of collaboration with external parties.

Initiatives targeting HIV

Since discovering *Tivicay* (dolutegravir), a highly effective, highly safe HIV integrase inhibitor with minimal risk of drug resistance, SHIONOGI has continued to tackle HIV infections. By keeping up the challenge of addressing troubles experi-

enced by patients, we have successfully mitigated side effects and reduced drug administration frequency and otherwise made considerable contributions to improving the QOL of HIV patients while preserving the effects of drug treatment.

For the mitigation of side effects, the adoption of dolute-gravir as key drug made it possible to treat patients with a two-drug combination. In turn, this led to the launch of *Juluca* (dolutegravir + rilpivirine) and *Dovato* (dolutegravir + lamivudine). Today, prescriptions of this two-drug treatment centered on *Dovato*, which was added to the U.S. guidelines on the management of HIV infection, are expanding.

For the reduction of drug administration frequency, SHIONOGI discovered a long-acting formulation of the HIV integrase inhibitor cabotegravir (generic name). Given the expectation that the significant reduction in the number of days taken per year will help improve patient QOL and adherence to the drug regimen, there are considerable patient and

medical institution needs that are expected to translate to a larger market for long-acting pharmaceuticals. Prolonged action preparation with the simultaneous use of cabotegravir and rilpivirine (U.S. product name: CABENUVA) enables treatment with administration intervals of once every two months. This is being supplied to a large number of countries, starting with the U.S. and European nations. Additionally, regarding uses intended to prevent HIV infection, while it was necessary up to now to ingest oral medication daily, the launch of Apretude (a cabotegravir prophylaxis) has made it possible to prevent HIV infection with bimonthly administration.

Presently, drug administration intervals are once every two months for both treatment and prevention. We will continue our research and development for new drugs with the aim of prolonging those intervals even further to once every three or six months. S-365598, which SHIONOGI out-licensed to ViiV in fiscal 2021, is a compound expected to prolong those intervals to three or more months. Nonclinical studies are currently underway at ViiV with the goal of commencing clinical trials in fiscal 2022.

Initiatives targeting mycobacterium tuberculosis (TB) and Nontuberculous Mycobacterial (NTM) diseases

Mycobacterial diseases are caused when patients are infected with mycobacteria (mycobacterium TB and NTM). In recent years, a rise in the number of such patients has been reported in developed countries, Japan included. As existing therapeutic drugs involve long treatment times and do not yield sufficient therapeutic effects, hopes are being placed on the development of new, highly effective drugs.

In May 2018, SHIONOGI commenced joint research with

Hsiri Therapeutics with the goal of discovering drugs with new mechanisms of action to treat mycobacterial diseases, and has since pursued research on drug discovery together. In October 2019, as an endeavor to further bolster this joint research, we entered a new licensing agreement aimed at the discovery of therapeutic drugs for mycobacterial diseases that have different mechanisms of action.

Initiatives targeting malaria

According to a report by the WHO, in 2020, over 240 million people developed malaria during the year, predominantly in tropical regions. Moreover, this infectious disease took the lives of more than 600,000 people that year, most of which were children aged five and under. While the number of malaria patients had been trending downwards due in part to improved public health, that trend has reversed in recent years, and strains resistant to mainstay drugs are currently spreading. Additionally, the habitats of the Anopheles mosquito, a known carrier of malaria, have expanded due to the impact of climate change, with concerns that infection will possibly spread to nations in the northern hemisphere, including Japan and North America. SHIONOGI has been promoting drug discovery efforts by establishing a collaborative system with Nagasaki University since 2019 and with the National Institute of Infectious Diseases and Kitasato University since 2020. Going forward, we will continue to bolster our collaboration as we aim to discover innovative antimalarial drugs.



Please see the below website for details on the WHO report. https://www.who.int/teams/global-malaria-programme/ reports/world-malaria-report-2021

Developing vaccines aimed at total care for infectious diseases

The COVID-19 pandemic resulted in elevated levels of interest in vaccines. The fact is that ever since the discovery of the smallpox vaccine by Edward Jenner, vaccines against numerous infectious diseases have been put into use over our long history. For years, it has been an earnest wish at SHIONOGI to move into the vaccine business with a view to realizing total care for infections that goes beyond therapeutic drugs. By welcoming UMN Pharma as a wholly-owned subsidiary of SHIONOGI, we have taken a major step towards our transformation into a HaaS* company.

We have been moving along with vaccine development efforts with the use of BEVS, a recombinant protein vaccine manufacturing technology owned by UMN Pharma that uses viral antigen proteins. As a technology, BEVS is well-suited to high-speed, low-cost mass production, with multiple products having already been approved and put to use. For that reason, it is known as a technology whose effectiveness and safety have already been established. Furthermore, SHIONOGI is the sole company in the world to have established rhabdo-free insect cell cultivation technology without the inclusion of rhabdoviruses,

which we recognized as one of our competitive advantages.

At present, we have been tackling the development of a COVID-19 vaccine with priority. At the same time, we are also moving along with preparations to divert that vaccine to those for influenza virus, pneumococcus bacteria, RS virus and other acute infectious diseases and to develop mixed vaccines. Furthermore, we are also working towards developing nasal vaccines in addition to general intramuscular injections. As of now, we are pursuing nonclinical studies for nasal vaccines targeting COVID-19 and influenza virus infections. Nasal vaccines have the merits of allowing immunity to be effectively induced in the respiratory mucosa, the area that becomes infected, as well as in the entire body, and not necessarily requiring administration using an advanced medical care system or by healthcare professionals. To accelerate the development of these vaccines, in April 2022, we jointly established a research department with Chiba University. Endeavors aimed at reinforcing our vaccine business continue to progress steadily.

^{*} Healthcare as a Service: Provide a range of healthcare services in line with customer needs, rather than only providing pharmaceuticals

Improve Social Productivity and Extend Healthy Lifespans

Materiality

Around the world, the average lifespan continues to increase thanks to improvements in public health and advances in medical technology. How to extend healthy lifespans—the period during which people can live without restrictions on daily living due to health issues—and how to lessen differences from average lifespan are matters that SHIONOGI has identified as material issues. In the fields of psychoneurological disease and pain, factors that threaten healthy lifespans in developed countries and other aging societies, we will undertake improvement of the societal environment and the provision of products and medical services that go beyond conventional medicines, to help achieve a society of healthy longevity in which all can enjoy more rewarding lives.

Initiatives	Related Indicators	Current Progress		Remaining Issues/Needs
Creation of products and services for psychoneuro- logical diseases, which have a high level of unmet medi- cal needs	Number of psychoneurological diseases-related pipelines: 7 products	 Provision of ADHD medicines with differing mechanisms of action Sales alliances for insomnia thera- peutic drugs Development and sales alliances for therapeutic digital apps (ADHD, insomnia))	Provision of additional support and new treatment options for psychoneu- rological disease patients
Provision of optimal treat- ment choices for the causes of pain	• Number of pain-related pipelines: 3 products	Development of pain therapeutic drugs with different mechanisms of action	•	Provision of treatment options with mechanisms of action different from those of existing medicines
Securing of new assets to deal with the super-aging society	Number of oncology-related pipelines: 5 products	Continued development of the cancer area pipeline	•	Provision of more effective solutions optimized for individual patients
Programs to promote public understanding of disease traits and the problems of people affected	Number of educational activities held via webinars, etc. Number of support services pro- vided in the area of developmen- tal disorders	 Achieved the target amount of crowdfunding for initiatives to support persons with disabilities (educational comics to future healthcare professionals) Conclusion of a business coopera- tion agreement with various municipalities regarding a bright future for children)	Total support for patients with disabilities Provision of enhanced support for social issues involving developmental disorders Further strengthening of cooperation with municipalities and educational organizations

Contribution to a society in which everyone can live longer, more fulfilling, and more active lives

Value Created

Achievement of medical services tailored to individual concerns

Under STS2030, SHIONOGI is advancing initiatives to solve social issues with a focus on the areas of the psychoneurological diseases and pain that threaten healthy lifespans, while also battling the threat of infectious diseases that lessen people's average lifespans. With the aim of achieving a society in which everyone can live longer, more fulfilling, and more active lives, we have provided therapeutic drugs to treat depression, ADHD, and pain. Because CNS disorders are caused by a combination of factors, solving all issues with a single solution is difficult. Solutions that consider the environment and the symptoms of each individual patient are neces-

Bringing about a world in which patients can receive the appropriate healthcare products and services in a timely manner.



sary. Acting under the concept of total care and setting out an image for ourselves as a HaaS company that provides wide-ranging healthcare services extending beyond conventional prescription drugs, SHIONOGI will provide a wide range of solutions that go beyond conventional pharmaceuticals to

address not only treatment but also disease awareness programs, prevention, and diagnostics. We do so with the aim of bringing about a world in which patients can receive the healthcare products and services appropriate for each patient to solve his or her issues in a timely manner.

Development of solutions optimized for individual patients

In the area of psychoneurological and other CNS disorders, mechanisms of pathology remain largely unknown, and many patients do not get the full therapeutic effect of treatment due to the complex factors behind onset. In some cases, efficacy can be realized through therapeutic drugs with different mechanisms of action, yet some patients may be unable to continue medication due to side effects. Two applications currently in development, insomnia therapeutic

app from SUSMED Co., Ltd. and ADHD digital therapeutic app AKL-T01(approved in the U.S.) from Akili Interactive Labs, Inc., are examples of solutions that embody the HaaS concept to meet the needs of such patients. By providing innovative treatment options that go beyond conventional medicines, we will contribute to the enhancement of productivity and QOL for patients and their families.

Toward the achievement of the SHIONOGI Group VISION

Under STS2030, SHIONOGI seeks to undergo a transformation from a drug discovery-based pharmaceutical company to a HaaS company. To expand the breadth of our existing business and achieve this transformation, collaboration with a variety of partners in industry, government, and academia is vital. In July 2022, we reorganized the company's structure and established the Investment Strategy Department to handle strategic investment outside the company and further strengthen co-creation from the research and development stage onward.

To strengthen the vaccine business that we entered into in 2019 as well as the diagnostic drug business that is indispensable in prevention and prediction, we consolidated the Vaccine Business Department and the business functions of the Biomarker R&D Department to establish the Vaccine and Diagnostic Drug Department. We have placed the Diagnostic Drug Office and the Partnership Promotion Office under this new department and are accelerating the integrated development of our vaccine business.

SHIONOGI Transformation



Tatsuya Yanagawa Business Creation Group Manager, New Business Promotion Department

Message from an Employee

A world realized through the HaaS concept

We have already begun providing new value that extends beyond the treatment of diseases, as seen in the launch of AdvanSentinel Inc., a company that aims to detect infections. We are working to bring about a society in which the signs and characteristics of diseases and the condition of affected people can be accurately grasped and in which solutions can be provided in a way that reduces the burdens on the individuals concerned as well as on those around them. Leveraging strengths of SHIONOGI including the scientific capabilities we have built up as a drug discovery-based pharmaceutical company, we will advance efforts to create brand new value in collaboration with partners wielding other strengths.

Contribute to Sustainable Social Security

Materiality

Over 60 years have passed since the introduction of Japan's universal health insurance system in 1961. During that time, Japan has become the country with the world's highest average lifespan and healthy lifespans. The World Health Organization (WHO) has commended Japan's universal health insurance system for its level of achievement of uniform health and the fairness of its cost burden. At the same time, the burden on the working generation is growing under environmental changes in Japan including a declining birthrate, aging population, and low economic growth, threatening the sustainability of the system. While the advance of medical care has made great contributions to defeating diseases that had been difficult to treat, it has also led to financial pressures today.

SHIONOGI defines its primary mission as the provision of new treatment options that can free patients from the suffering caused by illnesses. However, it is also necessary to address the social issue of increasing medical costs. To do this, SHIONOGI is working not only on conventional small-molecule drug discovery, but also on self-medication, and raising awareness about disease prevention. We seek to be a company that continues contributing to the extension of healthy lifespans and sustainable social security.

Initiatives	Related Indicators	Current Progress		Remaining Issues/Needs
Extending healthy lifespans by providing new treat- ment options	Provision ratio for each modality of products and services	 Development of new modal- ity products and services including vaccines, antibody drugs, and treatment apps)	 Balance between medical care resources and prices of new modality products Selection of appropriate modality matched to dis- ease/application
Promotion of self-medication	Number of OTC drugs and sales results	 Launch of four switch OTC drugs Operation of OTC and health food internet sales sites 	•	 Provision of new options for OTC drugs and self- medication
Enhancement of awareness and knowledge of illness	Number of visits to sites for patients and their families	Enhancement of infectious disease-related information websites	•	Provision of more substantial information on diseases

Value Created

Contribution to the extension of healthy lifespans and sustainable social security

Providing services at appropriate prices

Antibody drugs, nucleic acid drugs, regenerative medicines, and other innovative biopharmaceuticals have undergone remarkable advances in recent years. While these biopharmaceuticals contribute greatly to the prevention and treatment of diseases that had been difficult to treat, concern exists that high prices of the drugs will place pressure on medical insurance finances. From a standpoint of risk versus benefit, SHIONOGI believes that conventional small-molecule drugs

and biopharmaceuticals should continue to coexist. While holding to our goal of providing patients with innovative treatment options that include biopharmaceuticals, in response to addressing the growing cost of medical care as well, we will maintain our commitment to the creation of the small-molecule drugs that we see as our strength. By doing so, we will contribute to both the extension of healthy lifespans and sustainable social security.

Promotion of self-medication

To control the rising costs of social security and to maintain Japan's world-class universal health insurance system amid an ultra-low birthrate and aging society, it is increasingly necessary that people adopt a mindset of guarding their own health. To promote self-medication, SHIONOGI is advancing the development of new OTC products and is switching from prescription drugs to OTC drugs such as Rinderon. On our

patient-oriented websites, we also provide information that lets people learn more about infectious diseases and other illnesses, to raise people's interest in their own health. By deepening understanding of disease and by making use of OTC drugs for the maintenance of health and the prevention and treatment of illnesses, we seek to maintain both people's health and the social security system.

Initiatives by Shionogi Healthcare Co., Ltd.

Amid a growing need for self-medication, Shionogi Healthcare is undertaking the following initiatives to enhance the familiarity and proper practice of self-care under the business concept of "easy, correct, and enjoyable self-care for all."

Expanded lineup of switch OTC drugs with the same components as prescription drugs

In response to requests by customers for pharmaceuticals that can be purchased without prescriptions or hospital visits, we have made efforts to expand our lineup of switch OTC drugs, making a wide range of familiar pharmaceuticals available at drug stores and EC sites.

Introduction of easy-to-use universal packaging

To ensure the proper use of Shionogi Healthcare's medicines, we have changed to universal packaging that visually and tactilely communicates information on the medicine and how to open the packaging, starting with products of our main brands in particular. Products' descriptions are translated into multiple languages and their packaging is debossed with "accessible codes" using QR Translator technology that assists understanding by reading text aloud. This makes the products easy to use for the elderly, the visually impaired, and those who speak primarily other languages.



Pursuing ways to make information easy to understand

1 Design of reader-friendly package inserts

Through the use of illustrations and icons in multiple colors, we design package inserts for OTC drugs to be easy to read, easy to understand, and conducive to safe use. The content goes beyond pharmaceutical information to provide consumers with helpful information that is useful in self-care.

2 Strengthening of information provision on our websites and social media

In addition to supplying products, we also make efforts to provide a wealth of information on our websites. The Shionogi Healthcare website and our brand websites offer a store search function* that lets consumers easily search for stores that handle Shionogi Healthcare products. We are also working to enhance information on diseases through means such as our "Hifushiru Wakaru" website that offers self-care support information related to skin diseases. As an initiative to lower the hurdles of self-care and to provide readily accessible support for the easy and comfortable practice of selfcare, we are expanding our information communication channels to embrace social media and other outlets. We are also actively distributing rich media content that incorporates video and audio, offering techniques for lifestyle improvement closely tied to sleeping, diet, exercise, and other elements of everyday life. We also carry out projects that people can physically take part in, such as public lectures and events.

As customers' needs diversify in line with changes in the social environment, Shionogi Healthcare is meeting those needs and is contributing to the extension of healthy lifespans and sustainable social security through excellent products, information, and services.

* The store search service was jointly developed with ONE COMPATH Co., Ltd. in March 2022

Improve Access to Healthcare

Materiality

Access to medicines is a critical issue for many people through the world. At SHIONOGI, we collaborate with a variety of international agencies to earnestly tackle that issue.

To improve access to medicines, in addition to getting them into the hands of people, it is vital to properly convey medical knowledge and improve the recognition of illnesses, the rate of diagnosis and the proper use of medicines. Based on this idea, in January 2022, we revised the "Shionogi Global Health Access Policy Statement" to add items pertaining to that proper use.

Shionogi Global Health Access Policy Statement

Developing innovative therapies to address unmet medical needs Promoting proper use of medicines

Improving access for patients in need

Strengthening healthcare systems

Please see SHIONOGI's website for details on this policy.

https://www.shionogi.com/global/en/company/policies/shionogi-group-global-health-access-policy-statement.html

Initiatives	Related indicators	Current progress	-	Remaining challenges/needs
Developing innovative therapies	Number of globally-developed products: 16	Launch of cefiderocol, an anti-infective drug against multidrug-resistant bacteria, to the market in the U.S. and Europe)	Threats caused by spreading of drug-resistant bacterium Addressing unmet medical needs in the psychoneurological domain
Promoting proper use	Frequency of the provision of information aimed at proper use and the understanding of illnesses -Number of website views: 1.8 million -Number of events: 8 -Number of event participants: 2,516 -Preparing and distributing communication tools aimed at patients with hearing impairments Number of over-the-counter drugs whose packaging was given universal design: Approx. 60	 Collaboration agreement with GARDP and CHAI Providing information aimed at proper use and understand- ing of illnesses Promoting activities to elimi- nate barriers to communica- tion regarding the taking of medicine by patients with disabilities 	•	 Remedying improper use of medicine Improving correct knowledge of illnesses and understanding of pharmaceutical information Improving access to pharmaceutical information by patients who require a guarantee of information accessibility
Improving access	 Executed agreements for access to cefiderocol in 135 countries Number of countries where ViiiV provides dolutegravir and cabotegravir globally: Over 140 Number of countries adopting subscription-type reimbursement model: 2 	 Securing access to low- and middle-income countries through partnering with GARDP and CHAI Inclusion of cefiderocol on the WHO Model List of Essential Medicines Disclosed intellectual property policy)	 Improved access to cefiderocol Improved access to vaccines
Strengthening healthcare systems	Number of programs for strengthening medical infrastructure in lowand middle-income countries: 2 Mother to Mother SHIONOGI Project: Prevalence of diarrhea down by 58%; percentage of childbirth at public health facilities increased twelvefold	Executed Letter of Intent that included transfer of technology for vaccine manufacturing to Vietnam Mother to Mother SHIONOGI Project: Prevalence of diarrhea and nutritional condition of children improved; number of users of mother and child public health services increased)	Strengthened health care systems in low- and middle-income countries Mother to Mother SHIONOGI Project: Challenges with mother and child public health in Kilifi County, Republic of Kenya



Contribution to universal health coverage

Contributions to global health

Made global to access to healthcare



Contributions aimed at improving access to antiinfective drug against drug-resistant bacterium

Cefiderocol, a new anti-infective drug against multidrug-resistant bacteria, is effective against all three types of carbapenem-resistant pathogens that WHO requires the highest priority measures (Acinetobacter baumannii, Pseudomonas aeruginosa and Enterobacteriaceae), and is also included on the WHO Model List of Essential Medicines. With cefiderocol, the product of our accomplishments in research and development, as the focus, we at SHIONOGI believe that we can do our part for global health by endeavoring to address serious AMR issues on a global plane.

In improving global access to antibiotics, a major challenge is promoting proper use and preventing further resistance to antibiotics. However, the regions that need access to antibiotics the most do not have an environment in place where they can be used properly due to social factors such as healthcare systems, poverty and public health education. This presents barriers to improving access to antibiotics.

For the purpose of improving that access in countries around the world, in June 2022, SHIONOGI entered a licens-

Partner: ViiV Solutions: Dolutegravir and cabotegravir Number of countries where provided: Over 140

ing agreement that included technology transfer with the Global Antibiotic Research and Development Partnership (GARDP) as well as a collaboration agreement with GARDP and a third party, the Clinton Health Access Initiative (CHAI).

Under this licensing agreement, the road to accessing cefiderocol will open up in 135 countries across the world, including all low-income countries, numerous lower-middle-income countries and upper-middle-income countries. Additionally, the collaboration agreement covers regulations intended to reinforce stewardship programs at medical institutions that are necessary in order to ensure the proper use of antibiotics. Through this partnership with an NPO, the very first of its kind in the world for antibiotics, SHIONOGI will provide patients who require cefiderocol with that drug across various barriers, and do its part for global health in the process. Simultaneously, we will go on to present the ideal nature of vigorous, promising collaborations for access to antibiotics in our capacity as a leading company in the area of infections.

Please see SHIONOGI's website for details on this collaboration agreement for cefiderocol.

https://www.shionogi.com/global/en/news/2022/06/e220615.html

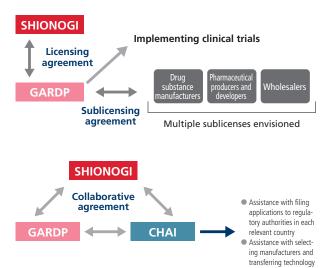
Fusing the strengths of SHIONOGI, GARDP and CHAI Dealing with issue of access

The advantages of CHAI and its value proposition A wealth of experience with AMR challenges Record and specialization in the manage A strong relationship with the WHO ment of access programs for HIV in low- and Deployment capability in Latin America middle-income countries Broad deployment capability to southern Medium- to long-term commitment African and Asia Intensive support and cooperation over the short to medium term **S** GARD P SHIONOGI Cefiderocol The advantages of Understanding of product attributes and SHIONOGI and our expertise in manufacturing

Responsibility for access to medicines

value proposition

New initiatives for improving access to cefiderocol A three-way collaborative framework



Improve Access to Healthcare

Contributions aimed at improving access to therapeutic drugs for HIV

Out of worldwide quantities of the anti-HIV drug dolutegravir that we out-licensed to ViiV and combination drugs containing it, over 40% are accounted for by developing countries. Dolutegravir is registered in the Medicines Patent Pool. Because we released the use of the patent for that drug free of charge, it is now possible for generic drug manufacturers to manufacture dolutegravir as a stand-alone drug or as a combination with other anti-HIV drugs and supply them to over 140 low- to middle-income countries. SHIONOGI contributes to access to such anti-HIV drugs as one of the patent rights holders for dolutegravir.

Accelerating clinical trials and transferring technologies

Two challenges in improving access to patients who require pharmaceuticals by SHIONOGI and contributing to global health are establishing infrastructure for large-scale clinical trials to realize early development and securing a manufacturing framework that is able to accommodate required quantities.

To address such issues, in November 2021, we executed a Letter of Intent regarding countermeasures for infectious diseases, COVID-19 included, with the Ministry of Health of Vietnam. In tackling the immediate challenge that COVID-19 poses, we have been promoting clinical trials in that country for vaccines and orally-delivered therapeutic drugs in middevelopment as well as pursuing discussions areas such as cooperating with the Vietnamese government on the transfer of manufacturing technologies for vaccines. Additionally, in December 2021, we commenced global Phase 3 clinical trials for the COVID-19 vaccine S-268019 in Vietnam.

Support for maternal and child health in Africa: Mother to Mother SHIONOGI Project

In Sub-Saharan Africa, the mortality rate of pregnant woman and children under the age of five is exceedingly high, with considerable challenges still remaining in the accomplishment of SDG Goal 3: Good Health and Well-Being. Concrete initiatives aimed in achieving universal health coverage (UHC) are needed.

In realizing a sustainable society, an environment where the next generation of children can healthily grow is indispensable. Since 2015, together with the international NGO World Vision, we have been engaged in activities the Republic of Kenya aimed

at realizing a community where the health of mothers and their children can be independently and continuously managed.

Second-Term Project (Kilifi County, Republic of Kenya, April 2020 – March 2023 (tentative))

We handed over the maternity building, clinical laboratory and other facilities that we had been developing under the project to the county government. The locally-based public health management team that oversees public health administration thanked us for the infrastructure-based support at clinics as well as training in preserving and managing that infrastructure and support for activities to educate local residents, which we combined to yield considerable effects in the improvement of access to healthcare. Furthermore, we are also pursuing the development of water supply facilities and the education of local residents in nutrition and water hygiene.

At one of the three clinics that we rendered assistance to, with the aim of providing stable medical services, we elicited the cooperation of Panasonic Holdings Corporation in installing a solar power generation system. Through cross-sectoral partnerships, we will continue to leverage the strengths of each sector and tackle the improvement of access to healthcare in Africa and the achievement of UHC as we move forward.

Accomplishments up to 2021

Total number of individuals who received medical services (cumulative number for both First-Term and Second-Term Projects)

Clinics

104,522

Traveling treatment

21,728





The maternity building handed over to Kilifi

The clinic with solar panels installed



Please see SHIONOGI's website for details on the Mother to Mother SHIONOGI Project.

https://www.shionogi.com/global/en/sustainability/society/social-contribution-activities/mtom.html

Tackling improved access to healthcare in Japan

At SHIONOGI, we believe that it is vital to properly convey medical knowledge and improve the recognition of illnesses, the rate of diagnosis and the proper use of medicines in order

to improve access to healthcare. In Japan, we are working towards improving that access by providing medical professionals, patients and families with the correct information.

Promoting the proper use of anti-infective drugs and conducting learning and development activities

We believe that controlling the outbreak of drug-resistant bacteria and resistant viruses is a necessary part of our responsibility as a corporation in the business of anti-infective drugs.

At SHIONOGI, we keep the sales volumes of anti-infective drugs by MRs and HR evaluations separate from the standpoint that doing so will lead to the proper use of those drugs and the continuity of medicines. Additionally, we aggressively pursue initiatives aimed at the widespread education and learning and development of the general public on correct knowledge of areas such as the prevention and control of illnesses and infectious disease, which is an absolute must for the proper use of anti-infective drugs.

In fiscal 2021, we collaborated with external entities such as World Vision Japan, the Tokyo Association of Public Health Center Directors and the Women's Healthcare Awareness & Menopause Network Society to hold learning and development seminars and practical classes for the general public. Furthermore, for website-based enlightenment efforts, we opened "Female Infectious Diseases Navi" as a means of countering such diseases particular to women, "Senior Infectious Diseases Navi" to do the same for elderly individuals while also helping to preserve their health, and "Learning about HIV/AIDS through Comics" as a means of enlightening others on correct information regarding HIV infections on a widespread basis. Additionally, we proactively communicate the above activities using SHIONOGI's official Twitter account.







Senior Infectious Diseases Navi (Japanese only) https://www.shionogi.com/jp/ja/ sustainability/informations-for-id/ senior_navi.html?tgh



Learning about HIV/AIDS through Comics (Japanese only) https://www.shionogi.com/jp/ja/sustainability/informations-for-id/hiv.html?tgh

Initiatives for promoting the understanding of psychoneurological diseases and pain

Over a period of thirty years, SHIONOGI has worked together with governments, academic societies and medical professionals to engage in activities to realize greater pain relief for cancer patients. Going forward, we will continue to resolve misconceptions surrounding medical narcotic drugs and conduct learning and development activities aimed at realizing a society where patients who suffer from cancer pain can feel more at ease with

using such drugs. Additionally, for developmental disorders, we are working on providing information on treatment and assistance for affected individuals and their families as well as holding seminars and publishing articles for promoting understanding among members of society, starting with parents and guardians raising small children. Additionally, in the course of collaborating with local governments and other entities to promote the development of human resources who assist persons with developmental disorders and members of their families, we have received positive feedback from participants in associated training such as citing how children with such disorders are enjoying longer time spent in a relaxed state. SHIONOGI will aim to realize total care through these activities.

Communications Barrier-Free Project (CBF-PJ)

As part of its Vision, SHIONOGI is implementing the Communication Barrier-Free Project (CBF-PJ) to eliminate communications barriers with hearing/visual impairments and medical personnel when they are accessing medicine. Since 2017, we have been holding seminars with employees with hearing impairments employees serving as instructors to enlighten medical professionals on the attributes of such impairments and how they should be ideally handled (These seminars have a 98% satisfaction rate.). From fiscal 2020, we have been offering these seminars in an online format, using them to provide numerous medical professionals with information. In addition to producing and supplying enlightenment materials and communication tools aimed at patients, through local governments with whom we have entered collaborative agreements, we distributed guide cards at COVID-19 vaccination venues.

Additionally, we took on the challenge of crowdfunding the production of a comic to communicate the troubles experienced by persons with hearing impairments at medical institutions and how to handle them to students in medical disciplines who will be involved in healthcare in the future. Thanks to the support of many individuals, we were able to reach our target amount. We will effectively use these funds with the hope that having as many people as possible become familiar with hear-



ing impairments will result in greater social approval for associated initiatives.

Crowdfunding (from READYFOR website)

Please see SHIONOGI's website for details on initiatives aimed at the proper use of medicines and understanding of illnesses. https://www.shionogi.com/global/en/sustainability/improveaccess-to-healthcare/proper-use.html

Please see SHIONOGI's website for details on the CBF-PJ. https://www.shionogi.com/global/en/sustainability/society/ social-contribution-activities/cbf.html

Supply Socially Responsible Products and Services

Materiality

It is SHIONOGI's duty as a life-related company to protect people's health by providing a stable supply of essential, high-quality products and services. Our entire Group is focused on product quality, safety, and providing information about proper usage so that people can trust and use SHIONOGI products or services with peace of mind.

Initiatives	Related Indicators	Current Progress	_	Remaining Issues/Needs
Stable supply of products and services	 Monitoring of and improvements to procurement management indicators and delivery indicators set by SHIONOGI Routine/non-routine consultations with suppliers to achieve stable supply Routine evaluation of contract manufacturers and support for building business continuity plan (BCP)-related systems 	 Quick detection and response to abnormal values through monitoring of procurement management indicators Implementation of all measures necessary to eliminate supply chain risks that have materialized Identification of supplier risks and support for construction of BCP-related systems 	•	 Reduction and dispersion of risks through construction of BCP-related systems to respond to SHIONOGI sup- ply chain risk and use of multiple suppliers Identification of supplier risks and continuation and expansion of support for construction of BCP-related systems
Strengthening of the monitoring system	Strict adherence to laws, ordinances, and guidelines related to production and sales of pharmaceuticals	 Strict adherence to related policies Regular audits of manufacturing sites and other locations Assessment of risks related to procurement and manufacturing and strengthening of the level of management appropriate for risks 	•	Well-timed, proper audits of manufacturing sites (in conjunction with remote audits) Response to diversification of customer needs regarding quality, such as disclosure of countries where APIs are manufactured Strict response to compliance violations related to the manufacturing and sales of medicines
Ensuring proper use of medicines and creation of an in-house system	 Regular meetings of the Promotion Review and Oversight Committee Training achievement level for department responsible for provid- ing marketing information Improved and more efficient detection of inappropriate cases of provision of marketing information through the use of AI 	 Establishment of appropriate information provision system Establishment of Al-based monitoring system)	 Strengthening of compliance review and monitoring system for overall SHIONOGI Response to the demand for timely, appropriate information provision Training to reinforce provision of information on proper use



Delivering high-quality SHIONOGI products and services along with peace of mind to society while pursuing responsible support for ensuring credibility and stable supply



Efforts to achieve stable supply

Stable supply of our products

SHIONOGI routinely conducts quantitative assessments of its procurement risk related to suppliers and contract manufacturers so that we will never run out of product supplies, and we implement various risk response measures, including asking risky suppliers to make improvements, selecting alternate suppliers, and procuring from multiple companies. In addition, we have set strict targets for product delivery indicators and have built a system that makes it possible to deliver a stable supply of our products and services to patients and healthcare professionals.

In fiscal 2021, procurement risks materialized because of not only instability in the procurement of raw materials due to the global spread of COVID-19 but also electricity problems in China and Russia's invasion of Ukraine, which resulted in shortages of raw materials and transportation. Even under these circumstances, we were able to deliver products without stockouts by gathering information both in Japan and overseas, regularly checking with various suppliers, and implementing other measures to secure raw materials in addition to making advanced purchases of overseas raw materials and storing them in Japan. In addition, SHIONOGI has positioned developing, quickly obtaining approval for, and then promptly starting to supply the COVID-19 therapeutic drug S-217622 (ensitrelvir) and the COVID-19 vaccine as top priority issues. SHIONOGI has united to build a raw material procurement, manufacturing, and supply system to do that.

Contribution to other company's products

Recently, there have been a series of stockouts of antibiotics manufactured by other companies because all key intermediates are manufactured overseas. As antibiotics are indispensable for conducting surgeries, stockouts of these products have a major impact on efforts to maintain the medical system. Therefore, in response to requests by the government and related academic associations, SHIONOGI is moving forward with newly installing antibiotics manufacturing equipment at SHIONOGI's Kanegasaki Plant in order to bring production of key intermediates back to Japan.

Quality assurance

SHIONOGI has clearly stipulated the roles and scope of responsibilities of officers in charge based on the amended Pharmaceutical and Medical Device Act so as to avoid incidents like those that have occurred at other companies in recent years and caused a loss of trust in companies because of compliance violations related to drug manufacturing. In addition to working to raise compliance awareness through training for the employees of SHIONOGI as part of the quality assurance system, we continue to create not only a system for collaboration among the SHIONOGI Group companies that conduct manufacturing and sales but also update applications for approval.

Furthermore, SHIONOGI is attempting to strengthen compliance-oriented attitudes throughout its supply chain through initiatives to instill a "quality culture."

At the same time, due to COVID-19 limitations on overseas travel and visits, it has been difficult to perform site inspections that we had been doing. However, in the near future we will mainly conduct on-site audits of manufacturing sites and will implement management and oversight of our domestic and overseas plants more efficiently and with higher quality than ever before.

Reinforce Supply Chain Management

Materiality

Building relationships of trust and collaborating with business partners is essential if a company is to fulfill its social responsibilities. In view of the recent changes in the external environment, SHIONOGI revised the Shionogi Group Procurement Policy and formulated the Shionogi Group Business Partner Code of Conduct. We are strengthening supply chain management in order to conduct sustainable procurement that takes into consideration not only traditional QCD (quality, cost, and delivery) but also human rights, working environment, global environment, and ethics.

Initiatives	Related Indicators	Current Progress	Remaining Issues/Needs
Formulation of policy and code of conduct	 Formulation of policies and education for the employees of domestic consolidated companies (84% of employees have completed) Establishment of an independent advising desk to handle suppliers 	 Revision of Shionogi Group Procurement Policy Formulation of Shionogi Group Business Partner Code of Conduct Confirmation of agreement 	 Greater in-house awareness of sustainable procurement, which includes overseas Group companies Revision, formulation, etc., of various procurement-re-
Supplier sustainability evaluations	 Percentage of all suppliers evaluated: 6.5% (28 of 430 companies) Companies audited: 2 (including remote audits) Companies that completed questionnaire-based audit: 9 Number of suppliers asked to participate in EcoVadis evaluation, 23; number of suppliers that provided valid responses, 17; percentage of suppliers that meet set standards: 64.7% (11 of the 17 companies) 	with sustainable procurement and code of conduct demanded of business partners • Assessment and management of business partners based on Shionogi Business Partner Assessment Rules • Identification of risks that global supply chains will be disrupted and procurement and supplies will be cut off as a result of COVID-19 or other infectious disease, natural disaster, or geopolitical incident	lated standard operating procedures Regular assessments of key business partners



Promotion of sustainable procurement through collaboration with business partners

Revising procurement policy and formulating Business Partner Code of Conduct

In fiscal 2021, SHIONOGI revised its Shionogi Group Procurement Policy and newly formulated a Shionogi Group Business Partner Code of Conduct. We also not only revised various SOPs and conducted related training, including at domestic consolidated companies, but also launched a Supply Chain Working Team that will examine various topics that are important to tackle issues within the supply chain, including human rights and the environment, through a Group wide structure. As SHIONOGI agrees with the spirit touted by the

Council on Promoting Partnership Building for Cultivating the Future, which members of the business community and related government ministers participate in, we formulated and made public a Declaration of Partnership Building in May 2022. We will continue to demand that business partners adhere to this code of conduct and work with them to promote effective activities to solve social problems throughout the whole supply chain.

See our website for the policy and code of conduct. https://www.shionogi.com/global/en/company/policies.html

Evaluating the sustainability of key suppliers using instruments such as EcoVadis

Using EcoVadis, a rating platform for fairer and more objective evaluations of a company's social responsibility–related efforts and sustainable procurement, SHIONOGI is conducting evaluations of its business partners, which started with high priority ones. Key suppliers for SHIONOGI are defined as suppliers from whom a large amount of purchases are made and that are necessary to provide a stable supply of the SHIONOGI's products to

the market. And starting with suppliers that do a large volume of business with SHIONOGI or that are important in terms of antimicrobial resistance infectious disease products and products whose supply should be maintained from a social responsibility or corporate management perspective, SHIONOGI conducts sustainability evaluations, including whether there are any human rights or environment–related risks.

Respect Human Rights

Materiality

SHIONOGI recognizes the importance of respecting the human rights of all stakeholders in the course of its business activities. We promote initiatives that are in line with the Shionogi Group Human Rights Policy, which was established based on the UN Guiding Principles on Business and Human Rights (UNGPs).

Initiatives	Related Indicators	Current Progress	Remaining Issues/Needs
Responding to Human Rights Issues	Responding to the UK Modern Slavery Act 2015 Conducting Human Rights Impact Assessments Investigation of labor conditions in manufacturing regions that produce raw materials and basic materials Investigation of labor conditions for foreign workers Validity assessments by external experts Dialogue with overseas human rights experts (once a year)	 Consideration of statements in accordance with the UNGPs Identification and investigation of human rights risks through assessments Continuing dialogue with external experts to improve initiatives 	 Disclose statements in line with the UNGPs More precise identification of potential human rights risks and consideration of how to respond to them Validation of SHIONOGI's efforts and incorporation of expert input in activities to improve issues
Implementation of education and training on Busi- ness and Human Rights	Implementation of E-learning for employees (participation rate: 89.6%)	 Raise awareness of human rights among executives and employees 	 Provide input on the latest information on business and human rights to executives and employees



Respect for the human rights of all people involved with SHIONOGI and compatibility with sustainable business

Human Rights Impact Assessment

SHIONOGI conducts human rights due diligence to promote the identification, prevention, and reduction of human rights risks. In fiscal 2021, we conducted human rights impact assessments, particularly on labor conditions in manufacturing regions that produce raw materials and basic materials, and labor conditions for foreign workers.

Labor conditions in manufacturing regions that produce raw materials and basic materials

Based on external reports and SHIONOGI's procurement status, cellulose, glass, ethanol, and aluminum were identified as key commodities for SHIONOGI, and in fiscal 2021 we began investigating the risk of human rights violations, starting with cellulose. For eucalyptus, one of our raw materials, we conducted online dialogues with farmers in India to check local labor conditions. We will share the findings from this case



Online Dialogue with Indian cellulose

with our business partners and continue to further check for human rights risks in the supply chain.

Labor conditions for foreign workers

In response to the issue of technical interns in Japan, SHIONOGI conducted a survey of domestic group companies and dialogues with three subcontractors in fiscal 2021, and found that none of them employed technical interns. We communicated SHIONOGI's policy to our outsourcing contractors, explaining the matters of consideration when hiring technical interns and requesting these to be respected. Going forward, SHIONOGI will expand the scope of the survey to the supply chain and proceed with the investigation of technical interns.

For more information on our human rights initiatives, please visit our website.

https://www.shionogi.com/global/en/sustainability/society/respect-human-rights/human-rights-policy.html

Protect the Environment

Materiality

SHIONOGI is promoting efforts to address environmental issues, such as climate change, conservation of biodiversity, resource conservation, and resource recycling with the aim of realizing a sustainable society through the preservation of the global environment. SHIONOGI has formulated the Shionogi Group EHS Policy and its accompanying SHIONOGI Group EHS Action Targets, and we are striving to reduce the burden on the environment caused by our business activities, including by our supply chain.

Initiatives	Related indicators	Current Progress		Remaining Issues/Needs
Climate change Reduce greenhouse gas (GHG) emissions	 FY2030: 46.2% reduction for Scopes 1+2; 20% reduction for Scope 3, category 1 (FY2019 benchmark) FY2050: Achieve zero emissions 	 Obtain SBT approval Express its support for the recommendations of TCFD Participate in the TCFD Consortium)	 Expand climate change-related information disclosure in accordance with the TCFD framework Consider measures to achieve SBT and implement them
Reduce the envi- ronmental impact of the antibiotic manufacturing process	Strict controls, including the supply chain, by FY2030 (completion of audit follow-ups)	• Establish a system of strict controls at SHIONOGI plants and some suppliers to reduce the impact of antimicrobials manufacturing on the environment)	Strict controls, including the supply chain
Resource conserva- tion/circulation Reduce waste and improve recycling rates	• FY2030: Recycle 65% of plastic waste	Promote use of biomass plastics and recycled plastics)	Further reduce amount of waste generated and land- fill amount, and improve recycling amount
Water Control the volume of water resources used	• FY2030: Reduce the volume of water resource usage to 1,340 thousand m ³ or less	 Conduct a water risk assessment for SHIONOGI Acquire an understanding of suppliers' water risks Reduce the volume of water resources used)	Further reduce water resources used in view of increased water stress risk going forward



Contribution to a sustainable society through preservation of the global environment

Climate Change Initiatives

Risks relating to climate change and the process of transitioning to a carbon-free society affect almost all industrial sectors. At SHIONOGI, we are assessing and working to minimize climate change risks by establishing governance structure with respect to climate change.

In October 2020, Japan joined other countries in declaring its goal of carbon neutrality by 2050, further accelerating the movement toward decarbonization. SHIONOGI also set SBTs as fiscal 2030 targets for carbon neutrality by 2050, and

received approval from the SBT Initiative in June 2021. In order to achieve the fiscal 2030 targets, SHIONOGI is following a plan to switch to electricity derived from renewable energy sources, which was drafted for SHIONOGI's main sites, and has completed its introduction at the head office building in fiscal 2021 and at the Aburahi Research Center in fiscal 2022. However, in fiscal 2021, we were unable to achieve our fiscal year target due to an increase in CO₂ emissions caused by factors such as our proactive efforts to create each solution

Supplier Engagement Implementation Process

STEP 1

Understanding suppliers' CO₂ emission amounts and current efforts to reduce CO₂ emissions (e.g., setting of reduction targets, implementation status of reduction activities, etc.) through interviews, etc.

STEP 2

Briefings were held to share SHIONOGI's policies and useful information on reducing CO₂ emissions

STEP 3

Individual negotiations (reduction requests, individual support) with key suppliers

aimed at total care for COVID-19 as well as the expedited manufacturing of the therapeutic drug for prompt supply after approval. We will continue to study and implement further reduction measures, including the proactive introduction of electricity derived from renewable energy sources, in order to achieve the SBTs.

In addition, since Scope 3 emissions account for approximately 60% of total emissions at SHIONOGI, it is essential to work with suppliers to reduce emissions throughout the entire supply chain in order to achieve the SBTs.

SHIONOGI participated in "the Fiscal Year 2021 Model Project for Supporting Achievement of the Decarbonization targets of the Entire Supply Chain," a project by the Ministry of the Environment to support the achievement of greenhouse gas (GHG) emission reduction targets for the entire supply

chain. SHIONOGI is working to achieve the SBTs by implementing the supplier engagement process established through this project, as well as establishing a cooperative framework including Group companies to promote supplier engagement.

As of June 2022, we are conducting supplier engagement activities for our top 21 suppliers in terms of purchase amount, including checking the status of CO₂ emission reduction efforts and holding briefings to promote understanding of SHIONOGI's policies regarding climate change. Going forward, SHIONOGI will identify key suppliers in terms of CO2 reduction and prioritize them for reduction requests and support.



For more information on the supplier engagement process, please visit the following website (Japanese only) and page 93: Guidebook for Developing GHG Emission Reduction Plans to Achieve SBTs, etc.

https://www.env.go.jp/earth/datsutansokeiei_mat02_20220418.pdf

Climate change-related disclosures under the TCFD

Expression of its support for the recommendations of TCFD and participation in the TCFD Consortium

The importance of companies recognizing the risks and opportunities of climate change and taking measures to address them has been emphasized by institutional investors and financial institutions that make ESG investments and loans, and is mentioned in the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). In addition, climate change-related information disclosure is becoming increasingly important as the Corporate Governance Code revised in June 2021 requires companies listed on the Prime Market to disclose information based on the TCFD or an equivalent framework.

In March 2022, SHIONOGI announced its support for the TCFD recommendations and joined the TCFD Consortium, a group of Japanese companies and financial institutions that support the TCFD recommendations. Along with promoting the study of strategies and specific measures, the Corporate Planning Department, Procurement Department, Sustainability Management Department, and other departments are collaborating to conduct a detailed assessment of the impact of SHIONOGI's business activities on climate change using the TCFD framework, with the aim of disclosing information by the end of fiscal 2022. We will continue to focus on address-

ing climate change issues to enhance SHIONOGI's resilience and meet the demands of society through appropriate disclosure of information.





AMR initiatives to decrease environmental emissions from the antimicrobial manufacturing process

In order to reduce the environmental impact of the antimicrobial manufacturing process, SHIONOGI plans to establish an appropriate control system to control environmental release of antimicrobials throughout the supply chain by fiscal 2030 through auditing SHIONOGI plants and suppliers. To this end, SHIONOGI aims to maintain the antimicrobial management system at the Kanegasaki Plant and complete an initial audit of all relevant suppliers by fiscal 2024. In these audits, we are controlling and managing the release of antimicrobials into

the environment in accordance with the Guidelines for Antimicrobial Release Control published by the AMR Industry Alliance.



Selection for AMR Benchmark 2021*

SHIONOGI's overall AMR activities were

highly evaluated and selected for the AMR

* AMR Benchmark: The world's first report by the Access to Medicine Foundation, a Netherlands-based NGO, which analyzes and evaluates AMR initiatives.

For more information on our environmental initiatives, please visit our website: https://www.shionogi.com/global/en/sustainability/environ-

ment.html Please refer to our website for the Environmental Report: https://www.shionogi.com/global/en/investors/ir-library/annu-

