

Sustainability Report 2023

JCR Pharmaceuticals Co.,Ltd.





Basic Philosophy

Corporate philosophy of JCR Pharmaceuticals Co., Ltd. is "Contributing towards people's healthcare through pharmaceutical products."

Under this philosophy, we aim to contribute to health improvements with better treatment options as a pioneer company engaged in research, development, manufacturing and marketing of biopharmaceuticals and regenerative medicine.

Reliability

We strive to establish a reliable company for all stakeholders by actions with high sense of duty in addition to compliance.

Confidence

We continue our research and development from our own point of view and provide high-quality products and information with confidence in the aim of providing pharmaceuticals that are accepted worldwide.

Belief

We aim for further corporate growth in the belief of "Think by oneself, act by oneself" under the basic philosophy.

JCR has reorganized its integrated report "JCR Report 2022" and provided an explanation of its sustainability initiatives.

JCR Pharmaceuticals Co., Ltd. (JCR) has the important missions of tackling rare and intractable diseases with its advanced biotechnologies, and researching, developing, and creating innovative medicines in the areas of cell therapy, regenerative medicine, and gene therapy. Mindful of those missions, JCR has launched its Midterm Business Plan for

FY2023-2027, "Reach Beyond, Together," under which we are continuing to meet the challenge of doing what only JCR can do for patients and their families. Through business activities based on its corporate philosophy, JCR aims to create sustainable corporate value, and believes that it is important to contribute to the development of a sustainable

society. For "Sustainability Report 2023," JCR has reorganized and edited its integrated report "JCR Report 2023" in order to foster a full understanding of JCR's sustainability initiatives among a wide range of stakeholders.



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Period covered

- FY2022 (From April 1, 2022 to March 31, 2023)
- * This report also contains some information from FY2023.

Organizations covered

- JCR Group (JCR Pharmaceuticals Co., Ltd., consolidated subsidiaries and equity method affiliates)
- * See explanatory notes for exceptions.

Presentation of currency units

- Numerical values are rounded down to the nearest whole number in the specific unit, in principle.
- However, numerical values presented in units of hundred millions of yen are rounded up or down to the nearest hundred million yen.

Forward-Looking Statements

"Sustainability Report 2023" contains forward-looking statements that are subject to known and unknown risks and uncertainties, many of which are outside our control and are based on our judgments derived from the information available to us at this time. Our actual results could be materially different from those expressed in our forward-looking statements, due to factors and events that include, but are not limited to, the following: a deterioration of economic conditions, a change in the legal or governmental system, a delay in launching a new product, impact on competitors' pricing and product strategies, a decline in marketing capabilities relating to our products, production difficulties or delays, an infringement of our intellectual property rights, an adverse court decision in a significant lawsuit and regulatory actions.



Under the Midterm Business Plan for FY2023-2027, "Reach Beyond, Together," which was announced in May 2023, we positioned sustainability measures as a key management priority, and have been promoting continuous measures to realize a sustainable society in the core areas of Rare Diseases (RD), Environment (E), Society (S), and Corporate Governance (G).

We recognize "Rare Diseases" as the arena that we can make our greatest contribution. In addition to developing treatments for ultra-rare diseases having very few patients, and building new business models, we have also worked to improve drug access. Moving forward, we will actively promote our values "what only JCR can do" to the society and pledge to ensure no one will be left behind.

November 2023

Shin Ashida

Representative Director, Chairman, President, CEO and COO

Midterm Business Plan for FY2023-2027

Reach Beyond, Together

Since its founding in 1975, JCR has introduced pharmaceuticals featuring new mechanisms available for the first time anywhere in the world, such as TEMCELL® HS Inj. and IZCARGO®, on the strength of its unique R&D and manufacturing capabilities in areas other companies do not handle. Our proprietary J-Brain Cargo® drug discovery platform technology, which we have established and are focused on developing further, will enable us to provide patients around the world with drugs that can be expected to have significant benefits for diseases that were previously untreatable.

JCR is now one of the few pharmaceutical companies in Japan that can

operate the entire biopharmaceutical process, from research through to manufacturing. To maximize this potential, and to provide even more patients and their families with "medicines that only JCR can provide," we have formulated our Midterm Business Plan for FY2023-2027, "Reach Beyond, Together."

In this section, we will introduce our strategy for creating new value during our second foundation, while also providing basic information to help readers better understand JCR's business activities through more detailed sidebars as appropriate.

Our goal is to become a research-oriented specialty pharma with global exposure, handing down to the next generation the spirit of challenge that has guided us since our founding.

Since its inception, JCR has continued to grow as a specialty pharma by targeting the field of drugs for rare diseases , developing them with proprietary biotechnologies, technologies for cell therapy and regenerative medicine, and gene therapy technologies.

During JCR's Midterm Business Plan for FY2015-2019, "HIYAKU (Leap into the Future)," in February 2016 we launched TEMCELL® HS Inj., the first allogeneic regenerative medical product ▶² in Japan. During the Midterm Business Plan for FY2020-2022 "REVOLUTION" that followed, we succeeded in the human clinical application of J-Brain Cargo®, the world's first technology for delivering active

ingredients directly to the brain, as well as launching IZCARGO®, a revolutionary new drug that is expected to improve central nervous symptoms of Isosomal storage disorders (LSDs), for which there had been no effective treatment.

Under the Midterm Business Plan for FY2023-2027, "Reach Beyond, Together," we aim to become a research-oriented specialty pharm with global exposure by handing down and further developing these successes, taking on the challenge of using our innovative drug creation platform technologies to create "medicines that can only be made by JCR."

Corporate Philosophy Contributing towards people's healthcare through pharmaceutical products. Research-oriented specialty pharma with global exposure Reach Beyond, **Together** [Who JCR wants to be] REVOLUTION Be an ally to individuals with rare diseases, focusing on innovation HIYAKU "only JCR can provide." Founding Demonstrated research capabilities to deliver innovation Demonstrated biomanufacturing technologies Create "medicines that only JCR can provide" with high added-value through innovative drug creation platform technologies Built a stable business foundation Team JCR

▶1 Drugs for Rare Diseases

These are drugs used for diseases with an extremely small number of patients, defined in Japan as those intended for fewer than 50,000 patients. While about 7,000 rare diseases have been identified around the world, it is estimated that approved treatment methods exist for no more than 5% of them.

►2 Allogeneic Regenerative Medical Products

Regenerative medical products that use cells other than the patient's own. Their advantages include the ability to respond to need for emergency treatment by manufacturing and stocking products in advance.

▶3 Lysosomal Storage Disorders

Rare deceases in which a specific enzyme is either congenitally missing or functionally deficient, resulting in the accumulation of metabolic waste which fails to dissolve and causing a variety of symptoms. It is the collective name for a group of about 50 types of disease.

Reference P.38 History of Growth

JCR will contribute to patients and their families around the world by further reinforcing its strengths and working to maximize value.

Under the Midterm Business Plan for FY2023-2027, "Reach Beyond, Together," we will work toward achieving our vision for who JCR wants to be, bringing together our foundational proprietary R&D and manufacturing capabilities 1 in the pursuit of what only JCR can provide to patients and their families, even in the case of diseases with an extremely small number of patients. To do this, we will marshall all capabilities of "Team JCR" at focusing on the following five initiatives.

From a global perspective, JCR is still positioned as a biotech company with proprietary technology, and we believe that, to achieve global growth during our second foundation, we should invest in R&D to the extent our resources allow. In addition, since profits may fluctuate significantly over the next five years due to timing differences, etc. in revenue from licensing, rather than establish quantitative guidance, we will determinedly invest in opportunities for growth.

Given the above, we recognize the importance of providing timely information to investors and our shareholders, and will strive to disclose information promptly and with a high degree of transparency.

Five Initiatives

- Creation of innovative core technologies
- 2 Demonstrating global standard production capacity
- 3 Expansion of global quality assurance system in terms of quality and quantity
- 4 Early launch of products for rare diseases
- 5 Human resource development to support growth



Rather than establish quantitative guidance, we will determinedly invest in opportunities for growth through advancements in R&D, create new innovation, and work to maximize value

▶1 Bringing Together R&D and Manufacturing Capabilities

JCR is one of the few companies in Japan that can operate the entire biopharmaceutical process, from research through to manufacturing. More than 70% of our employees are highly skilled personnel involved in R&D and in production and quality assurance, which are strengths we have preserved from the time of our founding. Research and production sites are concentrated in the Kobe area to allow for close collaboration across divisions.

We will accelerate the development of innovative platform technologies by exploring the potential of J-Brain Cargo[®].

JCR is engaged in research aimed at expanding potential applications for J-Brain Cargo® 1, its proprietary blood-brain barrier penetration technology, to further increase its value. Research to date has made it possible to utilize J-Brain Cargo® in a manner appropriate for the substance being delivered. Optimizing the molecular structure of the substance to which J-Brain Cargo® is applied has allowed us to successfully fabricate molecules that are more highly productive and can be delivered to the brain efficiently.

Under the Midterm Business Plan for FY2023-2027, "Reach Beyond, Together," we will not only apply J-Brain Cargo® to LSD

drugs such as IZCARGO® ▶ 2, which we have already accomplished, but will also take on the challenge of applying J-Brain Cargo® to nucleic acid drugs, for which potential applications have been suggested in a variety of disease areas. We will also accelerate research to realize the next generation of J-Brain Cargo®, aimed at being able to deliver drugs to tissues such as the eye, skeletal muscle, cartilage and others, where conventional technologies face hurdles to drug delivery.

Brain

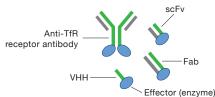
BBB

Vasculature

J-Brain Cargo®-applied therapeutics

Transferrin

Endothelial cell



Selecting J-Brain Cargo® molecules best suited for unique effector properties

Protein engineering expertise accumulated since JCR's founding

Plentiful J-Brain Cargo® variations

Transferrin receptor

 Creation of biopharmaceuticals that are difficult to produce



IZCARGO®, world's first drug proven to penetrate the BBB to deliver ERT to CNS. Launched in Japan in 2021.

▶1 J-Brain Cargo®

A proprietary technology for delivering drugs into the brain by penetrating the blood-brain barrier, a structure that exists in the brain. For years, many researchers and companies have worked to develop similar technology, but JCR is the first in the world to succeed in its human clinical application.

►2 IZCARGO®

This drug is the world's first successful human clinical application of a technology for delivering active ingredients to the brain. It was launched in Japan in May 2021 as a treatment for MPS II.

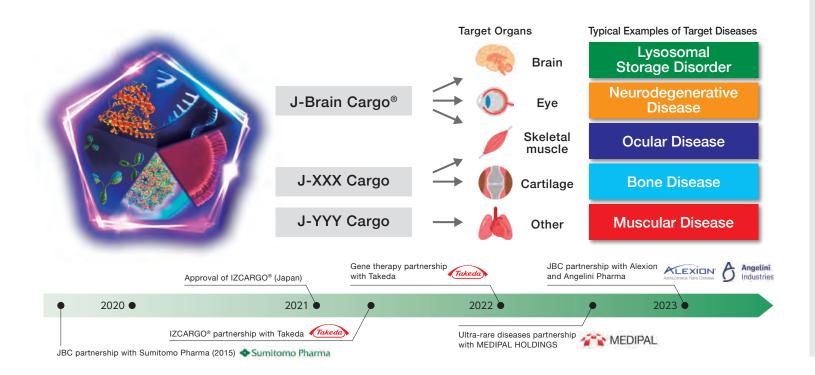
Continuing to explore the potential for application of J-Brain Cargo® to a wide range of modalities through active promotion of collaboration with other companies.

Utilizing J-Brain Cargo®, JCR is working with a development pipeline of more than 17 new drugs in the LSD field. However, the potential of the J-Brain Cargo® new drug platform technology is not limited to this field. It can apply to a wide range of modalities 1, and can target a variety of organs and diseases. We are actively moving forward to collaborate with partners who have cutting-edge technology in each of these fields.

In the field of LSDs, we are working with Takeda on the global commercialization of JR-141 for the treatment of MPS II. In October 2022, we also entered into a global development

agreement with MEDIPAL HOLDINGS for drugs to treat ultra-rare diseases. ▶2

In March 2023, we entered into an agreement with Alexion ▶ for the development of drugs for the treatment of neurodegenerative diseases, and in May 2023, signed an agreement with Angelini Pharma ▶ to develop biological products for epilepsy. Going forward, JCR will continue to explore further partnerships and accelerate these efforts with a view to the future.



▶ 1 Modalities

Treatment methods including small molecule pharmaceuticals, enzymes, antibody delivery, oligonucleotide delivery, cell therapy, gene therapy and others.

▶2 Ultra-rare Diseases

Rare diseases with an extremely small number of patients, defined by the National Institutes of Biomedical Innovation, Health and Nutrition as those diseases with fewer than 1,000 patients.

▶ 3 Alexion

Founded in the U.S. in 1992, Alexion is a global developer of biologics involved in R&D, manufacturing and sales of drugs for rare diseases.

▶ 4 Angelini Pharma

An Italian global pharmaceutical company with nearly 100 years of history, focused on R&D and commercialization of drugs in the field of the central nervous system.

We will further reinforce our strengths in manufacturing to build a global supply chain capable of providing a stable supply in any situation.

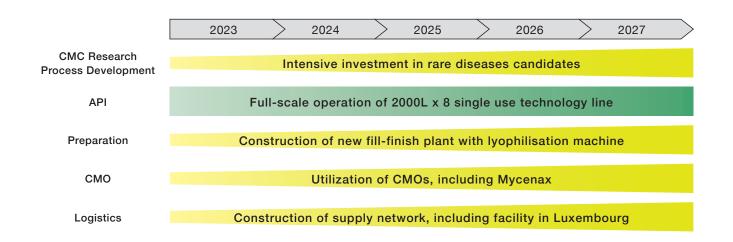
Since its founding, JCR has taken manufacturing as its strength, and for more than 15 years has developed manufacturing experience drawing on single-use technology 1 to build a manufacturing and quality assurance system that enables the stable supply of high-quality biopharmaceuticals. We currently have five production sites, including the new API plant, Kobe Science Park Center 2, which was completed in November 2022.

To expedite global clinical trials of multiple development products, in July 2022 we moved to strengthen our relationship with Mycenax⁵, a Taiwanese company with an established

reputation as a contract manufacturing and development firm for biopharmaceuticals.

Under the Midterm Business Plan for FY2023-2027, "Reach Beyond, Together," we plan for over \$300 million in capital expenditures and investments in contract development and manufacturing organizations (CDMOs) as we work to further expand supply capacity. We are also working to build a global supply chain capable of providing a stable supply even in emergencies such as natural disasters and pandemics.

- Over \$300m CAPEX and investment in CDMOs, leading to supply expansion.
- Constructing a resilient global supply chain for emergencies.



▶ 1 Single-use Technology

Technology that allows for the efficient production of small lots of many different drugs with single-use culture vessels using disposable plastic bags.

▶2 Kobe Science Park Center

A new API plant that meets the requirements of the FY2020 State of Emergency Vaccine Production
System Improvement Project by the Ministry of Health, Labour and
Welfare (MHLW). Equipped with four 2,000 L single-use culture vessels, this plant will secure contract production systems for vaccines and other products in an emergency, and will greatly contribute to strengthening manufacturing capacity for JCR's own products.

► 3 Mycenax

A contract manufacturing and development company specializing in biopharmaceuticals, founded in 2001, with a track record in a variety of global development projects, including in recombinant proteins, enzymes, antibodies, antibody drug conjugates, and gene and cell therapies.

JCR aims to launch clinical trials of five LSD therapeutics during the term of its Midterm Business Plan for FY2023-2027.

Utilizing its proprietary J-Brain Cargo® blood-brain barrier penetration technology, JCR is working on the development of more than 17 new drugs in the field of LSDs, including global clinical trials ¹ of JR-141 and JR-171. Many of these are currently in the basic research and preclinical phase.

During the term of its Midterm Business Plan for FY2023-2027, "Reach Beyond, Together," JCR aims to enter clinical trials for five products, including JR-441, JR-446, JR-479, JR-471, and JR-194, accelerating efforts in candidates for Krabbe disease. Global Phase I/II clinical trials for JR-441 were launched in October 2023.

Among these candidates, JR-471 and JR194 are indicated for fucosidosis and Batten disease, respectively, both of which are ultra-rare diseases with an extremely small number of patients around the world. In dealing with these kinds of diseases, in fields large corporations may find it difficult to enter, JCR considers it its mission to deliver "medicines that can only be made by JCR," and aims to commercialize them globally through collaboration with its partners.

Clinical Clinical **Basic Research Preclinical Review Period Approved** (Phase I/II) (Phase III) JR-446 JR-171 JR-141 JR-141 JR-194 MPS II MPS II MPS IIIB MPS I (Batten disease type I) (Sanfilippo B syndrome) (Hurler syndrome, etc.) (Hunter syndrome) (Hunter syndrome) Krabbe disease JR-162 JR-441* Pompe disease MPS IIIA GM1 (Sanfilippo A syndrome) gangliosidosis JR-443 MPS VII CLN2 (Sly syndrome) (Batten disease type II) JR-479 Aiming to begin clinical trials for five items Gaucher disease GM2 gangliosidosis (Tay-Sachs, Sandhoff disease) (Candidates) JR-441*, JR-446, JR-479, JR-471, JR-194, Krabbe disease α-Mannosidosis JR-471 Fucosidosis Niemann-Pick Metachromatic leukodystrophy Galactosialidosis As of November 2023

*At the preclinical development stage as of the announcement of the Midterm Business Plan for FY2023-2027

▶ 1 Global Clinical Trials

Clinical trials in which medical institutions in multiple countries or regions participate, and which proceed simultaneously based on common clinical trial protocols, with the aim of developing and gaining approval for new drugs on a global scale. This has the advantage of making it easier to gather test subjects than if each country were to conduct their trials individually, leading to faster development of drugs for rare diseases.

JCR will advance investments in human capital, reinforce the collective strength of "Team JCR," and establish a human resources strategy that will contribute to enhancing corporate value.

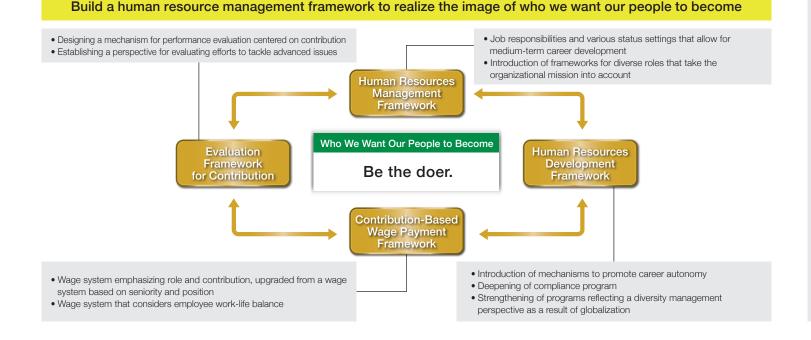
Based on its conviction that "Team JCR" is the source of its own value, JCR has set out three main pillars under its Midterm Business Plan for FY2023-2027, "Reach Beyond, Together," for establishing a human resources strategy that will contribute to enhancing corporate value. These are: construction of a dynamic human resource portfolio that will help to accomplish the strategy; development and organizational permeation of diversity and inclusion; and activation of individuals and organizations, and promotion of improvements to engagement.

We see the development and securing of human resources who can contribute to the enhancement of corporate value as central to our investment in human capital. Going forward, we will strive to

enhance programs that contribute to the development of our human resources portfolio and the advancement of human capital management, including the JCR Academy, ▶¹ a program to develop the next generation of global leaders, as well as training programs to improve language skills.

We will also formulate an image of who we want our people to become and a description of our optimal corporate culture. As a mechanism for realizing these goals, we will build a human resources management framework consisting of four sub-frameworks, including human resource management, evaluation of contribution, contribution-based wage framework, and human resource development.

and human resource development.



▶1 JCR Academy

The JCR Academy is an initiative launched in FY2022 to develop next-generation leaders who have acquired the skills to perform on a global level. The objective is to offer a practical program where participants can gain the soft skills needed in their roles as global leaders, including communication, project management, leadership, and other abilities.

Reference
P.24 Human Resource Management

Through business activities based on our corporate philosophy, we will contribute to achieving a sustainable society that leaves no one behind.

JCR aims to realize sustainability through its business activities founded on Rare Diseases, the Environment, Society, and Corporate Governance.

Rare diseases, in particular, relate closely to JCR's business activities, and we see this as one area in which JCR can truly contribute. We are working to enhance initiatives such as the development of drugs for ultra-rare diseases, and construction of new business models, as well as efforts to improve access to drugs (Named Patient Supply*).

With regards to the Environment, JCR considers the environmental impact of its business activity as a risk factor that could have a long-term impact on business and society. We will thus work to implement environmentally friendly business practices, such as reducing CO₂ emissions and making effective use of water resources, while also expanding information disclosure in line with the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD) as a response to climate change.

▶ 1 Named Patient Supply

A system under which manufacturing and sales companies individually provide drugs to physicians seeking to use pre-approval drugs after first registering their patients. In March 2023, JCR began a program to supply IZCARGO® in response to the need for access to drugs in countries where they have not yet been approved.

Ideal state of mind

Achieve sustainability through business activities based on RD-E-S-G



Rare Diseases

- Develop drugs for ultra-rare diseases and construction of new business models
- Make efforts to improve access to medicines (Named Patient Supply) to deliver innovative medicines to people around the world





Environment

- Investigate and implement measures to reduce environmental impact through business activities
- Promote environmentally friendly procurement on the premise of ensuring the quality and stable supply of pharmaceuticals



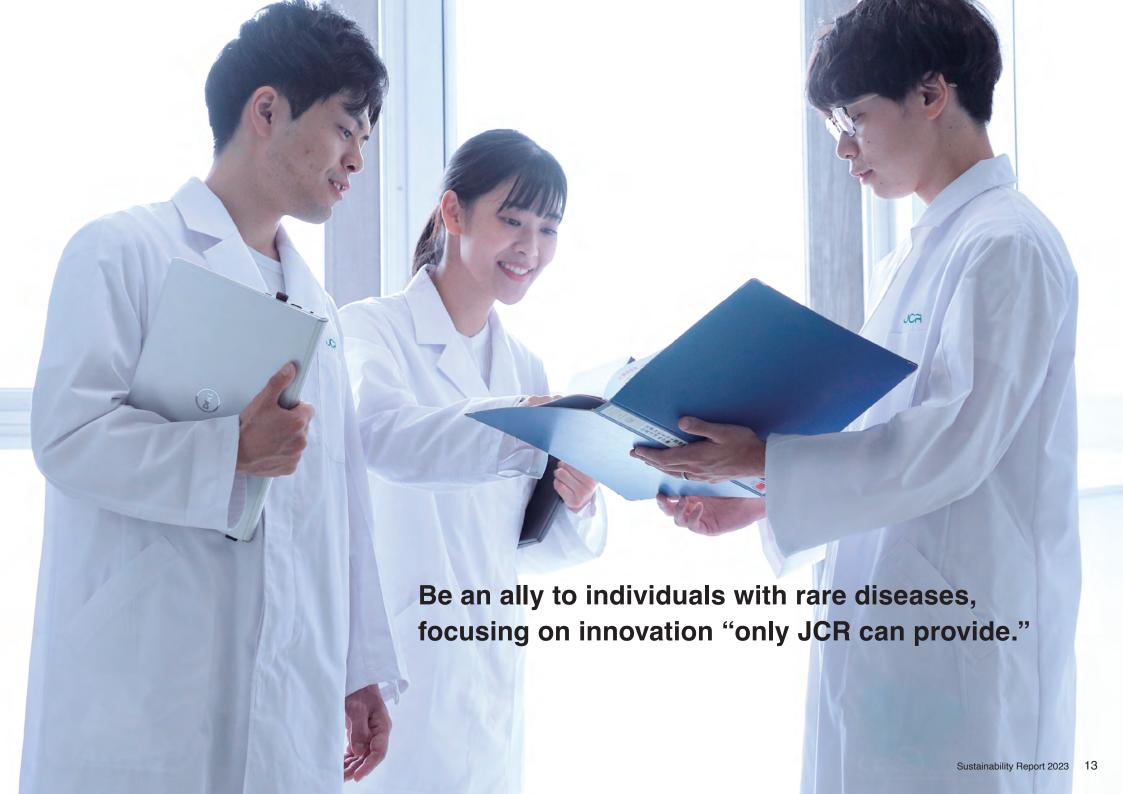
Society

- Address the challenge of unmet medical needs by creating platform technologies
- Develop human resources so that each member of "Team JCR" can shine in their own station



Corporate Governance

- Pursue governance in line with the Company's growth
- Ensure thorough compliance and strengthen risk management



Basic Approach to Sustainability

Since its inception in 1975, JCR has sought to create groundbreaking therapeutics that respond to unmet medical needs, particularly in the rare disease field, under its corporate philosophy of "Contributing towards people's healthcare through pharmaceutical products." To this end, we have been harnessing forward-looking biotechnologies, as well as technologies for cell therapy and regenerative medicine.

The global environment and conditions and issues facing society have been changing year by year, but JCR believes that it is crucial to create sustained corporate value through its business activities as a pharmaceutical manufacturer and contribute to the

development of a sustainable society, and is implementing activities in the core areas of Rare Diseases, Environment, Society, and Corporate Governance. Rare Diseases, in particular, are closely related to JCR's business activities and are a domain to which JCR can especially contribute. In addition to developing treatments for ultra-rare diseases and building new business models, JCR has also worked to improve access to medicines. We will proactively engage in things that only JCR can provide even for ultra-rare diseases where there are only few patients as we aim to achieve a society where no one will be left behind.



MESSAGE

In the Midterm Business Plan for FY2023-2027 "Reach Beyond, Together," which was announced in May 2023, JCR set out its "ideal state of mind:" to achieve sustainability through business activities based on Rare Diseases, Environment, Society and Corporate Governance. JCR believes that its mission is to harness its R&D and manufacturing capabilities to deliver new treatment opportunities to patients who are living with rare or ultra-rare diseases and their families around the world.

"Team JCR" shares this mission, and its business activities and beliefs are aligned with the spirit of the Sustainable Development Goals (SDGs) of "no one will be left behind." We are committed to establishing a production system that ensures a stable supply of high-quality pharmaceuticals with consideration for the environment and to defining KPIs that must be addressed for JCR to continue sustainable growth. By each employee taking these challenges as their own, we will pursue the realization of a sustainable global society. Because we seek to continuously address the voices of patients and their families around the world, we will realize sustainability in the manner unique to JCR, with a view to remaining a company that is chosen by all people involved with JCR and its diverse spectrum of stakeholders.

Toru Ashida Head of Sustainability



Structure for Promoting Sustainability

In July 2022, JCR established the Sustainability Advisory Committee, Sustainability Committee and Environmental Committee to enable in-depth discussions and formulating strategies in close alignment with management in response to the ever-changing social and business environment and challenges surrounding JCR. JCR will continue to work as one team, driven by a sense of purpose in the rare disease field, to pursue sustainability in the manner unique to JCR.

Sustainability Advisory Committee

The members of this Committee are Internal Directors, Independent Outside Directors, and Corporate Officers.

The Committee provides feedback on matters presented to the Board of Directors by the Sustainability Committee.

Sustainability Committee

Chaired by the director in charge of sustainability, members will be employees appointed from each business division. This Committee will identify material issues, discuss and propose ESG-related initiatives, monitor progress, and report findings to the Board of Directors.

Environmental Committee

Members will be Internal Directors and employees appointed from each business division. They will consider the environmental impact of business activities as a long-term risk factor affecting business and society, and practice environmentally friendly business activities.

Core Sustainability Initiatives

Rare Diseases	 Development of drugs for ultra-rare diseases and construction of new business models Efforts to improve access to medicines (Named Patient Supply) to deliver innovative medicines to people around the world
Environment	 Investigation and implementation of measures to reduce environmental impact through business activities Promote environmentally friendly procurement on the premise of ensuring the quality and stable supply of pharmaceuticals
Society	 Address the challenge of unmet medical needs by creating platform technologies Develop human resources so that each member of "Team JCR" can shine in their own station
G Corporate Governance	Pursue governance in line with the Company's growth Ensure thorough compliance and strengthen risk management

Addressing the SDGs

JCR believes that partnership and cooperation with the international community are the most important priorities for realizing sustainability. JCR proactively conducts sustainability initiatives, in keeping with the spirit of the SDGs of "no one will be left behind." It shares with and returns to a wide range of stakeholders the achievements of these efforts.

JCR believes that it is crucial to continue pursuing the sustained creation of corporate value through its business activities, thereby contributing to a sustainable society. To that end, JCR identifies the materiality issues it should address through the process outlined to the right.

SUSTAINABLE GALS DEVELOPMENT





































Process for Identifying Materiality (Material Issues)

List materiality issues

Derive materiality issues by referring to international guidelines, principles and frameworks, as well as conditions and challenges faced by the pharmaceutical industry, and from the perspectives of what JCR is uniquely capable of doing and what it should be doing.



Assess materiality 2

Assess the importance of the materiality issues derived in 1. from the perspective of their impact on society and the environment as well as their impact on JCR's business.



Assign priority to materiality issues 3

Based on the assessment in 2., organize materiality issues into categories and assign priority to highly important materiality issues for JCR from a long-term perspective, in light of JCR's corporate philosophy, purpose, business activities, and Midterm Business Plan.



Determine materiality

4

The issues identified in 3. are discussed and approved by the Board of Directors and are established as JCR's material issues. The identified materiality is explained and shared internally so that each employee can take ownership of each issue, and further enhancements are made. In addition, specific materiality issues are shared with a wide range of stakeholders through disclosure via JCR's website and other channels.

Contributions in the Rare Diseases Arena



Rare Diseases

RARE DISEASE Project

The RARE DISEASE Project is a cross-sectional internal awareness-raising project, with "What JCR can do for rare diseases" as its motto. We collect information and share it internally to deepen employees' understanding of rare diseases. We also support and cooperate with patient groups and support organizations that help people with rare diseases. We stipulate a two-year appointment without fixed membership to allow as many people as possible to participate.

As awareness-raising in-house activities, we promote

our employees to wear official badges for Rare Disease Day (RDD), conduct fundraising activities, global consciousness-raising activities for MPS Awareness Day, hold open public lectures and in-house lectures, and distribute participants' reports about the events organized by patient groups.



What JCR can do for rare diseases

Although the COVID-19 pandemic continued through FY2022, patient groups gradually resumed in-person meetings. Several RARE DISEASE Project members participated in a social event and joint symposium of the Japan MPS Patient and Family Group held in Tokyo in August 2022. We also welcomed students from

Kobe Kaisei Girls' Senior High School, Osaka Meisei Gakuen Senior High School, and National Institute of Technology, Tsuruoka College in November 2022 for an online RDD high school study tour (JCR internship).

As a company aiming to become "a global specialty pharma in the rare disease arena," JCR believes that it is extremely important to provide opportunities for each and every employee to learn what patients are going through. As a new initiative in FY2022, *Given: Ima koko ni aru Shiawase* (Given: The happiness of being here now), a documentary movie featuring patients with rare diseases such as MPS and their families, was made available to employees through on-demand streaming from August to September 2022. Many of our employees viewed the documentary and gave many comments and feedback about it.

JCR will continue to carry out not only research and development focused on orphan drugs, but also activities that lead to broad-based support for patients and their families on a global basis.

MPS Awareness Day

In FY2021, the RARE DISEASE Project was kicked off with its first global awareness-raising activity for MPS Awareness Day on May 15, sponsored by the MPS Society, a support group for patients with MPS in the United States.

JCR decided to make this a company project after a subsidiary employee made a proposal that JCR think about what it could do for MPS Awareness Day.

In FY2022, photos in the theme color purple and the message of MPS awareness were solicited Company-wide, and they were distributed through the internal bulletin board in a format that could be downloaded as posters at each business location. We also donated funds to the National MPS Society in proportion to the number of photos collected. In addition, employees wore hand-made purple ribbon badges and newsletters related to raising awareness of MPS were distributed through the internal e-bulletin board.



MPS Awareness Day Poster (for in-house awareness-raising)

RAREDISEASEDAY.ORG

Rare Disease Day

From FY2015, JCR has been a supporter of RDD. There are patients suffering from rare and intractable diseases around the world, but the total number of these patients is small, and the disease mechanisms are complicated. Therefore, almost no progress has been made in research and development of therapeutics and methods of diagnoses for some diseases. RDD activities began in Sweden in 2008 with the aim of improving the quality of life of patients with rare and

intractable diseases through better diagnoses and treatments. It is hoped that these activities will create a bridge between patients and society, and help to increase awareness of rare and intractable diseases.



In-House RDD Awareness-Raising Activities

To commemorate RDD, JCR encourages employees to wear official RDD badges and raises funds in-house in February every year.

Moreover, Japanese professional golfer Masahiro Kawamura, Japanese professional tennis player Masamichi Imamura, and Japanese professional tennis player Shinji Hazawa have been appointed as RDD Japan ambassadors by RDD Japan secretariat office and they have continued awareness-raising activities worldwide by placing the RDD official logo mark on their clothing, caps, bags, etc., and by distributing postcards and pin badges during domestic and international tours. JCR signed a sponsor agreement with Mr. Kawamura in October 2019, Mr. Imamura in April 2021 and Mr. Hazawa in April 2022.

MESSAGE

I joined the RARE DISEASE Project because I wanted to hear directly from patients and their families, to reconsider the question "what can I do for them?" and to put what I learned into action. This is the second year of my appointment to the project. I've had several opportunities to speak with patients and hear their views firsthand through sessions and other events. By engaging with the patients, I was able to feel their daily suffering in the absence of effective treatment options, as well as their strong determination to fight their disease and stay alive, and their yearning for the creation of new medicines.

As a clinical development professional, I want to truly understand "what patients are suffering from and what they are thinking" and apply this knowledge to the development of clinical trial design. Furthermore, using scientific data from clinical trials and other studies, I would like to raise awareness of the fact that many people are suffering from diseases all over the world, as well as convey the voices of patients and their families, through the process of applying for new drug approval.



Domestic Project Coordination Group, Domestic Development Unit, Development Division





Initiatives for Environmental Conservation

JCR has been taking a wide range of steps to mitigate its environmental impact, including reducing CO₂ emissions and effectively using water resources. For example, we have worked to transition to LED lighting at all company facilities and shift all our company cars to hybrid cars, electric vehicles, and hydrogen-powered cars. In addition, we have promoted measures such as reducing water use at production sites, along with adopting single-use bioreactors to ensure efficient use of manufacturing facilities.

In July 2022, JCR established a new Environmental Committee to further strengthen its environmental initiatives, including efforts toward carbon neutrality. The Committee is responsible for setting basic policies involving the environment and for identifying material issues, and will establish and manage progress with targets based on those issues

The Kobe Science Park Center, JCR's new production site completed in November 2022, makes proactive use of solar power generation and other types of renewable energy. In addition, we are working to contribute to reducing global environmental impact by recycling industrial waste (waste plastics) generated by our production sites through material recycling, thermal recycling, and conversion into recycled solid fuel.

1. Recycling industrial waste (waste plastics)

Since FY2022, we have been working to select global environmentally friendly waste collection, transport, and intermediate treatment operators, and to strengthen our understanding and sorting of different types of industrial waste. This is intended to optimize disposal methods and monitor the volume of waste plastics disposed, as issues in recycling and reuse of industrial waste (waste plastics) and improving recycling rates.

As part of future efforts, in FY2023 we will actively promote material recycling of waste plastics discharged by our production sites. We are working to help mitigate the global environmental burden by reducing CO₂ emissions, conserving depletable resources, and extending the life of landfills through thermal recycling of waste plastics for which material recycling is difficult, and by converting them into recycled solid fuels—alternatives to fossil fuels—including RPF*1 (solid fuel made from waste plastics and paper waste) and fluff*2 (shredded soft plastic).

- *1 Refuse Paper & Plastic Fuel (RPF): A high-grade solid fuel made primarily from waste plastics, with a calorific value comparable to coal. It not only offers excellent handling and storage properties but also advantages in terms of economy and CO₂ reduction.
- *2 Fluff fuel: Fluff fuel is produced by sorting and shredding waste plastics. Compared to RPF fuel, derived from general waste plastic, fluff fuel is characterized by a low environmental impact since it requires no process for adding heat.



RPF



Fluff fuel

Consideration for biodiversity and proper management of chemicals and hazardous substances in wastewater management

In order to minimize our impact on biodiversity, we appropriately manage methods for handling and disposing of chemical substances used in R&D and manufacturing based on risk assessments. In addition, sewage containing chemical substances and hazardous materials generated at each production site is properly treated via the wastewater treatment system described below. We then monitor the effluent to ensure it is discharged into the public sewer system at levels at or below the standards required by law.

■ Wastewater treatment tank using yeast (new production site)
Because drug substance manufacturing often generates
highly concentrated BOD, we have installed a system that
uses yeast to decompose the BOD and includes compliance
with wastewater regulations. Chemical dosing via a

continuous neutralization device capable of neutralizing manufacturing wastewater is also used to adjust pH values to within values permitted by wastewater regulations; the wastewater is then discharged into the public sewer system.



Wastewater treatment tank

■ Virus inactivation equipment (new production site)

We have installed a system to inactivate microorganisms, viruses, etc. contained in wastewater from the process of manufacturing biopharmaceuticals and other products. This

process ensures that sewage is disinfected and discharged into the public sewer system with consideration for the environment.



Virus inactivation treatment system

3. Consideration for the surrounding residential environment at the new production site

At the Kobe Science Park Center, manufacturing facilities and equipment that generate noise and wastewater odors, etc., are located on the factory side of the property, while the

office building is located on the residential side in consideration of the need to preserve the residential environment for the people who live near the factory.



Kobe Science Park Center

4. Other initiatives

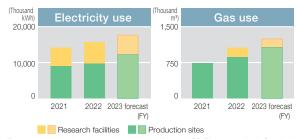
- We use rental uniforms made of recycled materials, and used uniforms are collected and recycled as raw material, contributing to a reduction in the use of petroleum-derived raw materials.
- We are reducing the use of copy paper by going paperless (digitizing documents and records related to GMP). We also use paper products with a FSC certification mark (switch completed in some departments, with plans for Company-wide rollout going forward).
- We use 100% recycled toilet paper (with flushable cores and wrappers). (Switch completed in some departments, with plans for Company-wide rollout going forward.)
- We are switching electric cars used as company vehicles to long-range models.



Electric vehicle

Energy Use

Total energy use has increased since heat source equipment went into full-scale operation at our research facilities around May 2022, and the new production site began operation in the latter half of FY2022.



*Data from production sites and research facilities of JCR Pharmaceuticals Co., Ltd.

At the Kobe Science Park Center, we have installed 588 solar panels on the roof of the office building, and use renewable energy in staff spaces, the cafeteria, and elsewhere. In accordance with recommendations from the Task Force on Climate-Related Financial Disclosures (TCFD), we have been disclosing information on total energy use since FY2021.

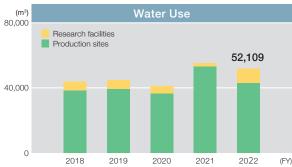


Solar power generation panels that have been installed over the entire roof of the Kobe Science Park Center office building

Water Resources

In FY2021, we saw a partial reduction in the use of water resources thanks in part to reductions in the amount of water used in research and production processes and efforts such as promoting the recovery and reuse of exhaust steam. However, water use increased temporarily due to growth in manufacturing business results (manufacturing of stock solution for COVID-19 vaccine). In FY2022, water use increased significantly due to full-scale operation of heat source equipment at the research facilities and other factors. Among production sites, operation of a new plant brought an increase in water use, but it decreased overall with the end of contract manufacturing stock solution for COVID-19 vaccine.

All water used in research and production activities is treated appropriately on site before being discharged.



*Data from production sites and research facilities of JCR Pharmaceuticals Co., Ltd.

Information Disclosure in Accordance with the TCFD

JCR will deliberate on matters such as establishing medium- to long-term GHG reduction targets in light of its business plans and initiatives such as the GHG reduction targets set by various companies, with the aim of keeping the rise in temperatures that has occurred since the industrial revolution below 1.5°C.

JCR will continue to handle the analysis of risks and information disclosure related to climate change in accordance with TCFD recommendations. Scope 3 emissions represented about 90% of GHG emissions overall in FY2022. For Category 1, which represents half of that amount, we plan to work with suppliers to prioritize reviewing and implementing measures to reduce those emissions.

[Governance]

JCR is working to strengthen governance initiatives related to climate change. Policies regarding activities and specific contents are deliberated by the Sustainability Committee, and the Board of Directors make decisions on them, taking into consideration the opinions of the Sustainability Advisory Committee.

[Strategy]

Regarding physical and transition risks and opportunities related to climate change, JCR plans to identify those that affect operations to a high degree as important risks and opportunities after assessing the significance of their short-, medium-, and long-term impact on business, strategy, and finances.

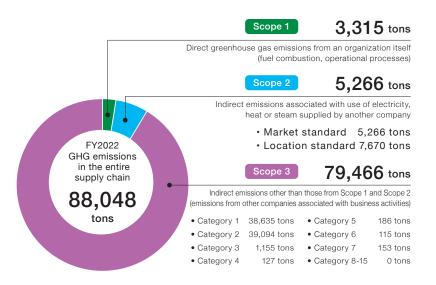
[Risk Management]

JCR is considering risk identification, assessment, management, and enterprise risk management integration processes, and will disclose information on this moving forward.

[Metrics and Targets]

JCR will consider climate change performance indices going forward. In addition, our Scope 1, 2, and 3 (some categories) GHG emissions calculated according to the GHG Protocol, an international calculation standard, are as follows.

FY2022 GHG Emissions by Scope



Scope of calculation	Scope 1, 2, and 3 applied to JCR Pharmaceuticals Co., Ltd.		
Scope 1	In addition to the combustion of fossil fuels such as gasoline, freon—which originates from industrial ai conditioners—and CO2 emissions derived from CO2 canisters are also included in the calculations		
Scope 2	Calculated using both market standards and location standards. Coefficients are in compliance with the Act on Promotion of Global Warming Countermeasure		
Scope 3	-		
Category 1 (Purchased products and services)	Calculated based on purchase and sales data. Coefficients are referenced from the Ministry of the Environment's Input Output Table Database v3		
Category 2 (Capital goods)	Calculated based on the increased amount of noncurrent assets. Coefficients are referenced from the Ministry of the Environment's Input Output Table Database via		
Category 3 (Fuel and energy-related activities not included in Scope 1 and 2)	Calculated based on energy consumption in Scope 1 and 2. Coefficients are referenced from the Ministry of the Environment's Database v3.2 and IDEA		
Category 4 (Shipping, Transport (Upstream))	Calculated using the mileage method for shipping from suppliers to the Company's locations, and calculated using the ton-kilometer method for shippin from the Company's distribution center to a distributor. Coefficients under the mileage method are referenced from the home page of the Japan Truckir Association, while coefficients under the ton-kilometer method are referenced from the Ministry of the Environment's Input Output Table Database v3.2		
Category 5 (Waste produced by business)	Amounts of generated waste are calculated according to type. General business-type waste is estimated based on number of employees and statistic data from the Ministry of the Environment. Coefficients are referenced from the Ministry of the Environment's Input Output Table Database v3.2		
Category 6 (Business trips)	Calculated based on number of employees. Coefficients are referenced from the Ministry of the Environment's Input Output Table Database v3		
Category 7 (Employee commutes)	Calculated based on commuting distance. Coefficients are referenced from IDEA		
Category 8 (Lease assets (Upstream))	Assets leased by the Company itself are included in the calculations of Scope 1 and 2		
Category 9 (Shipping, Transport (Downstream))	Calculated using the ton-kilometer method for shipping from the Company's distribution center to clinics, etc. Coefficien under the ton-kilometer method are referenced from the Ministry of the Environment's Input Output Table Database v3.2		
Category 10 (Manufacturing of sold products)	(Currently not calculated because it is difficult to assess and estimate the amount of activity by downstream customers		
Category 11 (Use of sold products)	(Excluded from scope because the final products are pharmaceuticals, and no energy is used)		
Category 12 (Disposal of sold products)	Calculated based on product shipment amounts. It is assumed that the products are completely consumed, and that only the glass vials are disposed of.		
Category 13 (Leased assets (Downstream))	(Excluded from scope because there are no leased assets that are owned by the Company and leased to other companies;		
Category 14 (Franchises)	(Excluded from scope because the Company does not have franchises)		
Category 15 (Investment)	(Excluded from scope because investment is not the objective)		

Contributing to Unmet Medical Needs



Basic Concept

With the aim of contributing to the unmet medical needs of patients and their families around the world, JCR supports medical research and the development of young researchers; provides humanitarian assistance in medically underserved countries; offers aid for the development of maternal and child health care; and supports children undergoing medical care and their families. Further, in an effort to address the world's medical needs as quickly as possible, we are working to disseminate the latest developments and expand access to pharmaceuticals.

Through such activities, we aim for a society in which no one will be left behind and the sustainable growth of JCR.

Support for the "International Medical Research Foundation"

JCR supports the activities of the "International Medical Research Foundation," which helps to foster medical researchers who can succeed internationally through programs such as study abroad grants. Since its establishment in April 2019, the International Medical Research Foundation has carried out a study abroad grant program for young medical researchers as well as a program to provide grants to international symposiums on medical research that are held both in Japan and overseas.

In the past few years, the declining international competitiveness of Japan's scientific research has become a serious problem. For this reason, efforts to support study abroad opportunities involving research at leading overseas institutions and efforts to support international symposiums that invite internationally recognized foreign researchers at the forefront of their research fields carry tremendous significance.

Accordingly, JCR endorses the activities of the International Medical Research Foundation.



Support for the Swiss Nonprofit Foundation "Global Foundation for Life Sciences"

As part of its efforts to contribute to global health, JCR supports the "Global Foundation for Life Sciences," a nonprofit foundation established in Switzerland in 1999. This foundation supports the advancement of life sciences, provides humanitarian assistance to various medically underprivileged countries and also provides support for the development of young researchers.

One example of the humanitarian assistance provided by the foundation is its support for the activities of a group of volunteer doctors formed to treat women suffering from obstetric fistula in West Africa. Obstetric fistula is a condition where a hole is formed in the birth canal or surrounding tissues due to inadequate medical care in cases where under-aged women become pregnant and give birth, among other situations, causing chronic fecal and urinary incontinence. The number of fistula patients is approximately 2 million worldwide with about 100,000



women newly diagnosed with the condition every year. The nature of the symptoms means that women with obstetric fistula face difficulties in their daily lives, in addition to some reported cases of harm from social discrimination and exclusion. The group of volunteer doctors regularly visits a hospital in Benin, a country in West Africa, and undertakes activities to eradicate obstetric fistula, performs surgeries on patients, and provides technical instruction to local doctors. JCR contributes to people's health and the advancement of medical care through its support for the foundation.



Donations to Kyoto University (Third-Party Allotment of Treasury Stock)

JCR aims to provide financial support to enable young researchers involved in life science or basic research as well as cancer immunotherapy research to concentrate on their studies, donating through third-party allotment of treasury stock to two funds established within Kyoto University, the Tasuku Honjo "Yuh-shi" Fund and the Cancer Immunotherapy Research Fund. By donating to these two funds, we support the development of challenging and creative basic research that could cause a paradigm shift in the field of life science and research aiming at realizing full cancer recovery, which is a long-cherished wish of humankind.

Support for the "Award for Promotion of Maternal Child Health"

JCR supports the "Award for Promotion of Maternal Child Health" (sponsored by the Mothers' and Children's Health and Welfare Association), as part of its efforts to provide support for pediatric diseases and public health.

The Award for Promotion of Maternal Child Health was created to commemorate the International Year of the Child in 1979. The award seeks to encourage the good work of individuals who have made great contributions to society and the field of community-based maternal and child health, in areas such as research on motherhood and children's health, raising widespread awareness of public health principles, providing practical education and instruction, and upgrading and expanding the development of public health facilities. By recognizing these accomplishments, the award program seeks to further promote the development of maternal and child health. Every year, 15 award recipients are selected from among candidates working in the field of

maternal and child health. The recipients include public health nurses, midwives, nurses, doctors, dentists, nutritionists, dental hygienists, nursery schoolteachers, and maternal and child health support workers, who are chosen for the award based on recommendations from the head of prefectures, ordinance-designated cities, core cities and special wards.

Momiji House, a Short-Stay Medical Care Facility

JCR supports Momiji House, which was established as Japan's first short-term facility for children with complex medical care needs. The facility was built on the grounds of the National Center for Child Health and Development (Setagaya-ku, Tokyo) in April 2016.

Momiji House provides 24-hour-a-day medical care for children who require constant medical care at home. Those with serious illness and disabilities and their families can stay for several days at Momiji House, feeling secure and comfortable as if they were at home. Aiming to realize medical care for patients living with rare and intractable diseases and their family members, JCR has continued to provide continuous support dating back to the time before the opening of Momiji House.





Transmitting Information at Academic Conferences

As a company that seeks to be "a global specialty pharma in the rare disease arena," JCR strives not only to deliver superior pharmaceuticals, but also to actively provide information on cutting-edge technologies, clinical trial evidence, and related matters.

In February 2023, at the 19th Annual WORLDSymposium[™], an international research conference on the basic research and clinical application of LSDs, 10 topics related to JR-141, JR-171, and JR-441, JR-471, and other candidate treatments for LSDs which it is developing using its proprietary J-Brain Cargo® technology were presented orally or as posters, while it also opened a booth at the venue where information was exchanged with relevant parties.

Clinical trial results for JR-141 were also presented at the 6th Asian Congress on Inherited Metabolic Diseases 2023 held in March 2023.

Efforts to Expand Access to Pharmaceuticals

IZCARGO® was approved and launched in Japan in 2021, and Phase III global clinical trials for JR-141 are currently underway outside of Japan. While JCR is working to strengthen product development and registration in order to deliver this treatment to patients around the world, it has also entered into an agreement with Clinigen Limited ("Clinigen") of the UK, and in March 2023 began addressing access to the drug in countries where it has not yet been approved through its Named Patient Supply program for IZCARGO®.

Clinical trials are conducted in selected regions, and registration requirements limit the number of patients who can participate. We have thus decided to implement a program through Clinigen to provide access to this treatment to patients who meet the medical needs, regulations, and standards of each country. Our goal through this program is to expand appropriate access to pharmaceuticals.



Basic Concept

As noted in its newly formulated Midterm Business Plan, "Reach Beyond, Together," JCR aims to continue investments in human capital and to establish a human resources strategy that will help to improve corporate value. It will work to construct a dynamic human resource portfolio that will help to accomplish the strategy, develop and organize permeation of diversity and inclusion, and activate individuals and organizations promote improvements to engagement. JCR will also advance efforts toward individual and organizational growth by creating a workplace environment in which our richly diverse employees can shine, and strengthening hiring and development of next-generation leaders in anticipation of full-scale global business expansion.

Construction of a Dynamic Human Resource Portfolio That Will Help to Accomplish the Strategy

Promoting Human Capital Management, Including Development of a Human Resources Portfolio

JCR sees developing and securing personnel who might contribute to enhancing its corporate value as central to its efforts to invest in human capital that will aid in advancing its business plans. Going forward, JCR will strive to expand and enhance programs that will contribute to promoting human capital management, including development of a human resources portfolio.

To remain a group that is attractive to a diverse workforce and to retain talent, we value the ability to share our core values with others regardless of nationality, gender, or age. To secure those human resources, we are working to strengthen not only recruitment of new graduates, but also mid-career hires with diverse skills and attributes who can make immediate contributions. In FY2022, we spent approximately 41 million yen on this effort. We will continue this proactive investment in hiring in FY2023 and beyond with a focus on securing human resources with an even greater degree of

specialization and diverse human resources. Our goal is to enhance our human resources portfolio with people better able to contribute to advancing our global strategy.

Offering Online English Conversation and In-Person Practical Training Programs to All Those Wishing to Improve Their Language Skills

JCR focuses on employee training from the viewpoint that employee growth leads to the development of the Company itself. In addition to holding regular training for new hires and for employees at each level of the organization, we also offer English-language training and beginning in FY2020, we have incorporated voluntary training in which employees can express their own interest in participating and e-learning to support employee efforts at self-improvement and growth. We also take into consideration the needs of our employees and the ease with which they can participate in these training programs, whether in the form of group training with outside instructors or participation in open lectures held outside the Company. English-language training is also offered with a variety of content and formats, including group lessons, web-based training and others.

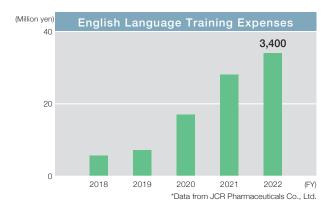
Key Efforts Aimed at Personal and Organizational Growth

 Promote human capital management, including building a human resources portfolio • Offer online English conversation and in-person practical training programs to all those wishing to resource portfolio that will help improve their language skills to accomplish the strategy • Develop next-generation global leaders (JCR Academy) • Create a corporate culture that utilizes the individual abilities of richly diverse employees • Promote the creation of a workplace where employees can thrive regardless of gender Development and • Enhance initiatives for career support of persons with disabilities organizational permeation of Introduce a system that enables flexible work diversity and inclusion • Support those raising children through in-house daycare centers and subsidies for childcare, etc. • Measures to improve the childcare leave acquisition rate among males • Build a human resource management framework as a system for realizing the image of Activation of individuals

employees and allows them to work with peace of mind

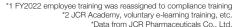
• Promote the creation of a workplace environment that protects the safety and health of

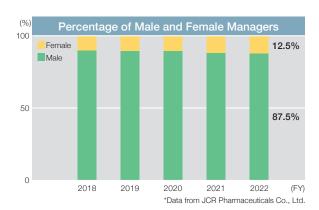
who we want our people to be

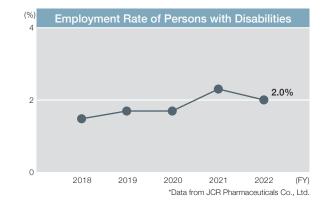


and organizations promotion of

	Training Track Record					
FY		2018	2019	2020	2021	2022
Group	Number of sessions	15	15	8	16	_ *1
training Tier-specific training	Hours	135	126	60	112	– *1
Voluntary training	Amount (Millions of yen)	6.6	9.0	5.1	11.4	16.0*2
English language training	Amount (Millions of yen)	5.7	7.2	17.0	27.9	34.0







Developing Next-Generation Global Leaders (JCR Academy)

JCR Academy was launched in FY2022 as a training initiative to develop next-generation global leaders and nurture the skills that will enable them to thrive on a global stage. The goal is for participants to acquire the soft skills required to thrive as global leaders, including communication skills, project management skills, and leadership skills, through a practical program.

Development and Organizational Permeation of Diversity and Inclusion

Creating a Corporate Culture That Utilizes the Individual Talents of a Richly Diverse Employees

Based on a firm belief that "Team JCR" is the source of JCR's value, we mutually respect different attributes such as gender, age, nationality, and disability, and believe it is important to maximize the individual abilities of richly diverse employees. For this reason, we promote diversity and inclusion.

Creation of a Workplace Where Employees Can Thrive Regardless of Gender

In October 2018, JCR was recognized in the Third Annual Hyogo Women's Active Participation Awards by Hyogo Prefecture for its efforts to expand career opportunities for women, raise the ratio of female employees in managerial positions (from 5.8% in FY2012 to 12.5% in FY2022), establish in-house daycare facilities, and encourage the participation of male employees in parenting activities.

In January 2019, we received Eruboshi certification (Grade 2) from the Minister of Health, Labour and Welfare for excellence in promoting the active participation of women in the workplace based on the Act on Promotion of Women's Participation and Advancement in the

Workplace. In FY2021, we were evaluated for creating a workplace environment that balances childcare and work based on a policy of eliminating distinctions between men and women, and received



the Hyogo Work-Life Balance Company Award.

Going forward, we will continue to conduct hiring and promotions free of gender bias, so that we can remain a company that enables women to continue working without interrupting their careers for significant life events or other reasons.

Promoting Employment of Persons with Disabilities

JCR aims to promote and normalize diversity, and to create an environment in which those with disabilities can work comfortably. It assigns counselors and uses in-person interviews to check individual wellness and motivation and to exchange information on work styles. The legally required rate of employment of persons with disabilities was met in FY2021, at 2.3%, but with an increase in the total number of employees, in FY2022 that rate was 2.0%.

Going forward, we aim to become a company in which diverse human resources can play an active role, both by continuously creating employment from the perspective of work sharing, and by establishing a system to ensure ongoing follow-up.

Introducing Systems to Enable Flexible Work

In the belief that both work and private life are important to our employees, we have introduced flexible work systems, some unique to JCR. These include introduction of flextime and telecommuting systems, allowing employees to take annual paid leave in hourly increments, and others. Since 2020, we have been working to enhance this initiative, including gradually expanding eligibility for the flextime system to each plant in the Production Division.

Beginning in 2019, we also began trial introduction of a paid leave accumulation system*, unique to JCR. This system can be used by employees whenever they need to provide childcare or nursing care to family members, or when they need to see a doctor regularly for the treatment or screening of personal injury, illness, or chronic disease, among other situations. From 2021, the scope of eligibility for nursing care, which had previously been limited to parents, has been expanded to family members. JCR aims to introduce a variety of systems to provide a workplace environment in which employees can work comfortably.

* The unused portion of paid leave may be carried over to the following fiscal year. However, under the provisions of the Labor Standards Act, any unused paid leave expires two years after it is granted. The new system allows employees to save and use up to 40 days of their expired paid leave.

Support for Employees Raising Children, through In-house Childcare Centers and Childcare Subsidies, etc.

We have provided an in-house childcare center at the Research Institute for employees who are raising children. In addition, we provide monthly childcare subsidies to support



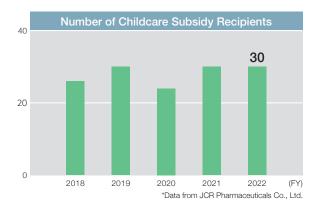
employees who are unable to use the in-house childcare center due to their work location. In recognition of these and other efforts, we received the Kurumin certification from the Ministry of Health, Labour and Welfare in September 2022. JCR has now been certified for two consecutive fiscal periods since 2018.

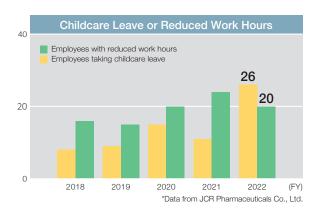
In addition, as a system for shortened working hours for childcare, JCR provides for shortening working hours by up to two hours per day until the child reaches the end of the second grade of elementary school.

Measures to Improve the Childcare Leave Acquisition Rate among Males

As a social issue, childcare leave taken by males has not yet fully become entrenched in society. Even at JCR, the childcare leave acquisition rate among males (17% in FY2020) was lower than the childcare leave acquisition rate among females (100% in FY2020). We believe that fostering workplace understanding and instilling awareness among male employees are essential to improving the childcare leave acquisition rate among males. Based on this belief, the Child-Raising Support Café (37 voluntary participants in FY2020) and Ikuboss training (14 participants in FY2021 and 28 in FY2022) (Ikuboss: a boss supportive of child-raising) were held as in-house seminars. At the seminar, an outside lecturer spoke about the benefits of childcare for males, and male employees and managers who have taken childcare leave in the past shared their experiences to promote understanding and cooperation for male employees to take childcare leave. Furthermore, staff from human resources departments explained various programs that enable male employees to actively acquire childcare leave, and published interviews in the in-house newsletter

with those who have taken childcare leave. With these and other steps, JCR is working to foster awareness of the acquisition of childcare leave by males within the Company. Through these measures, the childcare leave acquisition rate among males has increased every year, reaching 67% in FY2022. Going forward, we will continue working to improve the childcare leave acquisition rate.







Activation of Individuals and Organizations Promotion of Improvements to Engagement

Building a Human Resource Management Frame as a Framework to Realize the Image of Who We Want Our People to Become

To ensure proper communication between the Human Resource Planning Department and each department, regular discussions are held to align the Company's approach to future human resource needs before formulating a personnel plan. This effort to build a human resource management framework for people who can excel globally is centered on a newly formulated the image of who we want our people to become, and our desired corporate climate.

To study the current status of the above initiatives, in FY2023 we conducted an engagement survey of all

employees to measure employee satisfaction levels. We also conducted a human resource trend analysis (competency measurement). We were able to obtain responses from about 90% of employees, and the results of our analysis of the survey were used in formulating our image of who we want our people to become and our desired corporate climate. Going forward, we will use the information in considering new human resource systems, and will also begin considering a system for measuring engagement on an ongoing basis.

In addition, with the aim of accumulating and visualizing human resources information as human capital, we introduced SAP SuccessFactors, a talent management system, in parallel with the deployment and building of the Company's core SAP S/4 HANA system. The system, a standardized solution for human resource management, not only allows for the centralized management of human resource data, but will enable us to analyze and utilize data to

achieve talent management in line with our image of who we want our people to become. Examples of these initiatives include management of employee goals and evaluations, and use of a Career Vision Sheet. The Career Vision Sheet is a system unique to JCR, and is used to obtain information from employees once a year regarding the jobs they desire going forward and their career goals several years into the future. This allows us to understand each employee's vision for their own career, and consider appropriate assignments, transfers, and employee career development in light of future business operations. It also functions as a tool for communication between the Company and its employees.

Related page >-

Midterm Business Plan for FY2023-2027,

"Reach Beyond, Together" P.11

Promotion of a Workplace Environment That Protects the Safety and Health of Employees,

and Allows Them to Work Comfortably

As an initiative to create an ideal workplace environment that protects the safety and health of employees and allows them to work with peace of mind, we are encouraging the use of annual paid leave. We also provide group administration of influenza vaccinations and support employees aged 35 years and over who wish to receive a comprehensive health check. To improve the workplace environment, we hold a monthly Safety and Health Committee meeting on a Company-wide basis. Whenever improvements are necessary, the committee members discuss what steps JCR should take. We also have appointed two corporate physicians, one of whom provides mental healthcare as a designated mental healthcare physician. Furthermore, inside the Research Institute, we have created a space called "JCR Oasis," where employees can get a massage and refresh themselves during work.



Close Up

Initiatives for Hiring Those with Disabilities

Hiring and Creating Places for Those with Disabilities to Excel

With the aim of promoting and normalizing diversity, in addition to its existing recruitment activities JCR has undertaken a wide-ranging review of work for individuals with disabilities. Since 2021, we have worked to create a system that would allow for stable operations even during the COVID-19 pandemic, while also introducing diverse work styles, including a hybrid of teleworking and office-based work for employment of those with disabilities. Through this system, we also worked to expand employment of those with mental disabilities. To create a more comfortable working environment, we have also assigned counselors who

conduct one-on-one interviews to check on employee wellness and motivation, and to discuss how they work. The legally required rate of employment of persons with disabilities was met in FY2021, at 2.3%, but with an increase in the total number of employees. in FY2022 that rate was 2.0%.

Going forward, we will look from the perspective of work sharing to create a base for employment of those with disabilities, continue to expand eligible occupations, and strive to ensure each person can make full use of their abilities in their areas of strength. In addition, we will put in place a system for continually following up with those with disabilities, with the goal of being a company in which diverse human resources can excel.

Support System for Employees with Disabilities

The Act for Eliminating Discrimination against Persons with Disabilities, enacted in 2016, requires businesses to make "reasonable accommodations" to remove as many barriers as possible in the lives of people with disabilities. At JCR, we are working to improve and maintain the working environment to enable employees with disabilities to lead stable professional lives in accordance with the characteristics of their particular disabilities. This includes, in the hybrid work teams mentioned above, direct individual support, including cooperation with specialized welfare agencies, as well as assigning counselors to conduct regular one-on-one employee interviews.

MESSAGE

I work as a member of a nine-person team, using software called AutoCAD to digitalize hand-drawn blueprints created in the past. Since I had no experience with AutoCAD until I joined JCR, when I first started the job, I often made mistakes in operating the software and in drafting procedures. To overcome those problems, I worked to identify the details behind my mistakes, verbalizing what steps I could take to avoid repeating them and implementing those steps.

At JCR, each drawing is handled by a team, so a system is in place to cover for any absences among the team, which makes it easy to take leave when necessary. Reasonable accommodations are made for the characteristics of each team member's disability, and among other things, the environment is such that we can immediately check on any questions we may have about the work, allowing us to continue to work without feeling too much of a burden. We are also able to maintain a good work-life balance, including time to pursue our hobbies.

Tomomi Tashiro HR Planning Dept., Administration Division



Quality Assurance and Stable Supply



Stable Supply of High-Quality Pharmaceuticals

Quality Assurance Based on Global Standards

All of JCR's production sites have established a system that scientifically guarantees quality, encompassing the purchase of raw materials, manufacturing, shipment of products and product distribution in compliance with PIC/S GMP, an international standard, and continue efforts to raise those standards even further. JCR utilizes single-use equipment and supplies in the manufacturing of its biopharmaceutical products, with a wide range of culture medium and diagnostic agent suppliers in Japan and overseas. Because it also utilizes custom-made items, JCR enters into multiple-year contracts with suppliers worldwide and ensures quality by conducting regular on-site visits according to the level of risk.

Consistent Quality

Biopharmaceuticals require more highly sophisticated, complex manufacturing and quality control than what is required by small molecule pharmaceuticals. Moreover, detailed manufacturing and quality test plans are required. Each production site sets quality targets under common, Company-wide quality policy to continuously manufacture high-quality products, evaluates the status of achievement of those targets each year, and reports the results to management. Eyeing future global expansion, we are operating a consistent quality system to ensure that no differences arise

between production sites in terms of their positions on quality standards. At the same time, through the Quality Testing Department which has been integrated with the Analytical Methods Development Department, we have established a quality control system that enables a streamlined process from consideration of testing methods in the early stages of research to release testing for commercial production.

Ensuring a Stable Supply of Products

Since many JCR products are administered to patients over the long term, an unstable supply can be directly detrimental to the interests of patients. In terms of product characteristics, JCR products require a longer period of time to manufacture than small molecule pharmaceuticals because they involve more time-consuming and complicated manufacturing processes. To ensure a steady supply of products, JCR secures appropriate levels of raw material and product inventories, along with manufacturing of drug substances and finished products at its in-house production sites in Japan to allow for flexible manufacturing schedules. The ratio of products for overseas markets will increase in the future and there is a need to ensure a stable supply during emergencies. Therefore, we are considering manufacturing products and storing key intermediates at production sites overseas.

Ensuring Product Safety

Pharmacovigilance System

Given that the safety evaluation carried out when a new product is approved is based on limited clinical trials, JCR continues to collect and evaluate safety and validity information on products after they have been manufactured and sold in accordance with a risk management plan

(RMP). All the safety information collected is evaluated in a timely manner, and the need for implementing any additional safety measures is considered. Concurrently, JCR periodically evaluates the accumulated safety data and verifies whether there are any changes in trends such as side effects. If safety measures are necessary, JCR will convey information swiftly and reliably to all users that require it, such as medical professionals.

In order to implement these measures appropriately, JCR carries out safety management operations in accordance with laws and regulations. Notably, JCR provides regular training on the importance of collecting safety information to medical representatives (MRs), who directly interface with medical professionals, as well as the departments implementing safety management operations. This training is part of JCR's efforts to improve the safety awareness vital to undertaking its corporate business activities.

System of Cooperation among Three Responsible Persons

In accordance with the Pharmaceuticals and Medical Devices Act, JCR has set up a system of cooperation among three responsible persons, namely the Marketing Supervisor-General, Quality Assurance Manager and Safety Management Supervisor. This system is designed to scientifically and objectively evaluate the quality and safety of products independently of the Sales Division and Production Division, which are the principal bodies of JCR's corporate business activities. The system decides whether or not to release products and if there is a need for product recalls or additional safety measures, all important factors for JCR. By also reporting to and working in cooperation with the Representative Director and President and other responsible officers, management and this system work together to ensure the quality and safety of JCR's products.



Corporate Governance

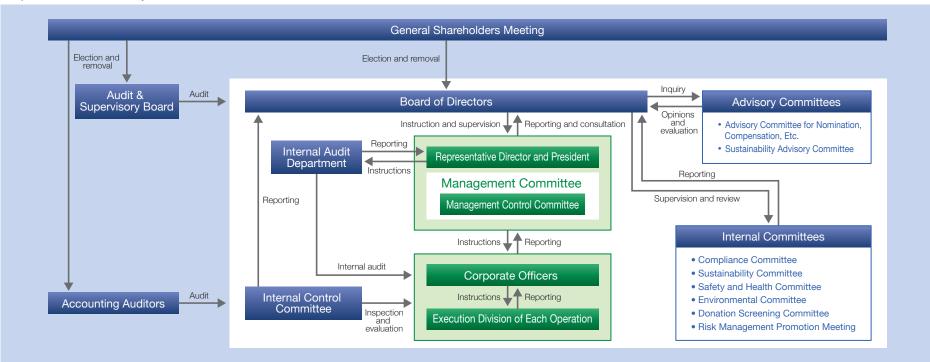
Basic Concept

The JCR Group believes that for the purpose of providing superior quality and more useful pharmaceutical products and medical equipment to society, it is important to aim to enhance the legality, transparency and objectivity of its management, to heighten its corporate value further, and at the same time to build a system to ensure the protection of shareholder interests. To this end, we will

work to secure implementation and operation of effective internal control systems, to evaluate the effectiveness of such systems on our own, and to fulfill our corporate social responsibilities.

For the purpose of compliance, we recognize that it is important to adhere to laws and regulations, global standards, and various industrial standards, and also to foster a corporate culture with the highest standards of ethics in the course of day-to-day business activities.

Corporate Governance System (As of July 6, 2023)



Overview of Corporate Governance System

JCR is a company with an Audit & Supervisory Board. As such, we have established the Board of Directors consisting of 12 Directors, including seven Outside Directors, the Audit & Supervisory Board consisting of five Outside Audit & Supervisory Board Members, and Accounting Auditors.

In addition to these organs, we have established the Management Control Committee, Advisory Committee for Nomination, Compensation, Etc., Sustainability Advisory Committee, Management Committee, Internal Audit Department, Internal Control Committee, Compliance Committee, Sustainability Committee, Safety and Health Committee, Environmental Committee, Donation Screening Committee, and Risk Management Promotion Meeting. As for the composition of the corporate governance system we believe it covers an appropriate scope in line with our current condition, and that it enables efficient management of business operations. Also, we have judged that the current governance system, which includes seven Outside Directors and five Outside Audit & Supervisory Board Members, is effective for ensuring management transparency, objectivity (impartiality) and independent supervision over management.

Description of Organs of the Company

Board of Directors

The Board of Directors consists of 12 Senior Executive Directors, and in principle, an ordinary Board of Directors' meeting is held once per month, and an extraordinary Board of Directors' meeting is held as necessary. The Board of Directors decides important matters concerning the management of the Company in addition to matters specified by laws and regulations. In FY2022, the Board of Directors discussed and made decisions on the establishment of an overseas subsidiary, important capital expenditures, and collaboration and license agreements with other companies.

Our Articles of Incorporation state that the Company may have no

more than 12 Directors and that the appointment of those Directors must be resolved at a meeting attended by shareholders who hold at least one-third of the voting rights of all the shareholders who have voting rights and that it must be passed by a majority of the votes. Furthermore, the resolutions to appoint Directors shall not be decided by cumulative voting.

Management Control Committee

The Management Control Committee consists of Representative Directors and Internal Directors. The Management Committee deliberates and decides important management matters related to management policy, management strategy and other priorities, in principle. However, the Management Control Committee operates as a meeting body when expeditious responses are needed depending on the matter in question.

Advisory Committee for Nomination, Compensation, Etc.

The Advisory Committee consists of one Internal Senior Executive Directors, four Independent Outside Directors and two Independent Outside Audit & Supervisory Board Members (one full-time member and one part-time member). The Committee deliberates on important matters concerning nomination and compensation for Senior Executive Directors and Corporate Officers and Audit & Supervisory Board Members. It also provides opinions on the evaluation of the effectiveness of the Board of Directors, etc. In FY2022, it reported to the Board of Directors in response to inquiries regarding appointments of Senior Executive Directors and Corporate Officers and major organizational changes.

Sustainability Advisory Committee

The Sustainability Advisory Committee comprises a total of five members: one Internal Senior Executive Directors, one Corporate Officer, and three independent Outside Directors. The Committee reports to the Board of Directors in response to inquiries on the content of discussions by the Sustainability Committee and Environmental Committee. In FY2022, it reported on JCR's current conditions, such as external ESG assessments, and challenges, as

well as the Sustainability Committee and Environmental Committee's annual activity report and planned initiatives for FY2023 and beyond.

Management Committee

The Management Committee consists of five Internal Senior Executive Directors, two Senior Corporate Officers, and three Corporate Officers, as well as Outside Audit & Supervisory Board Members and outside experts acting as observers. The Committee meets twice per month, in principle. The purpose of the Committee is to carry out deliberations and make decisions necessary for management to make judgments after sharing important matters related to management policy, management strategies and other matters related to company management among departments, and to submit results to the Board of Directors.

Corporate Officer System

We have introduced the corporate officer system for the purpose of ensuring the efficiency of management of the Company and to accelerate the execution of operations. Two Senior Corporate Officers and three Corporate Officers execute operations based on the management policy decided by the Board of Directors.

Audit & Supervisory Board

JCR is a company with an Audit & Supervisory Board. Five Audit & Supervisory Board Members have assumed office (one full-time Audit & Supervisory Board Member and four part-time Audit & Supervisory Board Members) and all of them are Independent Outside Audit & Supervisory Board Members.

The Audit & Supervisory Board holds a meeting once per month and also an extraordinary Audit & Supervisory Board meeting as needed.

Audit & Supervisory Board Members attend important meetings, including Board of Directors' meetings. The Audit & Supervisory Board also serves as a supervisory body over management, and ascertains the Company's status through consultations with top executives including General Managers in charge.

Internal Audit Department

The Internal Audit Department, which is directly under the control of the Representative Director, performs audits on whether or not administrative and operational structures of JCR's management activities as a whole and business operations are reasonably executed by departments in line with laws and regulations, confirming and evaluating objectively from an independent position. The purpose of the internal audit is to help the Company achieve management targets effectively and improve its operations.

The Internal Audit Department consists of two employees, including one department Director. Internal audit results are reported to the Representative Director and Audit & Supervisory Board Members.

Internal Control Committee

JCR established the Internal Control Committee to respond to the Internal Control Reporting System under the Financial Instruments and Exchange Act. The Internal Control Committee is chaired by the Director of the Internal Control Department, with members appointed from relevant departments in the Company, and Outside Audit & Supervisory Board Members and Accounting Auditors serving as observers. In principle, meetings are held every two months. It promotes and supervises the designing and operation of appropriate internal control relating to various business processes to ensure the reliability of financial reporting.

Sustainability Committee

JCR has established the Sustainability Committee in order to implement and promote sustainability management initiatives, with a view to contributing to the realization of a sustainable society and achieving sustainable growth for JCR based on its management philosophy of "Contributing toward people's healthcare through pharmaceutical products." The Sustainability Committee is chaired by the director in charge of sustainability with employees selected from each division of the Company as members.

Safety and Health Committee

JCR has set up the Safety and Health Committee for the purposes of securing the safety and health of employees at our workplaces, and establishing and promoting a comfortable work environment. The Committee is chaired by the general safety and health manager and consists of an industrial physician, safety administrator, health administrator, and employees at management level, all of whom are nominated by the Company, as well as employees nominated by an employee representative and a labor and social security attorney acting as an observer. The Committee holds meetings every month to report on the status of each workplace and exchange opinions, as it works to secure and improve occupational safety and health.

Environmental Committee

JCR views the environmental impacts of its business activities as risk factors that could potentially impact its long-term business or society, and believes that ensuring environmental protection is the responsibility of management and has established the Environmental Committee in order to practice and promote environmentally conscious business activities. This committee consists of Internal Directors and employees selected from each internal department.

Donation Screening Committee

JCR has established the Donation Screening Committee to screen donations made by JCR and its subsidiaries to ensure they are made appropriately and are socially and internally transparent and fair.

The Donation Screening Committee is composed of the Executive Director of Administration Division, members of the General Affairs Department, Accounting Department, Legal

Affairs Department, Internal Control Promotion Department, and a medical expert. It regularly evaluates matters such as the practice of donations and the appropriateness of donation amounts in accordance with their type, from an objective standpoint, with reference to factors such as relevant laws and regulations, industry rules, and internal standards. Details of the donation screenings are reported quarterly to the Board of Directors.

Compliance

Compliance System

JCR has established Compliance Rule to ensure that the group of companies comprising JCR and its subsidiaries conduct operations appropriately. Concurrently, the Compliance Control Committee and the Compliance Promotion Committee have been formed in order to establish the necessary measures concerning compliance and oversee their implementation.

The Compliance Control Committee, whose members are nominated by the Board of Directors, fulfills roles such as formulating basic policies and plans for promoting compliance activities, and presenting these matters to the Board of Directors, as necessary. Furthermore, the Compliance Promotion Committee, whose members are nominated by the Compliance Control Committee, is engaged in duties related to promoting compliance.

Separately from these committee organizations, the Compliance Rule requires that the heads of each division be appointed as the person responsible for the execution of compliance and assume responsibility for the implementation of compliance in the divisions they manage. Meanwhile, the Compliance Rule requires that education and training be provided regularly in each division to improve compliance-related awareness and enable employees to obtain and retain relevant knowledge. The Rule also requires each employee to make a sincere effort to participate in such education and training.

Compliance Initiatives

JCR defines compliance as: "All of the Company's executives and employees acting in accordance with laws and regulations (including rules, guidelines, voluntary industry standards, JCR's corporate philosophy and internal rules, etc.) with an ethical spirit for the Company to fulfill its social mission, meet the demands of society, realize sound, sincere management, and achieve sustainable development."

The most important principle in promoting compliance is to

not turn a blind eye when you encounter situations where you have doubts about compliance-related issues. We will neither hide our problems, nor try to turn them into a personal responsibility, but shall work together to resolve them. We should constantly review what we are doing, what we have done, and what we are trying to do in the future from the perspective of "creating sincere Team JCR." With our Compliance Manual and Compliance Handbook serving as our compass, we shall realize our vision for the Company by resolving problems whenever they arise.

JCR implemented the following compliance activities in FY2022: it issued a compliance newsletter and compliance e-mail magazine every month; provided general compliance training, including messages from management, every month; conducted a questionnaire on harassment; improved internal awareness through Compliance Awareness Month held twice a year; and provided compliance training for new employees and managers.

Composition, Number of Meetings Held, and Attendance Rate for Internal Committees and Other Organs of the Company in FY2022 (As of end of FY2022)

Advisory Committee for Nomination, Compensation, Etc.		Composition	7 members (1 Internal Director, 4 Independent Outside Directors, 2 Independent Outside Audit & Supervisory Board Members)
		Number of meetings held	10
		Attendance rate	94.12%
Internal Control Committee		Composition	11 members (1 from Administration Div., 4 from Internal Control Dept., 3 from Internal Audit Dept., 1 from Accounting Dept., and 1 from Production Management Dept.)
		Number of meetings held	7
		Attendance rate	90.79%
	Compliance	Composition	12 members (2 attorneys at law, 5 Internal Directors, 1 Independent Outside Audit & Supervisory Board Member, and 4 Corporate Officers)
	Control	Number of meetings held	2
Compliance	Committee	Attendance rate	100%
Committee		Composition	18 members (1 from Legal Affairs Dept., 3 from Internal Control Dept., 1 from Sales Div., 1 from Development Div., 2 from Research Div., 6 from Production Div., 2 from Quality Assurance Div., 1 from Tokyo Office, and 1 from Accounting Dept.)
		Number of meetings held	2
		Attendance rate	94.59%
Cofety and Health Committee		Composition	14 members (1 labor and social security attorney, 2 industrial physicians, 1 from HR Planning Dept., 2 from General Affairs Dept., 1 from Sales Div., 1 from Quality Assurance Div., 1 from Tokyo Office, 1 from Development Div., 2 from the Production Division Safety and Health Committee, and 2 from the Research Institute Safety and Health Committee)
Salety and Health	Safety and Health Committee		12
		Attendance rate	91.62%
Donation Screening Committee Risk Management		Composition	9 members (1 Adviser, 1 Executive Director of Administration Div., 1 from Legal Affairs Dept., 1 from Accounting Dept., 1 from Development Div., and 4 from Internal Control Dept.)
		Number of meetings held	10
		Attendance rate	96.63%
		Composition	15 members (4 Internal Directors, 1 Independent Outside Audit & Supervisory Board Member, 4 Corporate Officers, 1 from Corporate Strategy Dept., 1 from Business Development Dept., 1 from Sales Div., 1 from Internal Audit Dept., and 1 from HR Planning Dept.)
Promotion Meeti	Promotion Meeting		2
		Attendance rate	100.00%

Whistleblowing System (JCR Hotline)

JCR has established whistleblowing and consultation desks within and outside the Company. Regarding the permissible content of reports and consultations, JCR has adopted a system that accepts not only reports and consultations on violations of laws and regulations or internal rules, but also consultations on harassment and mental health, as well as opinions, requests, and suggestions for improvements. In addition, JCR has distributed to all employees business card-sized cards carrying the 27-item JCR Compliance Policy and contact information for the consultation desk, along with distributing and displaying posters in each department. JCR strives to make the whistleblowing system more generally known and easy to utilize through these measures.

Risk Management

Risk Management Promotion Meeting

JCR has established the Risk Management Promotion Meeting, which is led by the Risk Management Officer

appointed by the President, and includes division Executive Directors (or department Directors for departments that do not use the division system), as well as presidents of subsidiaries, as business risk managers. The Risk Management Promotion Meeting meets regularly to promote JCR's risk management and implements measures such as summarizing the risk management activities of each division, etc., preventing the occurrence of Company-wide risks, and formulating Business Continuity Plans (BCPs).

Status of the Risk Management System

As a company that handles pharmaceutical products that concern people's health, JCR has established the Basic Risk Management Rule and develops its risk management system and ascertains risk in its business activities based on that rule. Furthermore, JCR is creating systems to address risk prevention, risk management, and risk contingencies through collaboration with related committees such as the Risk Management Promotion Office, Internal Control Committee and Compliance Committee.

JCR has listed the important risks it should be aware of

and selected and decided on the three items below as BCP priorities.

- Response measures in the event of a disruption in the supply of GROWJECT®
- Company-wide response measures in the event of a large-scale disaster
- Response measures in the event of a major compliance violation

In particular, as a pharmaceutical company, JCR regularly holds meetings of the three executives of manufacturing and marketing (Marketing Supervisor-General, Quality Assurance Manager and Safety Management Supervisor) in accordance with laws and regulations, and has constructed systems that assure the quality, effectiveness and safety of drugs.

Moreover, while expanding its operations globally, JCR will introduce a world-class drug quality system and pursue an even higher level of safety.

Please refer to our "Corporate Governance Report" for details.

https://www.jcrpharm.co.jp/en/site/en/company/governance.html

Risk Management System



Outside Directors and Outside Audit & Supervisory Board Members

Functions and Roles of Outside Directors

JCR has seven Outside Directors, comprising five Independent Outside Directors and two Outside Directors. It has five Outside Audit & Supervisory Board Members, all of whom are Independent Outside Audit & Supervisory Board Members.

Outside Directors supervise management from an independent standpoint to contribute to JCR's sustainable growth and medium- to long-term improvement of corporate value through decision-making at Board of Directors' meetings. Outside Directors strengthen cooperation with the Audit & Supervisory Board, exchange information, share awareness, and appropriately reflect these aspects in Board of Directors' meetings from an objective point of view. Four Independent Outside Directors are also members of the Advisory Committee for Nomination, Compensation, Etc.

To further increase the independence and neutrality of our audit system, Outside Audit & Supervisory Board Members proactively acquire information necessary for audits by sharing information with an audit firm and the Internal Audit Dept., and monitor the execution of Directors' duties through operational and accounting audits. As they are expected to present objective opinions on audits, Outside Audit & Supervisory Board Members ask unreserved questions and offer comments to the Representative Directors and the Board of Directors. Two of the Independent Outside Audit & Supervisory Board Members (one full-time member and one part-time member) are members of the Advisory Committee for Nomination, Compensation, Etc.

Interests between JCR and Its Outside Directors or Outside Audit & Supervisory Board Members

Outside Director Toshihide Yoda concurrently holds the post of Managing Director at MEDIPAL HOLDINGS CORPORATION

(MEDIPAL HOLDINGS). JCR and MEDIPAL HOLDINGS concluded a contract for a capital and business tie-up, as well as multiple contracts for investment in development. MEDIPAL HOLDINGS also holds 23.28% of JCR's shares.

Outside Director Marc Dunoyer concurrently holds the post of Chief Executive Officer of Alexion, AstraZeneca Rare Disease. JCR and Alexion have signed a Research Collaboration, Option and License Agreement concerning a treatment for a neurodegenerative disease that applies JCR's J-Brain Cargo® technology.

The status of Outside Directors and Outside Audit & Supervisory Board Members' stock investments in JCR is recorded in our annual Securities Report. Otherwise, there are no special interests between JCR and its Outside Directors or Outside Audit & Supervisory Board Members.

JCR designates 10 members as Independent Directors or Audit & Supervisory Board Members, as stipulated by the listing regulations for the Tokyo Stock Exchange. The 10 members are Outside Directors Toshihiro Ishikiriyama, Takashi Suetsuna, Yuko Hayashi, Yutaka Atomi, and Philippe Fauchet, as well as Outside Audit & Supervisory Board Members Kazumasa Oizumi, Kazuhiko Yamada, Kenjiro Miyatake, Takeshi Komura, and Shuichi Tani.

Composition of Board of Directors and Audit & Supervisory Board

JCR's Board of Directors consists of five Internal Directors, five Independent Outside Directors, and two Outside Directors. Accordingly, JCR has appointed Independent Outside Directors who account for more than one-third of the Board of Directors, sufficiently meeting the conditions required in the Corporate Governance Code which was revised in June 2021. Furthermore, the Audit & Supervisory Board consists of five Independent Outside Auditors.

MESSAGE

I am honored to become again a director of JCR, and I believe that the pursuit of science to discover medicines that change patients' lives is an important mission for JCR. The shared values of the Company put the patients we serve at the center of our priorities, and the whole company contributes to these innovations, beyond our researchers and scientists. JCR is involved in a wide range of products and technologies, and its recent contribution to the production of a COVID-19 vaccine is truly remarkable. It is an exciting time to contribute to the success of JCR as a Board member.

Marc Dunoyer
Outside Director



Skill Matrix of Directors and Audit & Supervisory Board Members and Attendance Rate at Board of Directors and Audit & Supervisory Board Meetings in FY2022

			Advisory							Sk	ill						
			Committee for Nomination, Compensation, Etc.	Overall Management	Industry Knowledge	Global Experience	R&D	Production	Sales	ICT	Administrative Experience	Legal Affairs	Tax, Finance and Accounting	Sustainability	Risk Management	Other	Attendance Rate of the Board Meetings (FY2022)
Board of Directors	Shin Ashida	Representative Director, Chairman, CEO and COO	•	•	•		•	•						•	•		100%
	Toru Ashida	Senior Vice President		•	•				•					•	•		100%
	Mathias Schmidt	Vice President		•	•	•	•									Business Development and Contract Negotiation	100%
	Hiroyuki Sonoda	Vice President					•								•		100%
	Yoshio Hiyama	Senior Executive Director			•	•		•				•			•	Quality and Safety	100%
	Toshihiro Ishikiriyama	Director (Independent/Outside)	•	•	•												100%
	Takashi Suetsuna	Director (Independent/Outside)	•			•					•	•	•		•		100%
	Toshihide Yoda	Director (Outside)		•	•	•											100%
	Yuko Hayashi	Director (Independent/Outside)	•	•		•				•				•		Diversity and Inclusion	100%
	Yutaka Atomi	Director (Independent/Outside)	•		•		•								•		90.91%
	Philippe Fauchet	Director (Independent/Outside)		•	•	•	•	•	•	•	•	•	•	•	•	Business Development Medical Affairs, Public Relations and Government Affairs	100%
	Marc Dunoyer	Director (Outside)		•	•	•	•	•			•	•	•		•	Corporate Planning	_
Audit & Supervisory Board	Kazumasa Oizumi	Audit & SBM* (Independent/Outside)	•	•					•							Audit Practice	100%
	Kazuhiko Yamada	Audit & SBM* (Independent/Outside)									•						100%
	Kenjiro Miyatake	Audit & SBM* (Independent/Outside)		•	•						•						100%
	Takeshi Komura	Audit & SBM* (Independent/Outside)		•							•	•		•	•		92.31%
	Shuichi Tani	Audit & SBM* (Independent/Outside)			•												100%

* Audit & Supervisory Board Member



History of Growth

1975

JCR Pharmaceuticals Co., Ltd. founded

1978

Started sales of Urokinase drug solution (intermediate)

1985

Started import and sales of Grorm® Launched Urokinase product

30 billion yen

1993

Launched GROWJECT® Inj. 4IU, a recombinant human growth hormone (hGH) product

2003

Concluded license agreement for mesenchymal stem cells (MSCs) with Osiris Therapeutics, Inc. (U.S.)*

2009

1975

Concluded a comprehensive agreement concerning biopharmaceuticals with the GlaxoSmithKline Group

1980

2010

Launched Epoetin Alfa BS Inj. [JCR] for treatment of renal anemia, the first domestically produced biosimilar

2013

Listed on the First Section of the Tokyo Stock Exchange (TSE)

2014

Changed Japanese corporate name to JCRファーマ 株式会社

2016

Launched TEMCELL® HS Inj., the first allogeneic regenerative medical product in Japan

2017

Launched new liquid formulation of GROWJECT®, a recombinant hGH product

1995

Concluded a business capital alliance agreement with MEDIPAL HOLDINGS CORPORATION

2018

Established JCR USA, Inc.

Launched Agalsidase Beta BS I.V. Infusion [JCR], a recombinant treatment for Fabry disease

2019

Launched Darbepoetin Alfa BS Inj. [JCR], a long-acting erythropoiesis-stimulating agent

2021

Launched IZCARGO®, a recombinant treatment for mucopolysaccharidosis II

2022

Transitioned to the Prime Market of the TSE

Completed construction of the Kobe Science Park Center Established JCR Europe B.V.

Established AlliedCel Corporation
Established JCR Luxembourg S.A.

2020

2000

Acquired ArmaGen, Inc. (U.S.)

Commenced business activities at JCR DO BRASIL FARMACÊUTICOS IMPORTAÇÃO E EXPORTAÇÃO LTDA. (JCR DO BRASIL)

2005

Trends in net sales since 1975

(Consolidated figures are shown for FY2004 and subsequent years)

2010 2015 2020

Established purification technology

1985



Production at the time of foundation



1990

Production today

Established technologies ranging from cell development to culture technologies

Entered the regenerative medical product field

JCR's history started from the production of "Urokinase," a urine-derived protein-degrading enzyme. JCR will ambitiously develop drugs for rare diseases, which have been our target since our inception, as it seeks to evolve as a research-oriented specialty pharma with global exposure. We aim to develop these drugs with our proprietary biotechnologies, technologies for cell therapy and regenerative medicine, and gene therapy technologies.

^{*} The licensor was changed to Mesoblast Group (Australia) in 2013, following the transfer of MSC-related rights from Osiris Therapeutics, Inc. to Mesoblast Group.

Key Topics for FY2022

For details, please refer to news releases found at the URL address listed under each topic.

July 2022

Filed a Partial Change Application for a Supplemental Indication of GROWJECT® for the Treatment of Short Stature Due to Short Stature Homeobox-containing Gene (SHOX) Deficiency

In June 2023, JCR received partial change approval for the supplemental indication of GROWJECT®.

► https://ssl4.eir-parts.net/doc/4552/tdnet/2161425/00.pdf

August 2022

Upgrated Medication Management App Melon Nikki™ for Pediatric Patients Undergoing Growth Hormone Therapy

https://ssl4.eir-parts.net/doc/4552/announcement1/81631/00.pdf

September 2022

Established JCR Europe B.V. as an Overseas Subsidiary to Become a Base for Development in Europe

▶ https://ssl4.eir-parts.net/doc/4552/tdnet/2185245/00.pdf

October 2022

JCR and Sysmex Corporation Established Joint Venture AlliedCel Corporation

AlliedCel aims to conduct research and development and early commercialization of regenerative medical products using diverse cells such as stem cells.

https://ssl4.eir-parts.net/doc/4552/tdnet/2186410/00.pdf

Selection as a METI "Project for Establishing Biopharmaceutical Manufacturing Sites to Strengthen Vaccine Production"

JCR will use the grant from this project to construct a new plant for drug product filling and finishing.

- ► https://ssl4.eir-parts.net/doc/4552/tdnet/2186623/00.pdf
- ▶ https://ssl4.eir-parts.net/doc/4552/tdnet/2192404/00.pdf

Obtained "Kurumin" Certification for the Second Consecutive Term as a Company Supporting Childcare

https://ssl4.eir-parts.net/doc/4552/announcement1/83392/00.pdf

Initiated Development of New Drug Candidate that Uses J-Brain Cargo® for the Treatment of Fucosidosis (Development Code: JR-471)

▶ https://ssl4.eir-parts.net/doc/4552/tdnet/2195075/00.pdf

Concluded a Memorandum and Agreement with MEDIPAL HOLDINGS CORPORATION Concerning Global Commercialization of Drug Candidates for Ultra-rare Diseases

The two companies concluded a licensing agreement for a drug candidate that uses J-Brain Cargo® for the treatment of fucosidosis.

https://ssl4.eir-parts.net/doc/4552/tdnet/2195077/00.pdf

November 2022

Completed Construction of the New API Plant Kobe Science Park Center

The Kobe Science Park Center will produce vaccines and other remedies in case of such a pandemic emergency and will carry out research, development, and manufacturing of JCR's proprietary biopharmaceutical drugs for rare diseases.

https://ssl4.eir-parts.net/doc/4552/tdnet/2200173/00.pdf

Received the FY2022 Hyogo Childcare Support Award

December 2022

Established JCR Luxembourg S.A. in Luxembourg as a European Packaging and Logistics Hub for Global Distribution

▶ https://ssl4.eir-parts.net/doc/4552/tdnet/2212726/00.pdf

January 2023

U.S. Food and Drug Administration (FDA) Grants Rare Pediatric Disease Designation for JR-141 for the Treatment of Mucopolysaccharidosis Type II (Hunter Syndrome)

▶ https://ssl4.eir-parts.net/doc/4552/tdnet/2223488/00.pdf

Received the European Award for Best Practices 2022 by the European Society for Quality Research (ESQR)

▶ https://ssl4.eir-parts.net/doc/4552/tdnet/2223490/00.pdf

March 2023

Achieved Preclinical Proof-of-Concept Milestone in a Collaboration with Takeda Pharmaceutical Company Limited to Develop Gene Therapies Using J-Brain Cargo® Technology

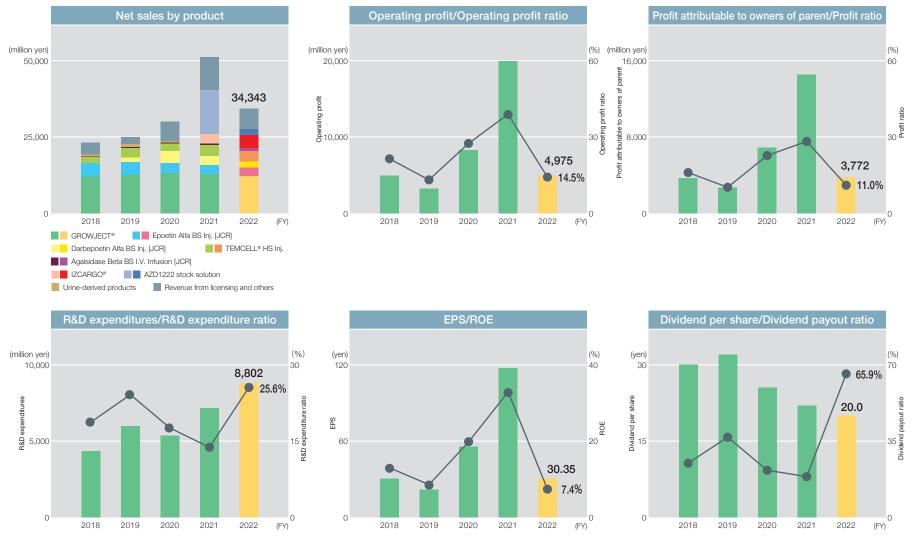
▶ https://ssl4.eir-parts.net/doc/4552/tdnet/2255762/00.pdf

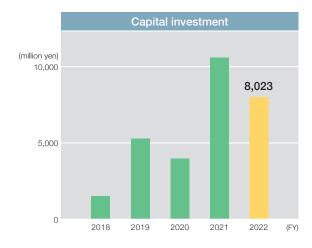
Concluded a Research Collaboration, Option and License Agreement with Alexion, AstraZeneca Rare Disease to Develop a Therapy Using J-Brain Cargo® for the Treatment of a Neurogenerative Disease

https://ssl4.eir-parts.net/doc/4552/tdnet/2257038/00.pdf

Consolidated Financial and Non-Financial Highlights

JCR Pharmaceuticals Co., Ltd. and Subsidiaries

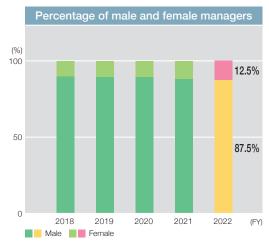




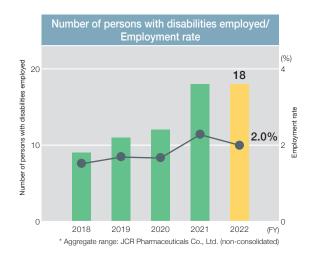


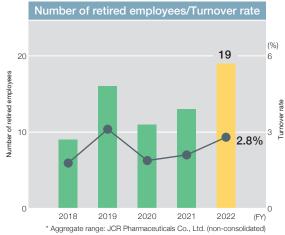












Society					
JCR Pharmaceuticals Co., Ltd. (non-consolidated)	FY2018	FY2019	FY2020	FY2021	FY2022
Number of employees	613	654	719	797	854
Research	129	146	154	221	244
Development	32	33	38	58	46
Production	230	246	270	209	226
Sales	117	119	122	118	121
Quality Assurance	31	33	36	81	102
Administration and other	74	77	99	110	115
Number of male employees	385	411	449	483	507
Number of female employees	228	243	270	314	347
Number of male managers	165	159	169	176	182
Number of female managers	19	19	20	24	26
Percentage of female employees	37.2%	37.2%	37.6%	39.4%	40.6%
Percentage of female managers	10.3%	10.7%	10.6%	12.0%	12.5%
Number of male new graduates	18	15	14	23	9
Number of female new graduates	10	7	15	17	13
Number of mid-career recruits	60	42	65	38	68
Average age	41.4	41.4	41.2	40.9	40.7
Length of service	8.8	8.9	8.9	8.7	8.7
Number of persons with disabilities	8	10	11	18	18
Percentage of employment of persons with disablities	1.6%	1.7%	1.7%	2.3%	2.0%
Number of retired employee	9	16	11	13	19
Turnover rate	1.8%	3.1%	1.9%	2.1%	2.8%
Percentage of acquisition of paid leave	9	15	9	4	13
Number of rehired employees	8	14	6	4	12
Percentage of rehired employees	88.9%	93.3%	66.7%	100%	92.3%
Percentage of acquisition of paid leave	68.1%	68.0%	62.7%	68.1%	75.5%
Average overtime hours	12.5	12.2	15.1	14.0	15.2

Society					
JCR Pharmaceuticals Co., Ltd. (non-consolidated)	FY2018	FY2019	FY2020	FY2021	FY2022
Number of parenting leave takers	8	9	13	4	11
Number of childcare leave takers	8	11	16	12	26
Percentage of acquisition of parenting leave and childcare leave (female)	100%	100%	100%	100%	100%
Percentage of acquisition of childcare leave (male)	35%	14%	7%	33%	67%
Percentage of returning to work after childcare leave	100%	100%	100%	100%	100%
Number of recipients of childcare subsidy	27	30	24	30	30
Number of short-timers	16	15	20	24	28
Number of savable paid leave takers*	_	260	112	319	125
Number of occupational accidents (without leave of absence)	2	2	8	7	8
Number of occupational accidents (leave of absence)	0	0	0	1	0
Number of Group training sessions	15	15	8	16	_ *2
Total Group training attendance time	135	126	60	112	_ *2
Total cost of English language training (millions of yen)	570	720	1700	2,790	3400
Number of meetings with investors (Japan)	103	137	105	124	155
Number of meetings with investors (Overseas)	20	21	12	9	22

^{*1} Instituted since FY2019

^{*2} FY2022 employee training was reassigned to compliance training

Corporate Governance	ce					
JCR Pharmaceuticals Co., Ltd. (non-consolidated)			FY2019	FY2020	FY2021	FY2022
Borad of Directors	Directors	9	9	9	9	11
	Outside directors	4	4	4	4	6
	Female director	1	1	1	1	1
Board of Directors Meeting	Number of meetings held	14	13	15	15	13
	Attendance rate	98.39%	99.15%	99.26%	98.52%	99.30%
Audit & Supervisory Board	Audit & Supervisory Board members	5	5	5	5	5
	Independent Outside Audit & Supervisory Board members	5	5	5	5	5
Audit & Supervisory Board	Number of meetings held	13	13	12	13	13
Meeting	Attendance rate	98.46%	100%	100%	98.46%	98.50%
Management Committee	Directors	6	6	6	6	5
	Outside directors	1	1	1	1	0
	Female director	0	0	0	0	0
	Audit & Supervisory Board members	2	2	2	2	2
	Independent Outside Audit & Supervisory Board members	2	2	2	2	2
	Corporate Officers	7	6	4	4	5
	Female Corporate Officers	2	2	1	1	1
	Advisers	1	2	2	2	2
Advisory Committee for	Number of meetings held	4	7	7	6	10
Nomination, Compensation, Etc.	Attendance rate	95.00%	90.24%	100%	100%	94.12%
Compliance Control Committee	Number of meetings held	2	1	2	2	2
	Attendance rate	96.67%	93.75%	100%	95.83%	100%
General compliance training	Number of times held	1	2	1	5	9
	Attendance rate	100%	100%	100%	99.88%	90% or more
Stress check	Number of times held	1	1	1	1	1
	Attendance rate	88.1%	92.6%	91.5%	95.4%	95.4%

Environment						
JCR Pharmaceuticals Co., Ltd. (non-	consolidated)	FY2018	FY2019	FY2020	FY2021	FY2022
Electricity (1,000kWh)	Research Division	4,512.009	4,464.587	4,602.125	5,068.261	5,857.852
	Production Division	7,678.841	7,606.577	8,408.000	9,012.701	9,731.705*3
Water (m³)	Research Division	6,389.000	5,870.000	5,280.000	2,097.000	8,735.000
	Production Division	37,660.000	38,901.000	36,061.000	53,004.000	43,374.000
Gas (1,000m³)	Research Division	0.07	0.06	0.06	8.16	201.67
	Production Division	604	611	709	734	858
CO ₂ emissions (t)*1	Business activities	_	426	244	112	*1
GHG emissions (t)*2	Scope 1	_	_	_	2,232	3,315
	Scope 2	_	_	_	5,136	5,266
	Scope 3	_	_	_	78,168	79,466
BOD (t)		2.47	2.40	8.62	15.36	6.14

^{*1} Data obtained beginning in FY2019 (FY2022 data is Included in GHG emissions Scope 1)

^{*2} Data obtained beginning in FY2021

^{*3} Includes 136.793 of electricity derived from renewable energy sources (data from August 2022 to March 2023)



JCR Pharmaceuticals Co.,Ltd.

Headquarters: 3-19 Kasuga-cho Ashiya, Hyogo, 659-0021 Japan Tel: +81-(0)797-32-1995 www.jcrpharm.co.jp/en/site/en/