

Next Step

SEIKAGAKU
CORPORATE
REPORT
2022



SEIKAGAKU CORPORATION

Exploring the Innovative Promise of Glycoscience

Seikagaku Corporation is a pharmaceutical manufacturer with a history of more than 70 years. As a pioneer in glycoscience, a research field with enormous hidden potential in drug discovery, we create innovative pharmaceuticals and medical devices.

Seikagaku contributes to the health, well-being, and improved quality of life for patients around the world in order to create a prosperous future.

What is Glycoscience?

Glycoscience is a field of research into sugar chains and the complex carbohydrates, or glycoconjugates, that are formed through the binding of these sugar chains with other substances, such as proteins and lipids. Research in this field has demonstrated that sugar chains are deeply involved exchanges of information and substances among cells and are essential for various life phenomena, from the creation of life to aging.

There is also growing interest in the relevance of sugar chains to numerous diseases. Progress in the field of glycoscience is expected to lead to the development of new diagnostic methods and therapies.

Key roles of sugar chains

- 1 Creation of life through fertilization**
Sugar chains are involved in the fertilization process that occurs when a sperm encounters an egg.
- 2 Determining blood type**
The ABO blood type of a person is determined by the shape of sugar chains on the surface of their red blood cells.
- 3 Water retention**
Sugar chains, such as hyaluronic acid, protect cells against excessive water loss.
- 4 Cell growth control**
Sugar chains control the activity of certain growth factors.
- 5 Protecting the body against external enemies**
When a viral or other infection invasion occurs, sugar chains activate immune cells by stimulating macrophages, which are a type of white blood cell.

Sugar chains and diseases

- 1 Viral and bacterial infections**
Pathogens such as the influenza virus bind to specific sugar chains on a cell's surface before penetrating the cell itself.
- 2 Metastasis of cancer**
When cells become cancerous, their sugar chains change shape and start to accelerate the proliferation and metastasis of cancer cells.
- 3 Diabetes**
Abnormal sugar chain genes are believed to be one of the causes of this disease.

<Reference> It has been found that highly metastatic cancer cells feature an increased amount of giant sugar chains, which are much less prevalent in normal cells.

Our Strengths Source of Competitiveness

Seikagaku Corporation has developed a unique business model based on specialization in R&D and manufacturing. We contribute to medical care globally by developing and supplying high-quality pharmaceuticals and medical devices that leverage our unique technological capabilities.

1

Specialization in Glycoscience

Since its foundation, Seikagaku has focused its attention on the importance of glycoscience and has been working on applied research for new drug development. With our many research achievements, we are contributing to advances in medical science globally through our pioneering and specialized work in this niche field.

2

State-of-the-Art Technology Related to GAG*

Through its many years of glycoscience research, Seikagaku has built up a library of GAG compounds and GAG-related enzymes, as well as a wide range of technologies based on the manipulation of these substances. We use these resources to develop new drugs. In its manufacturing operations, we apply our original GAG-related technologies and expertise to various processes, such as extraction, purification and culturing.

*GAG: Glycosaminoglycans, such as hyaluronic acid and chondroitin sulfate, which are structural components known as glycoconjugates.

3

Unique Business Model Specialization in R&D and Manufacturing

Seikagaku does not have its own sales force. Instead, we offer our products through sales partners that have strengths in their respective product fields. This approach allows us to concentrate our management resources into R&D and manufacturing. This is evidenced by the fact that our R&D expenses account for 25% to 30% of net sales, and that 40%* of our employees are involved in R&D.

*Non-consolidated base

PHILOSOPHY

CORE VALUES

<MOTTO>

Creativity, Fairness, Dreams and Passion

<Creed>

We create safe and useful products for human well-being with basic research based on glycoscience.

<Guidelines for Our Activities>

- We create a corporate environment of mutual trust and communication using individual abilities.
- We create innovative and useful products through in-depth cooperation between industrial and academic circles.
 - We assure the highest quality and safety of our products.
 - We enhance interaction with society by establishing genuine trust.

Through these efforts, Seikagaku will strive to become a sound and socially responsible company that protects the natural environment and improves quality of life.

Inspiration Behind Our Motto

Creativity

Individual and corporate creativity are important for scientific advancement aimed at pursuit of truth. We can produce novel new products, new technologies, and new use of products by developing and applying unique and creative approaches, thus we can expect to achieve sound and stable corporate growth as a result of these efforts.

Fairness

We will adhere to principles of fairness that are recognized worldwide, and through self-discipline, will ensure we remain a company that is respected by society at large. Our “Creativity” and our “Dreams and Passion” must be built on a foundation of “Fairness.”

Dreams and Passion

We have high ambition, and strive to achieve our dreams by working toward our ideals. This is the ultimate source of growth for our employees and our company.

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<< Editorial Policy >>

The Seikagaku Corporate Report 2022 is an integrated report containing both financial data and information about environmental, social and governance (ESG) initiatives. Non-financial information includes the history of our growth, our value creation processes, and initiatives in various business areas.

This report was created with the aim of providing stakeholders with a fuller understanding of our business activities and the value provided by Seikagaku Corporation.

<Target audience>

Seikagaku stakeholders, including shareholders and investors.

<Period covered by the report>

This report covers fiscal 2021 (April 1, 2021–March 31, 2022), but it also includes references to activities in fiscal 2022.

OUR HISTORY

Success Based on Steady Pursuit of a Unique Vision

As indicated by the company name, Seikagaku Corporation focuses on research in the field of biochemistry (seikagaku in Japanese). The history of Seikagaku Corporation is a story of growth in step with the development and progress of glycoscience.

Major Product Timeline

1950

Start of manufacture and sales of chondroitin sulfate for pharmaceutical products, following approval for pharmaceutical manufacturing in Japan



1960

Start of manufacture and sales of glucide-related research reagents developed in-house

*The research reagent business was terminated in 2012

1981

Start of manufacture and sales of world's first endotoxin colorimetry reagents

1987

Launch of ARTZ®*, the world's first joint function improving agent with hyaluronic acid as its main active ingredient
Launch of OPEGAN® as the first Japanese-made ophthalmic viscoelastic device



*The joint function improving agent ARTZ® delisted from the NHI drug price standard on March 31, 2022

1992

Launch of ARTZ®, a joint function improving agent, in Sweden under the name "Artzal®," making the start of full-scale overseas marketing of joint function improving agents

1993

Launch of ARTZ Dispo®, a joint function improving agent

1995

Launch of OPEGAN Hi® (now Sodium Hyaluronate 0.4 Ophthalmic Viscoelastic Preparation 1% SEIKAGAKU), an ophthalmic viscoelastic device

2001

Launch of SUPARTZ®, a joint function improving agent, in the U.S. (now SUPARTZ FX®)



2007

Launch of MucoUp®, a submucosal injection agent for endoscopic surgery



2012

Launch of Gel-One®, an intra-articular single-injection viscosupplement for the treatment of knee osteoarthritis, in the U.S.



2016

Launch of SHELLGAN®, an ophthalmic viscoelastic device



2018

Launch of HERNICORE®, a treatment for lumbar disc herniation



2019

Launch of HyLink®, an intra-articular single-injection viscosupplement for the treatment of knee osteoarthritis in Italy



2021

Launch of JOYCLU®, a joint function improving agent



1940s~

The world's first company to successfully produce chondroitin sulfate on a commercial scale.

1970s~

Pharmaceuticals using hyaluronic acid are developed.

1990s~

Enhances its range of pharmaceuticals using hyaluronic acid and expands its activities in overseas markets.

2018~

Product diversification leveraging cutting-edge glycoscience technology. Toward a new stage.

Business Structure Timeline

1947

Kosei Suisan K.K. (now Seikagaku Corporation) is established and opens the Kurihama Office (now Kurihama Plant) in Yokosuka City, Kanagawa Prefecture



1949

Masakane Mizutani (a former President of Seikagaku Corporation) commences trial production with the aim of realizing the world's first production of chondroitin sulfate on a commercial scale

1960

The Tokyo Research Institute (renamed the Tokyo Research Center in 1966) is opened in Shinjuku-ku, Tokyo

1962

The Company changes its name to Seikagaku Corporation

1968

The Tokyo Research Center (now the Central Research Laboratory) is relocated to Higashiyamato City, Tokyo



1975

The Takahagi Plant is opened in Takahagi City, Ibaraki Prefecture

1989

The Company's stock is registered on the Japan Securities Dealers Association market

1997

Seikagaku Corporation acquires Associates of Cape Cod, Inc. (U.S.A.), a manufacturer and seller of endotoxin-detecting reagents, etc.



1998

ISO 13485 certification is achieved

2004

Seikagaku Corporation is listed on the Second Section of the Tokyo Stock Exchange

2005

Seikagaku Corporation is promoted to the First Section of the Tokyo Stock Exchange

2013

The CMC Research Laboratory is established in Higashiyamato City, Tokyo (on the same site as the Central Research Laboratory)

2020

Seikagaku acquires CDMO* business operator Dalton Chemical Laboratories, Inc. (Canada)



*CDMO: Contract Development and Manufacturing Organization
A business that supplies comprehensive services in drug development and manufacturing to pharmaceutical companies, including contract drug manufacturing, pharmaceutical formulation planning at the development stage, manufacturing of investigational drugs, and optimization of manufacturing conditions

2022

SEIKAGAKU NORTH AMERICA CORPORATION is established in Canada to manage pharmaceutical and medical device development in North America

Moved to the Tokyo Stock Market, Prime Market



BUSINESS ACTIVITIES AND PRODUCTS

Seikagaku has two business segments. In the Pharmaceuticals business, we offer a range of original products that leverage technologies and knowledge cultivated over many years as a glycoscience pioneer. In the LAL business, we offer endotoxin-detecting reagents and other products.



LAL Business

Seikagaku engages in the LAL business, manufacturing and selling endotoxin-detecting reagents used in quality control of pharmaceutical and medical device manufacturing processes as well as a beta-glucan-detecting in vitro reagent for the diagnosis of deep fungal infections.

What are endotoxins?

Endotoxins are one of the major components of the outer membrane of gram-negative bacteria and exhibit strong pyrogenic activity even in minute amounts. Since serious side effects can be triggered by endotoxin contamination of injectable pharmaceuticals, biological products, or medical devices, they must be rigorously controlled, especially in directly administered injectable treatments.

What are glucans?

(1→3)-β-D-glucans are structural components of the cell walls of fungi, as typified by molds and yeasts. Measurement of the glucan concentration in blood is widely used in auxiliary diagnosis of deep fungal infections and judgment of the therapeutic effect of antifungal agents.

Endotoxin-detecting reagents and devices

■ ENDOSPECY®, TOXICOLOR®, PYROCHROME®, etc.

Endotoxin-detecting reagents are reagents that measure endotoxins. Made from limulus amoebocyte lysate (LAL), a substance extracted from the blood cells of horseshoe crabs, these reagents are used in quality control of injectable pharmaceuticals, biological products, and medical device manufacturing processes and water quality control of dialysate used in artificial dialysis.

■ PyroSmart NextGen™

PyroSmart NextGen is an endotoxin-detecting reagent manufactured using genetic recombination technology without the use of blood harvested from horseshoe crabs. Seikagaku has successfully developed the world's first product consisting of recombinant proteins of Factor C, Factor B, and a coagulating enzyme precursor, which are components of horseshoe crab blood cells. Developed together with overseas subsidiary Associates of Cape Cod, Inc., PyroSmart NextGen was launched in Europe and the U.S. in April 2021 and introduced in Japan in May of the same year.

■ Endotoxin-detecting Systems

Seikagaku provides a wide range of endotoxin-detecting solutions to meet customers' needs, such as fully automatic and simultaneous multi-analyte measurement.

Beta-glucan-detecting in vitro reagent

■ Fungitell®

Fungitell is an in vitro diagnostic reagent used in the selection of treatment methods for deep fungal infections and judgment of therapeutic effect. Fungitell was developed by Seikagaku Corporation as the first product of its kind in the world and it is manufactured and sold in markets outside Japan by Associates of Cape Cod, Inc.



Endotoxin-detecting reagents



Automatic endotoxin-detecting systems

Pharmaceuticals Business

The Pharmaceuticals business is Seikagaku Corporation's core business. Seikagaku manufactures and provides pharmaceuticals and medical devices made with GAG, as well as enzymes that act on GAG. GAG stands for glycosaminoglycans such as hyaluronic acid or chondroitin sulfate, the main ingredients in Seikagaku products. GAG is also a structural component of glycoconjugates. Seikagaku contributes to medical care in Japan and around the world by providing global-class high-quality products with its unique technologies.

Joint Function Improving Agents

■ ARTZ Dispo®, SUPARTZ FX®, VISCO-3®

ARTZ Dispo, a prefilled syringe product*1, is a multiple-injection version of ARTZ*2, a joint function improving agent containing hyaluronic acid as its main active pharmaceutical ingredient. When administered directly into the joint cavity, ARTZ Dispo is expected to reduce pain and inflammation. It has been approved and is supplied not only in Japan, but also in overseas markets, including the U.S., Asia, and Europe.

*1 A kit with an injectable syringe that has to be filled with solution.

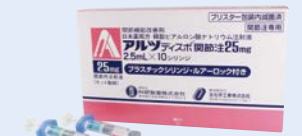
*2 Delisted from the NHI drug price standard on March 31, 2022.

■ JOYCLU®

JOYCLU, a formulation in which hyaluronic acid and diclofenac (an anti-inflammatory drug) are chemically bound, is a joint function improving agent launched in May 2021. Improvement of symptoms of osteoarthritis of the knee joint and hip joint is expected from the administration of JOYCLU into the joint cavity once every four weeks. JOYCLU is the first joint function improvement agent in Japan indicated for the treatment of osteoarthritis of the hip joint.

■ Gel-One®, HyLink®

Gel-One is an intra-articular single-injection viscosupplement for the treatment of knee osteoarthritis, which contains cross-linked hyaluronate hydrogel as its main ingredient, originally developed for the U.S. market. Administration of only 3mL provides long-lasting benefits. In March 2019, Seikagaku launched this product in Italy with its brand name "HyLink." Seikagaku is expanding the sales of this unique product with multi-branding strategy. It was launched in Taiwan in August 2021.



ARTZ Dispo®



SUPARTZ FX®



JOYCLU®



Gel-One®

Treatment for Lumbar Disc Herniation

■ HERNICORE®

HERNICORE, which contains an enzyme named "condoliase" as its active pharmaceutical ingredient, is Japan's first product for the treatment of lumbar disc herniation (intradiscal enzyme injection therapy). It can be administered without general anesthesia, and the administration can be less invasive for the patient compared to surgical technique because of direct intradiscal injection.



HERNICORE®

Ophthalmic Viscoelastic Devices (OVD)

■ OPEGAN®, SHELLGAN®, Sodium Hyaluronate 0.4 Ophthalmic Viscoelastic Preparation 1% SEIKAGAKU

The OPEGAN series of products allows the creation of appropriate intraocular space by viscoelastic properties of hyaluronic acid in cataract surgery. The product range includes seven types of different volumes and viscoelastic properties to meet specific treatment needs.

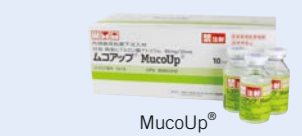


OPEGAN® series

Submucosal Injection Agent for Endoscopic Surgery

■ MucoUp®

MucoUp is an endoscopic surgical aid that utilizes the excellent viscoelastic properties of hyaluronic acid. By injecting MucoUp into the submucosa beneath the lesion during the endoscopic resection of tumors in the gastrointestinal tract such as esophagus, stomach and large intestine, it creates a durable tissue uplift and provides improved procedural maneuverability and efficiency for ESD/EMR.



MucoUp®

Bulk Products

■ Sodium hyaluronate, sodium chondroitin sulfate

Based on our unique extraction and purification technology, we manufacture and sell high-quality, high-purity hyaluronic acid and chondroitin sulfate, which are mainly raw materials for pharmaceuticals and cosmetics.



Bulk products

CDMO

■ CDMO services (contract development and manufacturing)

Seikagaku provides services to pharmaceutical companies, including manufacturing of chemical synthetics and pharmaceutical products on a contract basis and manufacturing process development. Seikagaku entered this business by acquiring Dalton Chemical Laboratories, Inc. as a subsidiary in March 2020.

PRESIDENT'S MESSAGE

Our aim is to achieve record-high business results during the term of the new mid-term management plan, which we have positioned as “A period for achieving growth.”

President & CEO Ken Mizutani



■ Summary of the previous mid-term management plan

Under the previous mid-term management plan, Seikagaku positioned the three-year period beginning with the fiscal year ended March 31, 2020 (fiscal 2019) as a time for solidifying the profit foundation so as to return Seikagaku to a growth trajectory, and we implemented three important measures: 1) Accelerating new drug discovery to become the pillar of new profits, 2) Solidifying the profit foundation through market expansion of new products, and 3) Productivity improvement reforms.

Although blindsided by the COVID-19 pandemic and other unforeseen crises, and negatively affected by the resulting market stagnation in Japan and overseas, delays

in R&D activities, and other consequences of the pandemic, Seikagaku was able to achieve certain positive results with respect to the three measures, notably progress with development pipelines; the launch of new products in Japan, the U.S., and other markets; and profit model diversification through the acquisition and consolidation as a subsidiary of Dalton Chemical Laboratories, Inc. of Canada.

Seikagaku also achieved all of the numerical targets in the plan and believes that during the three-year plan period the Group successfully laid a foundation for the next mid-term management plan.

■ New mid-term management plan (fiscal 2022–fiscal 2025)

We expect the business environment to remain uncertain due to rapid changes in the pharmaceutical industry, such as National Health Insurance drug price reductions in Japan, healthcare system changes in overseas markets, the increasing sophistication of new drug development, rising development costs, and innovations in medical technologies. Also, fulfillment of social responsibilities, starting with sustainability promotion, is increasingly important for the sustainable development of society and enhancement of corporate value, and responding to this societal trend is a matter of urgent importance.

In this business environment, Seikagaku has formulated a new mid-term management plan, positioning the four-year period beginning with the fiscal year ended March 31, 2023 (fiscal 2022) as “A period for achieving growth.” By implementing key measures set out in the plan on the basis of a profit foundation solidified during the period of the previous management plan, Seikagaku will aim to maintain a constant growth trajectory and achieve record-high business results in the final year of the plan.

Seikagaku Corporation Group will work to achieve further enhancement of corporate value by implementing five key measures set out in the new mid-term management plan: 1) Accelerate R&D utilizing unique drug-discovery technologies, 2) Maximize the product value of SI-6603 (treatment for lumbar disc herniation), 3) Maintain and enhance the business value of joint function improving agents, 4) Construct a global production system, and 5) Expand the LAL business through recombinant technologies.

R&D is the source of growth for pharmaceutical

companies, and Seikagaku is no exception. We focus on R&D as an important pillar of the business to be prioritized in preparation for future business development. Two key points of the management plan are steady advancement of existing pipelines, notably SI-6603, a treatment for lumbar disc herniation, and maximization of product value. In parallel with this effort to create next-generation products, we will actively revise the existing business structure, carrying out cost structure improvement targeting mainstay joint function improving agents and reinforcing our stable supply structure by constructing a global supply system. Gathering and providing safety information on the joint function improving agent JOYCLU remains a high priority, and we will seek to contribute to appropriate prescription on the basis of clinical research findings.

We expect to achieve record-high business results by implementing these key measures, as reflected in the numerical targets for net sales and operating income for fiscal 2025 in the management plan.

We consider enhancement of employee engagement along with organizational strengthening and human resource development to be the critical factors for carrying out these key measures. We introduced a new HR system in October 2022, erecting a framework for cultivating and fostering the growth of our human talent, which forms the nucleus of the business. We will continue to implement measures to enhance employee engagement and work to strengthen and improve the foundation for achieving sustained growth.

(For details, please refer to the section “Mid-term Management Plan FY2022 to FY2025” beginning on Page 17.)

■ Sustainability initiatives

Seikagaku considers the pursuit of sustainability to be an important priority. We have identified six material issues that should be addressed on a priority basis in the interest of achieving sustainable development of society and enhancement of corporate value. By continuing to focus on these material issues, which will become the foundation for the key measures in the mid-term management plan, we will strengthen development of medical-related businesses as well as ESG (Environment, Social, Government) initiatives, and aim to contribute to

solving social issues through close communication with supply chain partners and stakeholders.

(For details, please refer to the section “Sustainability Progress” beginning on Page 32.)

Forecast of financial results for fiscal 2022

The forecast of financial results for fiscal 2022 anticipates a sales decrease to result from a decline in royalty income from a high prior-year level coupled with strong impact from an NHI drug price decrease in Japan, which will offset a volume increase for pharmaceuticals in Japan and strong performance from pharmaceuticals overseas fueled by a strong yen.

We forecast a decrease in operating income to result from higher expenses at overseas subsidiaries, including foreign currency translation, despite a projected decrease

in R&D expenses accompanying completion of subject enrollment in an additional clinical study underway in the U.S. for SI-6603, a treatment for lumbar disc herniation. Ordinary income and net income attributable to owners of parent are expected to decline less steeply than operating income because of expected foreign exchange gains related to valuation of foreign currency-denominated assets.

Summary of the forecast of financial results for fiscal 2022

(Millions of yen)

	Forecast for Fiscal 2022	Fiscal 2021 Results	Change	% of Change
Net Sales	33,500	34,851	-1,351	-3.9%
Operating Income	1,700	4,495	-2,795	-62.2%
Ordinary Income	2,900	5,395	-2,495	-46.2%
Net Income	2,650	3,733	-1,083	-29.0%
R&D Expenses (Overseas sales ratio excluding royalty income)	8,000 (23.9%)	9,005 (29.2%)	-1,005 (-5.3pt)	-11.2%

To our shareholders and other stakeholders

The entire Seikagaku Corporation Group will implement the key measures set out in the newly formulated mid-term management plan in order to nurture the capability to maintain a growth trajectory and will work to achieve the targets in the plan. It is Seikagaku's mission to contribute to the health and well-being of people around the world through the wider provision on a global scale of new pharmaceuticals that patients truly need, and in so doing, we aim to enhance our value to society as a pharmaceutical company.

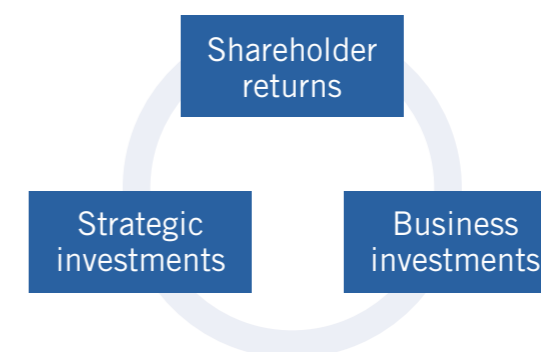
We will also strive to strengthen corporate governance on the basis of high ethical standards by rigorously practicing honest corporate activities and ensuring management transparency.

We request the continued understanding and support of our shareholders and other stakeholders in the coming years.

Basic policy on profit distribution

Seikagaku believes that sustained profit growth and enhancement of corporate value contribute to the common interests of the shareholders. Management regards the return of profits to shareholders as an important priority and, while taking an annual dividend of ¥26 per share as the basis, will consider dividend increases, taking into account the trend in business performance, the financial position, and other factors. Also, while taking into consideration future business expansion and the total return ratio, Seikagaku will consider the purchase of treasury stock when appropriate.

In addition, in order to solidify the business foundation and improve capital efficiency, the Company will make efficient and active business investments in R&D for creating new value, in production system development, and in sustainable activities and will flexibly make strategic investments offering prospects for future growth and synergy effects.



Shareholder returns

- Consider dividend increases, while taking an annual dividend of ¥26 per share as the basis, taking into account business performance and other factors.
- Consider the purchase of treasury stock when appropriate.

Business investments

- Continue efficient investments in R&D and production.
- Make active business investments in sustainable activities.

Strategic investments

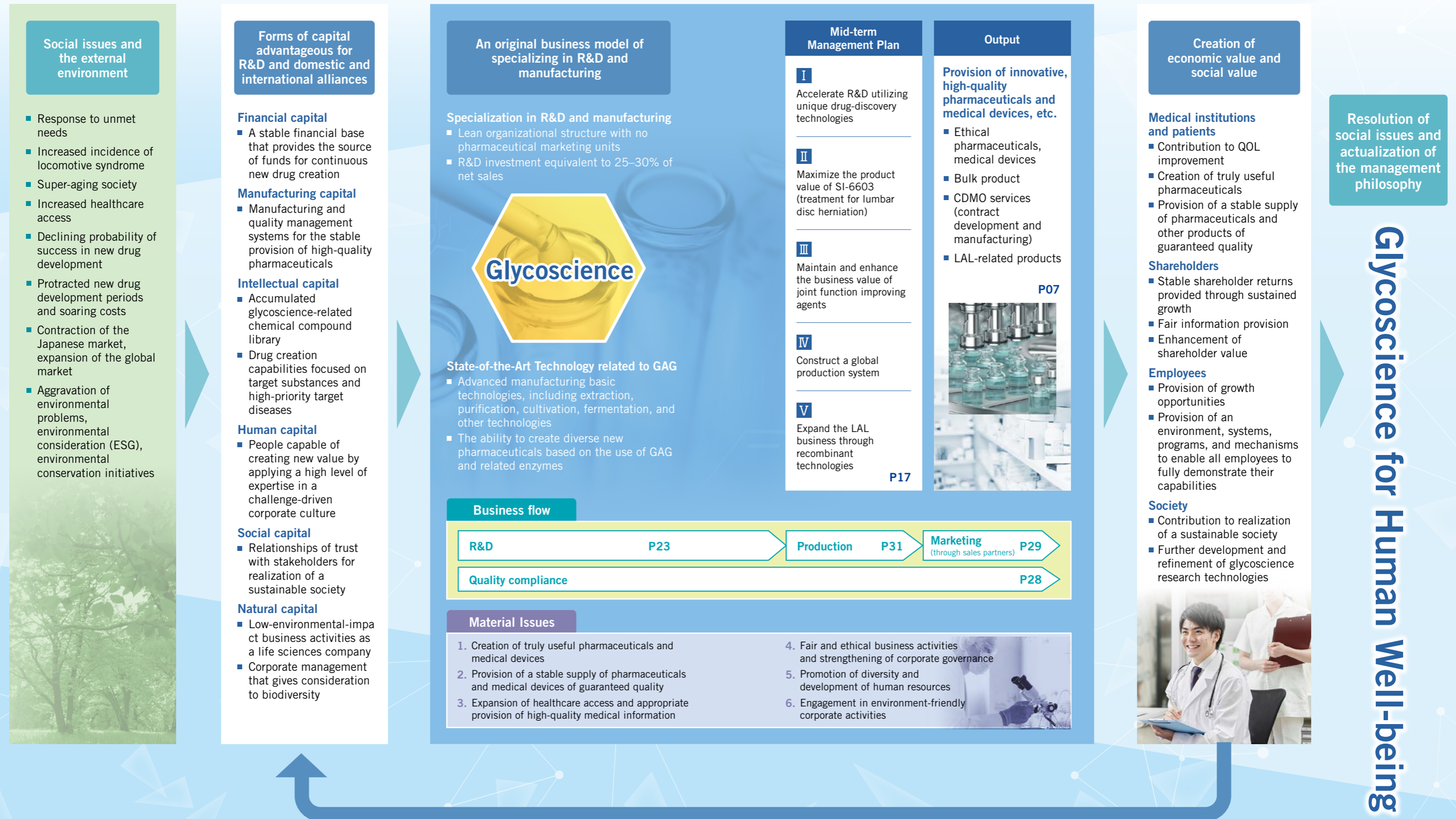
- Flexibly consider strategic investments with prospects for future growth and synergy effects.

	Forecast for Fiscal 2022	Fiscal 2021 Results
2nd Quarter	¥13.00	¥15.00 (including a special dividend of ¥5.00)
Fiscal Year-end	¥13.00	¥15.00 (including a special dividend of ¥5.00)
Annual Total Dividend	¥26.00	¥30.00 (including a special dividend of ¥10.00)
Dividend Payout Ratio	54.0%	45.2%

VALUE CREATION

Innovating Novel Contributions and Approaches

As a company specializing in glycoscience, Seikagaku works to find solutions to social issues, increase its corporate value, and contribute to the health and well-being of humanity by creating novel and effective pharmaceuticals and medical devices and providing them to the world.



SIX MATERIAL ISSUES

Seikagaku Corporation has identified six material issues on the basis of assessment of important issues that should be addressed on a priority basis in the interest of achieving sustainable development of society and enhancement of corporate value, in light of both their importance to the company and the expectations of society, including diverse stakeholders. By promoting initiatives related to these material issues, Seikagaku will contribute to achievement of the Sustainable Development Goals (SDGs) adopted by the United Nations.

Material Issue Identification Process

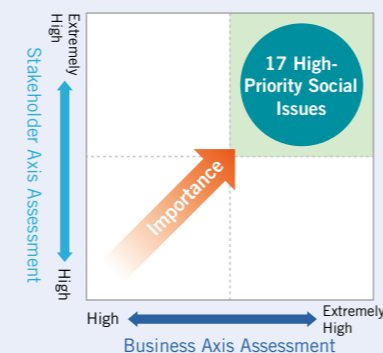
Step 1 Identification and organization of social issues

To identify material issues, we identified social issues based on factors including non-financial information disclosure guidelines; international frameworks, principles, and guidelines; and survey items from ESG assessment organizations. Furthermore, we closely examined issues specific to the pharmaceutical industry. On that basis, we compiled a list of 39 social issues.



Step 2 Prioritization of social issues

Using the list of 39 social issues identified in Step 1, we assessed the importance of issues to Seikagaku in light of its Corporate Philosophy, management strategies, and financial situation. Also, an external consultant scored, analyzed, and organized the issues from an outside perspective to assess the expectations of society, including diverse stakeholders. Based on the results of this assessment process, we prepared a social issues assessment matrix and shortlisted 17 high-priority social issues of importance to both Seikagaku and society.



Step 3 Identification of material issues through validation and grouping of issues

To validate the social issues assessment matrix prepared in Step 2, following discussion and careful examination of the matrix together with involved Seikagaku divisions and departments and an external consultant, the Board performed grouping of the 17 high-priority social issues and identified six material issues relevant to Seikagaku. The Board articulated reasons for selection and a future vision and determined objectives, initiatives, and monitoring indicators for each identified material issue and organized and confirmed their relevance to SDGs. The material issues were then deliberated and approved by the Board.



SUSTAINABLE DEVELOPMENT GOALS

Material Issues	Future Vision
<p>1 Creation of truly useful pharmaceuticals and medical devices</p> <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 17 PARTNERSHIPS FOR THE GOALS</p>	<p>Seikagaku increases its value to society by utilizing knowledge of glycoscience to continuously create pharmaceuticals and medical devices that are truly needed by society, and contribute to the health and well-being of people around the world. Seikagaku also considers intellectual property to be an important management resource and implements a global intellectual property strategy to contribute to the continuous creation of pharmaceuticals and medical devices.</p> <p>R&D P23</p>
<p>2 Provision of a stable supply of pharmaceuticals and medical devices of guaranteed quality</p> <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>Seikagaku strengthens its compliance and production systems to ensure uninterrupted access to reliable pharmaceuticals and medical devices for patients and medical institutions. Also, we manage risks associated with raw materials procurement and other business processes and take all possible measures to prevent risks from materializing.</p> <p>Quality compliance P28 Production P31</p>
<p>3 Expansion of healthcare access and appropriate provision of high-quality medical information</p> <p>3 GOOD HEALTH AND WELL-BEING</p>	<p>Seikagaku promotes global distribution of pharmaceuticals and medical devices that address medical needs and, as a pharmaceutical manufacturer, strives to enhance information provision in order to achieve appropriate awareness of the safety and efficacy of our pharmaceuticals and medical devices and of diseases related to our products.</p> <p>Marketing P29</p>
<p>4 Fair and ethical business activities and strengthening of corporate governance</p> <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>Seikagaku engages in business management to ensure that each employee not only complies with laws and regulations, but also behaves on the basis of high ethical standards. Seikagaku also continuously works to develop a highly effective corporate governance system.</p> <p>Corporate governance P41 Compliance and risk management P51</p>
<p>5 Promotion of diversity and development of human resources</p> <p>5 GENDER EQUALITY 8 DECENT WORK AND ECONOMIC GROWTH 10 REDUCED INEQUALITIES</p>	<p>Seikagaku considers human resources to be an important corporate asset and works to develop people capable of creating new value. We develop an environment, systems, programs, and mechanisms to enable all employees to fully demonstrate their capabilities so that the contributions and successes of diverse employees are the driver of Seikagaku's sustained growth.</p> <p>Human Resources P39</p>
<p>6 Engagement in environmentally friendly corporate activities</p> <p>7 AFFORDABLE AND CLEAN ENERGY 13 CLIMATE ACTION 14 LIFE BELOW WATER</p>	<p>As a member of society, Seikagaku aims to achieve balance between environmental protection measures and business growth and engages in business activities with low environmental impact in addition to obeying environment-related laws and regulations.</p> <p>Environmental impact reduction initiatives P34 Initiatives for biodiversity P37</p>

Mid-term Management Plan FY2022 to FY2025

Seikagaku has positioned the four-year period beginning with the fiscal year ended March 31, 2023 (fiscal 2022) as “A period for achieving growth” and formulated a new mid-term management plan. By implementing key measures set out in the plan on the basis of a profit foundation solidified during the period of the previous management plan, Seikagaku will aim to maintain a constant growth trajectory and achieve record-high business results in the final year of the plan.



Summary of Previous Mid-term Management Plan

Seikagaku was able to achieve positive results with respect to important measures set out in the management plan and solidified the foundation for returning to a growth trajectory by achieving the numerical targets in the plan.

I Accelerating new drug discovery to become the pillar of new profits

- Joint function improving agent JOYCLU launched
- SI-722 (treatment for interstitial cystitis) and SI-449 (adhesion barrier) advanced to the next stage of development
- Enrollment for SI-6603 (treatment for lumbar disc herniation) completed
- SEIKAGAKU NORTH AMERICA CORPORATION established

II Solidifying the profit foundation through market expansion of new products

- HyLink (intra-articular single-injection viscosupplement for the treatment of knee osteoarthritis) launched in Taiwan
- Alliance agreement concerning SI-613 concluded with Eisai (China, South Korea)
- PyroSmart NextGen Recombinant LAL Reagent launched

III Productivity improvement reforms

- DALTON CHEMICAL LABORATORIES, INC. made a subsidiary
- Business continuity system developed in response to the impact of COVID-19
- Progress with review of procurement costs and sales-related expenses

Numerical Targets

	FY2021 results*1	FY2021 target	Percentage achievement
Net sales	¥31.2 billion	¥28.3 billion	+10.5%
Ordinary income	¥5.39 billion	¥4.5 billion	+19.9%
SKK EBITDA*2	¥5.54 billion	¥5.0 billion	+10.9%
Overseas sales ratio (excluding royalty income)	56.6%	50.0%	+6.6pt

*1 Converted to previous presentation categories

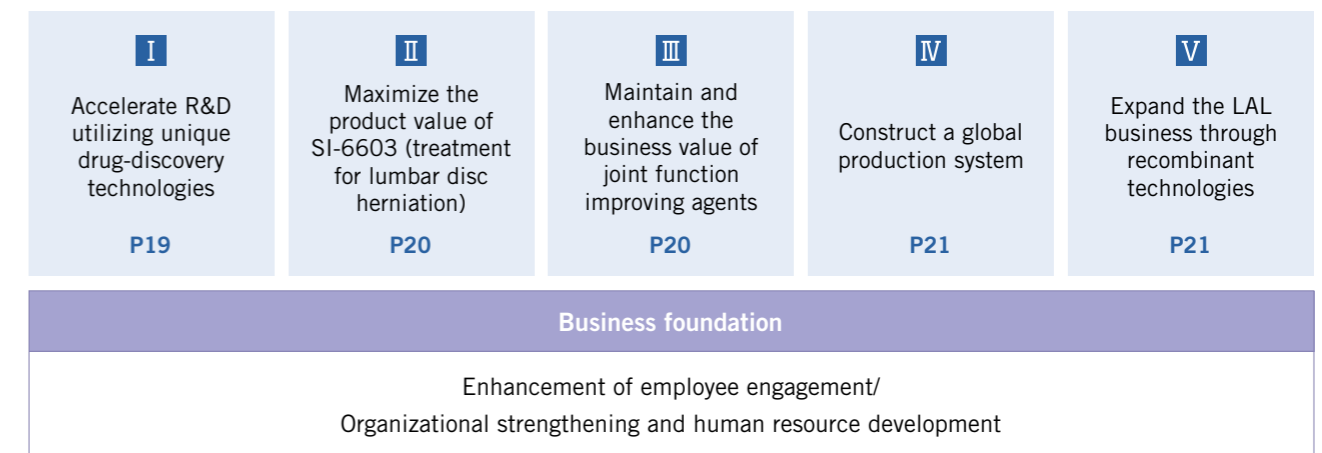
*2 SKK EBITDA: A profit indicator that adds depreciation and royalty income to operating income

Overview of Key Measures

We expect the business environment to remain uncertain due to rapid changes in the pharmaceutical industry, such as National Health Insurance drug price reductions in Japan, healthcare system changes in overseas markets, the increasingly sophisticated demands of new drug development, rising development costs, and innovations in medical technologies. Also, fulfillment of social responsibilities, starting with sustainability promotion, is increasingly important for the sustainable development of society and enhancement of corporate value, and responding to this societal trend is a matter of urgent importance. (Information on sustainability initiatives is available in the section beginning on page 32.)

In this business environment, Seikagaku will implement the five key measures in the management plan to develop the ability to maintain a constant growth trajectory.

In addition, enhancement of employee engagement along with organizational strengthening and human resource development will be critical factors for carrying out the above five key measures. Seikagaku will work to solidify and improve the foundation for achieving sustained growth by stepping up investment to create an environment that promotes development and growth of human resources, the heart and soul of the Group's businesses.



Numerical Targets

Seikagaku aims to achieve record-high business results in fiscal 2025, the final year of the management plan.

	FY2021 results	FY2025 target
Net sales	¥34.8 billion	¥40.0 billion
Operating income	¥4.4 billion	¥7.0 billion

<Assumptions>

- U.S. market introduction of SI-6603 (treatment for lumbar disc herniation)
- Profit expansion from joint function improving agents in Japan
- Expansion of the overseas pharmaceutical and LAL business
- Ratio of R&D expenses to sales (excluding royalty income): target of 25%
- Exchange rate: ¥135/US\$1

Summary of the Key Measures

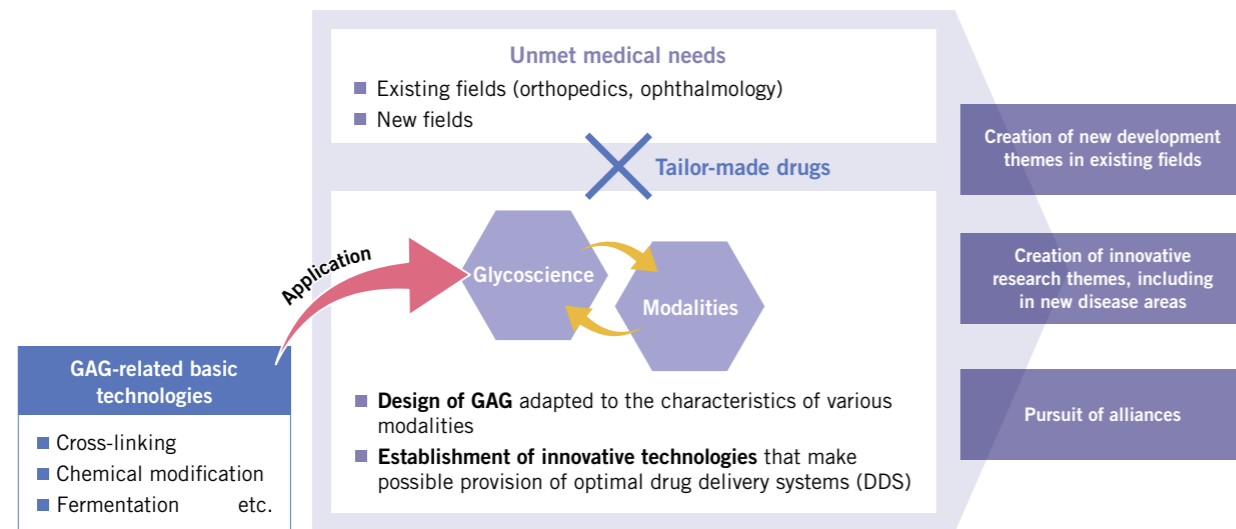
I Accelerate R&D Utilizing Unique Drug-Discovery Technologies

Create products that patients need utilizing Seikagaku's own GAG-related technologies and aim for steady advancement of the pipeline list.

Apply Seikagaku's own GAG*-related basic technologies to create new drugs that patients truly need, with an emphasis on unmet medical needs, by focusing on creation of new development themes in existing fields and creation of innovative research themes, including in new disease areas. Also, to increase the probability of success

of these efforts, pursue various alliances aimed at making early progress.

*GAG: Glycosaminoglycans, such as hyaluronic acid and chondroitin sulfate, which are structural components known as glycoconjugates.



Pipeline List (Research and Development themes)

Advance existing pipelines with the aim of obtaining approval and introducing in the U.S. SI-6603 (a treatment for lumbar disc herniation), completing a Phase III clinical

study in the U.S. of SI-614 (a treatment for dry eye), and obtaining approval in Japan and initiating a clinical study in the U.S. of SI-449 (an adhesion barrier).

[Pharmaceuticals]

(As of September 30, 2022)

Development code/Product name	Indication	Developed in	Phase I	Phase II	Phase III	Application	Market approval
SI-6603 Condoliase	Lumbar Disk Herniation	USA					
SI-614 Modified Hyaluronate	Dry eye	USA					
SI-613 Diclofenac etalhyaluronate sodium	Knee Osteoarthritis	USA					
SI-613-ETP Diclofenac etalhyaluronate sodium	Enthesopathy	Japan					
SI-722 Steroid compound sodium chondroitin sulfate	Interstitial cystitis and bladder pain syndrome	USA					

Phase I/II b (Discontinued (February 2022))

Phase I/II

[Medical Devices]

Development code/Product name	Product name	Developed in	Pilot study	Pivotal study	Application	Market approval
SI-449 Cross-linked Chondroitin Sulfate	Adhesion Barrier	Japan				
SI-449 Cross-linked Chondroitin Sulfate	Adhesion Barrier	USA				

→ Planned progress as of the end of fiscal 2025

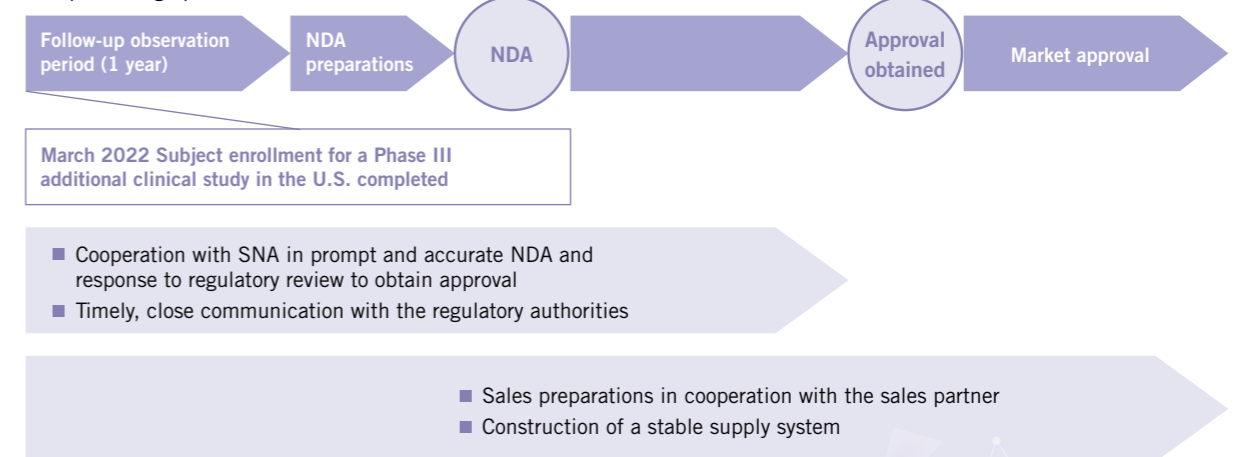
II Maximize the Product Value of SI-6603 (treatment for lumbar disc herniation)

Aim for an NDA, approval, and market introduction during the period of the mid-term management plan.

Take maximum advantage of SEIKAGAKU NORTH AMERICA CORPORATION, established in Canada for the purpose of obtaining approval in the U.S. and launching SI-6603, a treatment for lumbar disc herniation, to ensure a prompt and accurate NDA and response to regulatory review. Also proceed with sales preparations and pursue

maximization of product value through early penetration at medical institutions in close cooperation with the sales partner. (For information on the development status and characteristics of SI-6603, please refer to the section "Research and Development" beginning on page 23.)

<Steps leading up to market introduction>

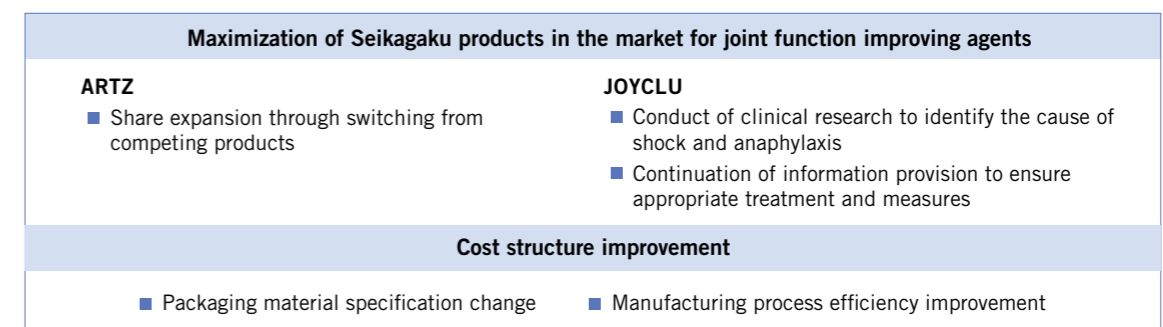


III Maintain and Enhance the Business Value of Joint Function Improving Agents

Seek to enhance business value through maximization of Seikagaku products in the market for joint function improving agents and cost structure improvement.

Strive to maintain and enhance the business potential of the core products that support business management by increasing the presence of Seikagaku products in the mainstay domestic market for joint function improving agents. Since the domestic pharmaceuticals business is greatly affected by NHI drug price reductions, cost structure improvement is essential. Seikagaku will further

proceed with product material specification changes, which help ensure continuity of product supply, manufacturing process efficiency improvement, and other measures. Seikagaku will also continue gathering and providing safety information on the joint function improving agent JOYCLU with the aim of contributing to appropriate prescription on the basis of clinical research findings.



Maintenance and enhancement of business value that supports business management

IV Construct a Global Production System

Undertake construction of a global production system with Japan and North America as dual production bases, including transfer of production of some products.

Further reinforce a stable supply of products on the basis of an appropriate and efficient production system by making Dalton Chemical Laboratories, Inc. (Toronto,

Canada) and the Seikagaku Takahagi Plant (Ibaraki Prefecture, Japan) dual production bases.



Seikagaku Corporation Takahagi Plant
(Ibaraki Prefecture, Japan)

▶ Please refer to "Overview of Production Sites" on page 31.



DALTON CHEMICAL LABORATORIES, INC.
(Toronto, Canada)

▶ Please refer to "Overseas Subsidiaries" on page 58.

V Expand the LAL Business Through Recombinant Technologies

Accomplish a transformation necessary from a long-term perspective in addition to continuation of current businesses and product improvement.


Further reinforce a stable supply of products on the basis of an appropriate and efficient production system by making Dalton Chemical Laboratories, Inc. (Toronto, Canada) and the Seikagaku Takahagi Plant (Ibaraki Prefecture, Japan) dual production bases, including transfer of production of some products.

▶ Please refer to "Overseas Subsidiaries" on page 58.



Endotoxin-detecting reagent
PyroSmart NextGen®

For details on the mid-term management plan:

 <https://www.seikagaku.co.jp/en/ir/management/midtermplan.html>

Business Progress

Research and Development P23

Quality Compliance P28

Marketing P29

Production P31



Research and Development

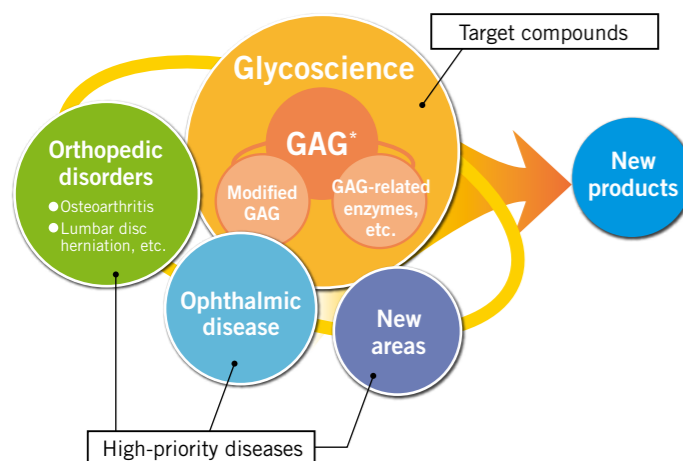
Seikagaku engages in research and development of innovative drugs in our specialty field of glycoscience. And we contribute to the health and well-being of people around the world.



R&D policy

In order to rapidly and continuously create new products, Seikagaku engages in efficient R&D activities by focusing on target compounds and prioritizing target diseases. The focus of our drug discovery is glycosaminoglycans (GAG), which are the structural components known as glycoconjugates.

In research spanning nearly 70 years, we have accumulated a wealth of experience and expertise related to GAG drug discovery research and GAG production and formulation technologies. Today, we apply hyaluronic acid or unmodified GAG in pharmaceuticals and also engage in research and development of modified GAG produced using a cross-linking technology as well as enzymes and other substances that act on GAG. Given the properties of GAG, we focus mainly on orthopedic disorders and ophthalmic diseases as high-priority areas for now, where we have expertise through the development of such products as ARTZ Dispo joint function improving agent and OPEGAN ophthalmic viscoelastic device.



*GAG: Glycosaminoglycans
(One of the constituents of complex carbohydrates)

Direction of R&D and future drug discovery approach

Seikagaku possesses a GAG compound library, GAG-related enzymes, and wide-ranging technologies for manipulating these substances. We actively utilize these assets, accumulated in the course of research spanning many years, in drug discovery activities. We have also developed a global network of collaborating glycoscience researchers and engage in multiple joint research projects with universities and research institutes.

Specifically, we continue to focus on drug discovery for orthopedic disorders and ophthalmic diseases and have also begun utilizing GAG-related technology to expand new fields. At the same time, we make efforts to maximize the value of our products on the market or themes in development through expansion of indications, additional formulations, changes in dosage and administration, etc.

Until now, Seikagaku has followed a drug discovery approach of increasing the bioactivity of GAG, mainly through GAG modification and processing, and we are currently applying GAG to drug delivery systems (DDSs). Furthermore, going forward, we will also adopt an approach focused on the biological functions of sugar chains to open up new possibilities in drug discovery.

In our DDS, we are researching technologies that utilize the characteristics of modified GAG to freely control drug dose and the location and timing of release. We will pursue drug discovery and development capable of responding to a wide range of unmet medical needs by designing GAG for various modalities—not only low-molecular compounds, but also so-called middle molecules, such as peptides and nucleic acids, and high polymers, such as proteins—and providing Seikagaku's own DDS.

Research and development organization

To ensure close coordination of the drug development process from its upstream to downstream, Seikagaku has put in place an organizational structure in which the departments involved in R&D are consolidated under the control of the Research & Development Division. This integrated organization covers every R&D activity from clinical development to new drug application (NDA) and intellectual property strategy. In this structure, the Central Research Laboratory is in charge of exploring candidate

substances and evaluating efficacy, safety, and pharmacokinetics, and the CMC Laboratory is responsible for production of investigational drugs, design of manufacturing processes, and consideration of commercial production.

The clinical study process and paths of new drug development

To create new drugs, it is necessary to conduct various studies to evaluate efficacy and safety. Clinical studies are conducted to confirm whether drug candidates are actually beneficial to humans, following completion of research processes such as basic research and non-clinical studies.

Clinical studies are ordinarily divided into three phases and conducted at medical institutions such as hospitals in conformance with rigorous standards after the consent of subjects (healthy persons or patients) has been obtained.

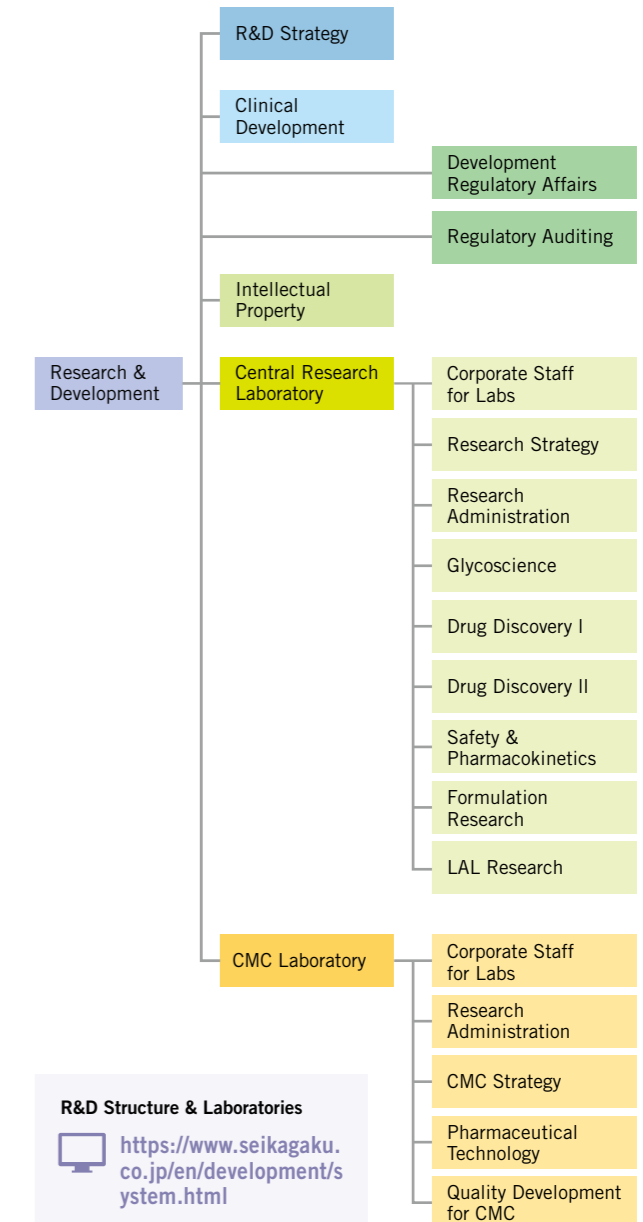
A Phase I clinical study, the initial phase, is ordinarily conducted for the main purpose of examining the pharmacokinetics (absorption, distribution, metabolism, and excretion) and safety (adverse events and side effects) of investigational drugs in a small number of healthy subjects.

A Phase II clinical study examines efficacy, safety, and pharmacokinetics and confirms optimal dosage and usage in a small number of patients.

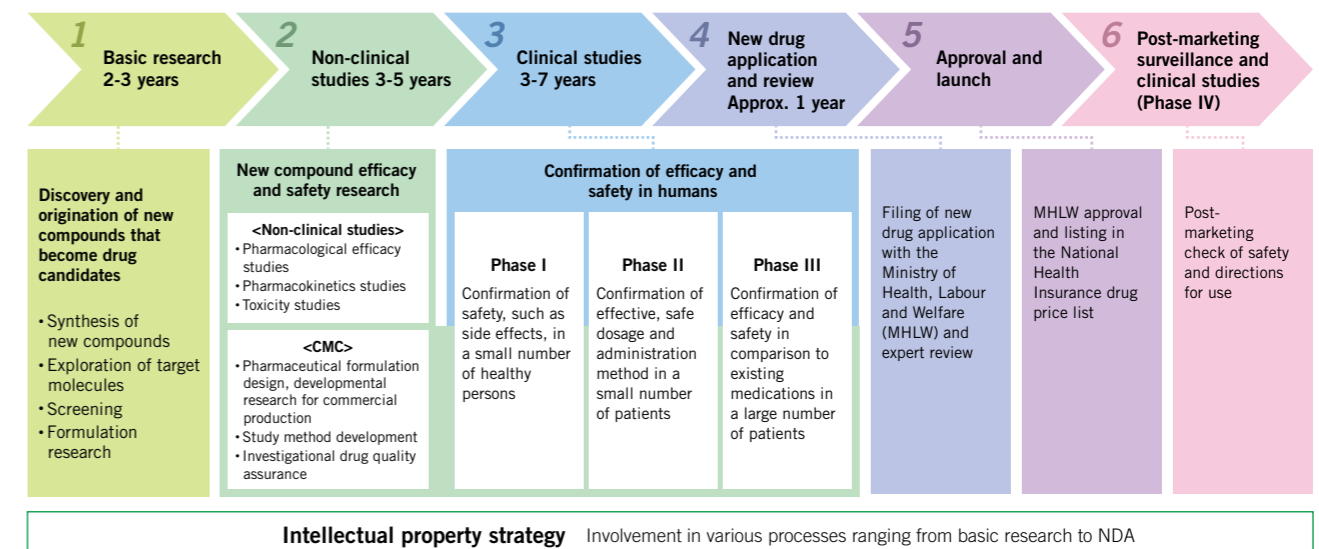
A Phase III clinical study, the final phase, objectively verifies efficacy and safety in comparison to existing approved drugs or placebos in large numbers of patients. Ordinarily, more than ten years is required from discovery of a candidate substance until its approval as a new drug. Within the long, difficult new drug development process, clinical development is considered to hold the key to whether an NDA can be filed.

[Research & Development Division Structure]

(As of April 1, 2021)



[The Drug Research and Development Process]



Research and Development

Development Pipeline

[Pharmaceuticals]

(As of September 30, 2022)

Development code/Product name	Indication	Developed in	Phase I	Phase II	Phase III	Application	Market approval
SI-6603 Condoliase	Lumbar Disk Herniation	USA					
SI-614 Modified Hyaluronate	Dry eye	USA					
SI-613 Diclofenac etalhyaluronate sodium	Knee Osteoarthritis	USA					
SI-613-ETP Diclofenac etalhyaluronate sodium	Enthesopathy	Japan				Phase II b (Discontinued (February 2022))	
SI-722 Steroid compound sodium chondroitin sulfate	Interstitial cystitis and bladder pain syndrome	USA		Phase I/II			

[Medical Devices]

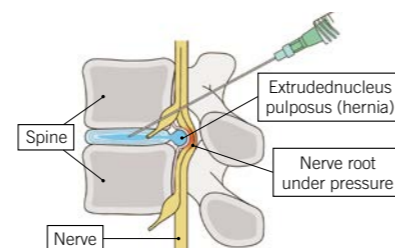
Development code/Product name	Indication	Developed in	Pilot study	Pivotal study	Application	Market approval
SI-449 Cross-linked Chondroitin Sulfate	Adhesion Barrier	Japan				

SI-6603 (treatment for lumbar disc herniation)

SI-6603, which contains condoliase as its active pharmaceutical ingredient, is a treatment for lumbar disc herniation directly injected into the intervertebral disc. It has the special characteristic of not requiring general anesthesia and being less invasive to patients than surgical treatment. Since a single injection is expected to improve the symptoms of lumbar disc herniation by reducing intervertebral disc pressure and relieving pressure on the nerve root, SI-6603 can contribute to improving patients' quality of life as a new treatment option.

In Japan, marketing approval was obtained from the Ministry of Health, Labour and Welfare in March 2018, and SI-6603 was launched on August 1, 2018 as HERNICORE 1.25 units for intradiscal injection.

Subject enrollment for an additional Phase III clinical study being conducted in the U.S. since February 2018 was completed in March 2022. Following a one-year observation period, Seikagaku plans to analyze the results and prepare for an NDA.



Administration of SI-6603

SI-613 (treatment for osteoarthritis)/SI-613-ETP (treatment for enthesopathy)

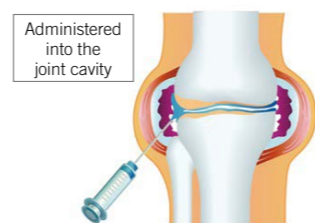
SI-613 is a formulation in which hyaluronic acid and diclofenac (an anti-inflammatory drug) are chemically bound using a drug binding technology proprietary to Seikagaku. By releasing diclofenac through hydrolysis, relief for osteoarthritis and enthesopathy can be expected.

In Japan, marketing approval was obtained for SI-613 for its efficacy and effect on osteoarthritis (knee joint and hip joint) on March 23, 2021, and it was launched as joint function improvement agent JOYCLU® 30mg Intra-articular Injection in May of the same year. It is the first joint function improving agent in Japan indicated for osteoarthritis.

Since shock or anaphylaxis has occurred in Japan, to promote appropriate use, Seikagaku is conducting a clinical study to identify the cause of the side effects.

The Company will consider the future direction for development in the U.S., China, and South Korea while assessing progress with identification of the cause of shock or anaphylaxis.

The primary efficacy endpoint in a late-stage Phase II clinical trial in Japan of SI-613-ETP for the treatment enthesopathy was not met, and the Company will prioritize identification of the cause of shock or anaphylaxis. For these reasons, development of SI-613-ETP was discontinued in February 2022.

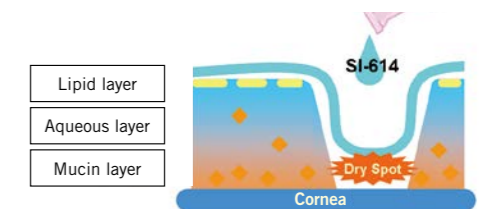


Administration of SI-613

SI-614 (treatment for dry eye)

SI-614, an ophthalmic solution, is a modified hyaluronate produced using Seikagaku's proprietary technology. Instilling this solution as an eyewash is expected to improve dry eye symptoms by stabilizing the tear film and promoting corneal wound healing.

Clinically beneficial effects were confirmed in a Phase II/III clinical study in the U.S. Accordingly, in May 2022 Seikagaku initiated a Phase III clinical study with the objective of evaluating efficacy and safety.

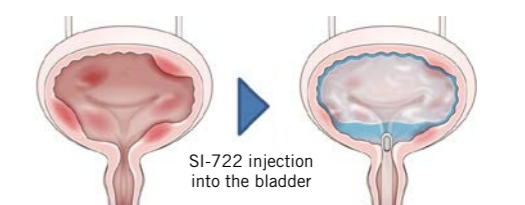


Administration of SI-614

SI-722 (treatment for interstitial cystitis and bladder pain syndrome)

SI-722 is a novel chemical compound in which a steroid is conjugated with chondroitin sulfate using Seikagaku's proprietary glycosaminoglycan modification technology and drug delivery systems. SI-722 injected into the bladder is thought to demonstrate an improvement effect in symptoms such as of frequent urination and bladder pain, by releasing a steroid with an anti-inflammatory effect.

While a Phase I/II clinical trial in the U.S. experienced delays in the trial schedule due to the spread of COVID-19, subject enrollment was completed in January 2021, and tolerability in the patients of this trial has been confirmed. Currently, we are exploring the next phase of trials based on the data we have obtained.



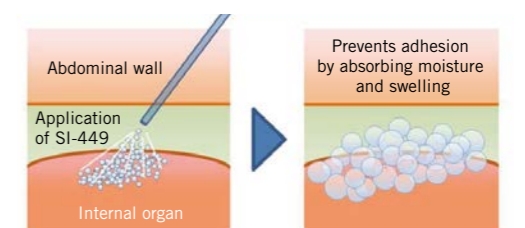
Using sustained release of steroids to provide long-lasting improvement

Administration of SI-722

SI-449 (adhesion barrier)

SI-449 is a powdered adhesion barrier whose main ingredient is cross-linked chondroitin sulfate developed using Seikagaku's own glycosaminoglycan cross-linking technology. SI-449, which has the property of absorbing moisture and swelling, is expected to prevent or mitigate post-operative adhesion formation by forming a barrier between the surgical wound site and surrounding tissues after application. Development of this subject is progressing with an eye not only on domestic development, but also globally.

Subject enrollment for a pivotal study in the field of gastroenterological surgery was completed in September 2022. The study is being conducted to confirm efficacy (prevention of adhesion formation), safety, and usability in gastroenterological surgery. Also, subject enrollment for a pilot study in the field of gynecology aimed at expanding the scope of application of SI-449 was completed in May 2022. Following the observation periods of both studies, the Company will aim for an NDA based on the data obtained.



Use of SI-449

Research and Development

■ Seikagaku and glycoscience

Seikagaku's Management Creed states: "We create safe and useful products for human well-being with basic research based on glycoscience." In keeping with this creed, we have made glycoscience the core foundation of our business and explicitly adopted a stance of respect for learning. Seikagaku's origin is closely bound up with this creed.

In 1950, Seikagaku became the first company in the world to successfully produce chondroitin sulfate, which is a sort of GAG, on a commercial scale. This breakthrough laid the foundation for our current business, which is centered on glycoscience. The manufacture of chondroitin sulfate marked the starting point for expansion of our business to bulk products, as well as reagents and diagnostics, and this has led to the strengthening of our ties to glycoscience-related academia and research institutes.

■ The difficulty of applying glycoconjugates to pharmaceuticals

GAG are formed when amino sugars (sugars that include nitrogen atoms) and uronic acids (a class of sugar acids) or galactose are linked together to form chain-like structures (sugar chains). Sugar chains are known in the life sciences as the third biological chain, along with nucleic acids and proteins, but they have complex chemical structures because they are molecules that handle various kinds of information within living organisms. In research in areas such as structural analysis, automatic synthesis, and large-scale synthesis, this complexity poses characteristic difficulties not found in other biological

■ Intellectual property strategy

Appropriate protection of intellectual property relating to Seikagaku's technologies, products, and other assets is essential not only for maintaining corporate competitiveness, but also for continuing to create and supply unique, high-quality pharmaceuticals and medical devices. Seikagaku views intellectual property as an important management resource and engages in global intellectual property-related activities.

■ Fair R&D activities

In the interest of conducting fair R&D activities, Seikagaku has established the Ethical Review Committee for Research Using Human Specimens and the Animal Experimentation Ethics Committee. Through comprehensive examination of the appropriateness of clinical studies and research using human specimens and animal experimentation in these committees, including ethical and scientific perspectives, Seikagaku strives to rigorously ensure ethical consideration in R&D activities.

Through this close relationship with academia, we acquired the idea of applying hyaluronic acid in pharmaceuticals. R&D activities spanning many years culminated with the successful development and launch of ARTZ, the world's first joint function improving agent whose main ingredient is hyaluronic acid. The development of HERNICORE, a treatment for lumbar disc herniation that contains condoliase, an enzyme that degrades GAG, also originated from collaboration with academia.

Seikagaku will continue to make glycoscience the central focus of R&D activities and, on the basis of research results in the field of glycoscience achieved in collaboration with universities and research institutes, strive to create pharmaceuticals and medical devices and deliver them to patients around the world.

materials.

However, long-term efforts in the industry and academia have advanced the structural analysis and synthesizing technologies of sugar chains. In addition, the genes of sugar-chain synthesizing enzymes and degrading enzymes have been comprehensively identified, and our understanding of the homeostasis of sugar chains in living organisms and their pathological function is advancing.

This progress in glycoscience technologies is closely linked with Seikagaku's drug discovery research.

The Intellectual Property Department engages in activities related to acquisition of intellectual property rights (patents, designs, trademarks, copyright, know-how, etc.) and their protection. It works closely with the Research & Development Division involved in drug discovery as well as with Business Development & Marketing Division, Production Division, and other relevant Company organizations.

Ethical considerations concerning research using human biological materials

<https://www.seikagaku.co.jp/ja/development/research/research01.html> (Japanese only)

Ethical considerations in non-clinical studies

<https://www.seikagaku.co.jp/ja/development/research/research02.html> (Japanese only)

Quality Compliance

Seikagaku's mission is to provide patients with a continuous supply of safe, beneficial, high-quality pharmaceuticals and medical devices. We have constructed corporate quality assurance and compliance systems in accordance with laws, regulations, and standards.



■ Quality compliance system

Seikagaku places quality first, from R&D to post-marketing by complying with overseas pharmaceutical laws and regulations, including GxP* regulations and guidelines. In Japan, as a marketing authorization holder, Seikagaku operates a legal compliance system under the officer responsible for pharmaceutical matters (Responsible Officer) in accordance with the Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices ("PMD Act"). And, the general marketing compliance officer, quality assurance supervisor, and safety management supervisor oversee appropriate quality management and pharmacovigilance operations.

To reliably provide pharmaceuticals and medical devices to patients around the world, we will continue to operate in accordance with global standards.

* GxP stands for Good XXX Practice, a collective term for standards established to ensure the efficacy, safety, and quality of pharmaceuticals and medical devices from R&D to post-marketing.

Quality compliance system

<https://www.seikagaku.co.jp/en/corporate/activities/quality.html>

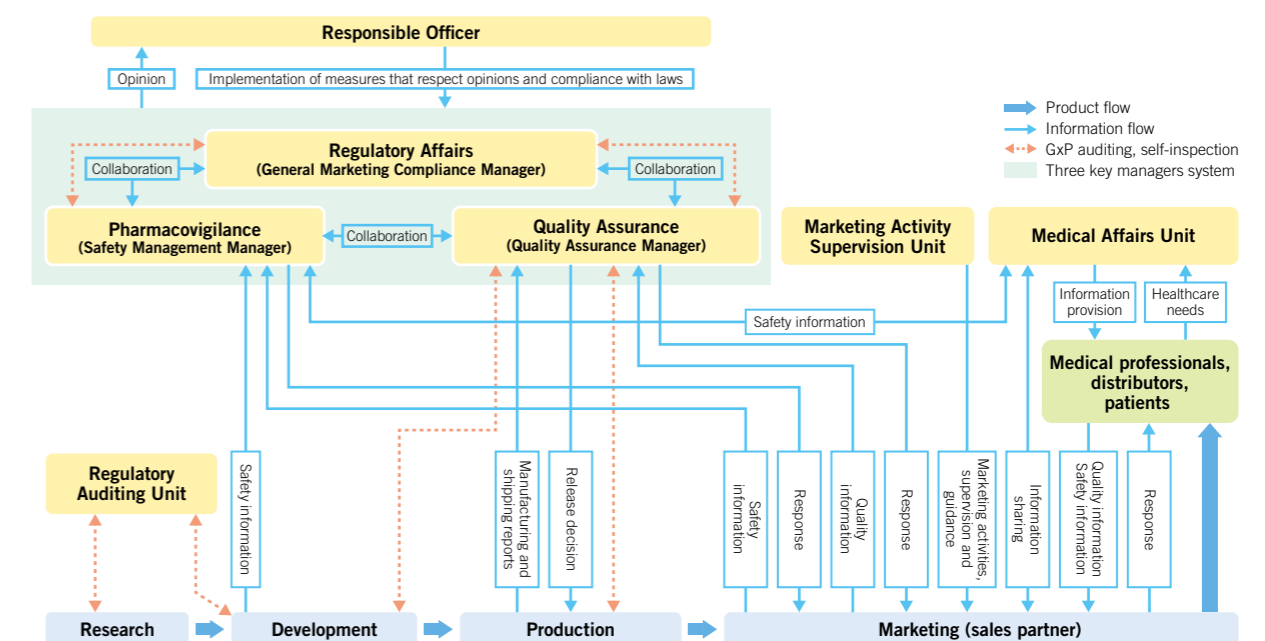
■ Safety management

Sometimes side effects not observed in the development stage come to light after the launch of a new pharmaceutical product. In accordance with Good Vigilance Practice (GVP) standards, Seikagaku conducts post-marketing pharmacovigilance activities involving promptly and appropriately collecting, evaluating, and sharing feedback information on the side effects of pharmaceuticals prescribed at medical facilities. Through these activities, we prevent the expansion of side effects and promote safety assurance and appropriate use of new drugs.

■ Medical information collection and provision activities

Seikagaku has established the Medical Affairs Unit, which engages in activities to provide current scientific knowledge to external professionals independently from the marketing division. As scientific experts with sufficient ethical perspective, the unit contributes to medical progress by creating and disseminating medical evidence relating to disease information and products in the fields in which Seikagaku focuses, such as orthopedic disorders and ophthalmic diseases.

[Research & Development Division Structure]



Marketing

Seikagaku has a business model of supplying products through external partnerships in Japan and overseas in collaboration with pharmaceuticals and medical device sales companies. In this way, it intends to focus and develop its business activities without having an in-house pharmaceuticals sales division.



■ Pharmaceuticals and medical devices

To efficiently deliver these products to patients globally, Seikagaku forms partnerships with pharmaceutical companies that have expertise in each market, including Japan, rather than selling directly to pharmaceutical wholesalers and medical institutions. Through their activities, our partners, in conformance with laws and regulations on pharmaceutical sales, provide appropriate information on product efficacy, safety, quality, and other matters to physicians on a timely basis.

Seikagaku, in close cooperation with sales partners, formulates sales strategies, supports preparation of product information materials, analyzes the market environment, including information on competing products, and collaborates with academic societies. Through these activities, we support sales partner activities and appropriately promote market penetration for our products.

As part of product life cycle management, Seikagaku is implementing product modifications that respond to needs of a changing market. One example is the conversion of the material for syringes, used for the joint function improving agent ARTZ Dispo, from glass to plastic. Through these efforts, we are adding value to our products.

Furthermore, we have been accelerating overseas business expansion in recent years. We are working to increase sales in countries where we already do business, and to meet global medical needs, we are implementing a plan to introduce existing products and products in development into new markets.

■ Bulk products

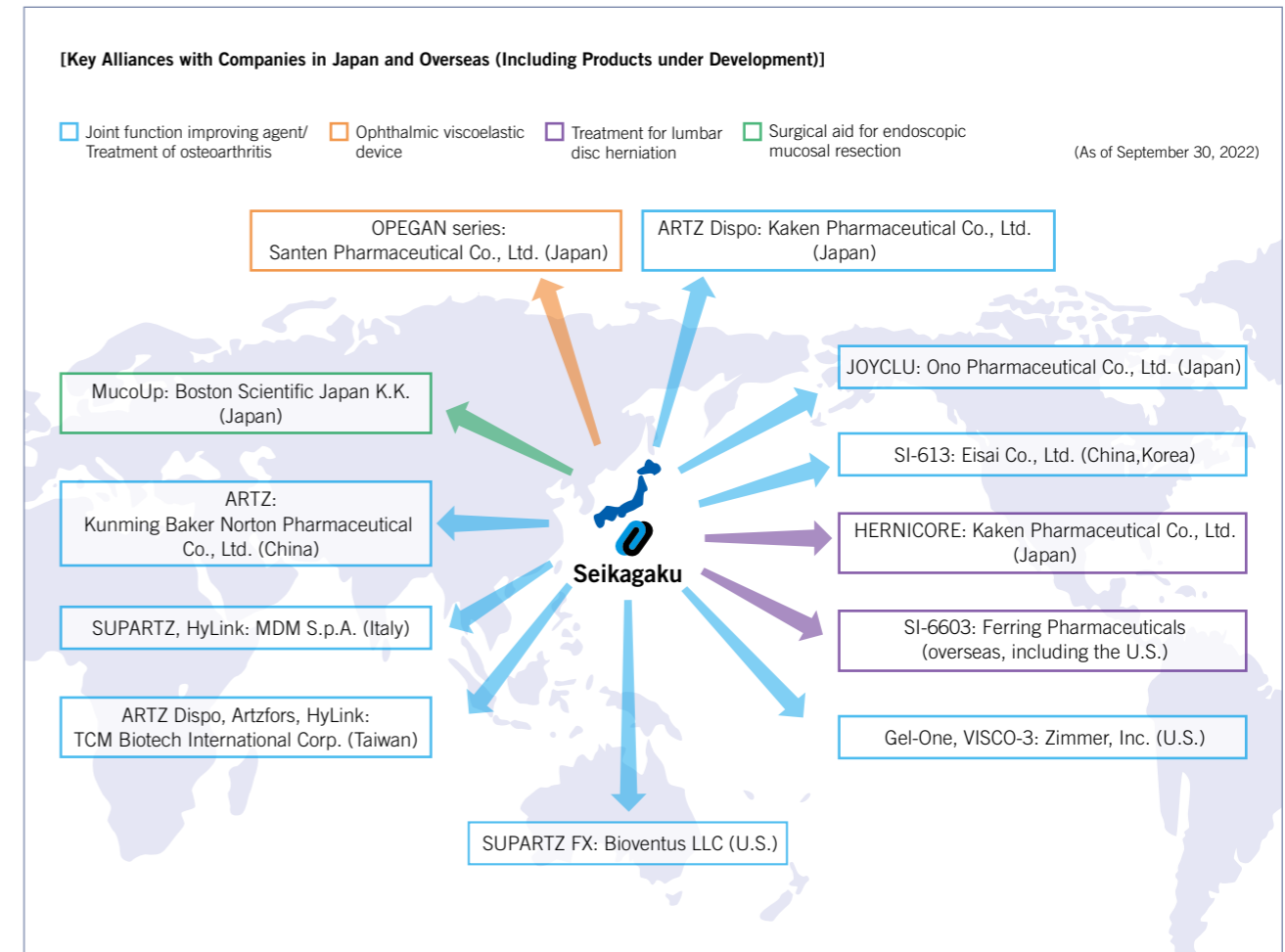
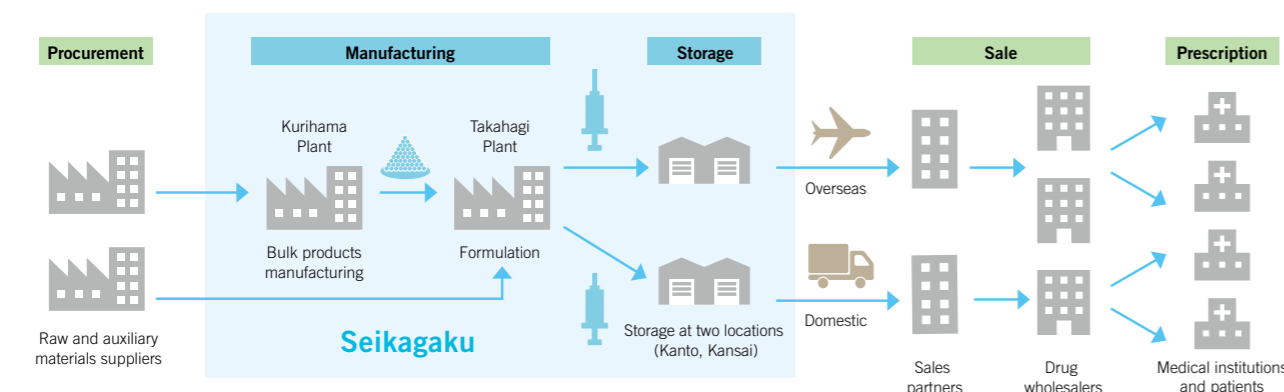
Using proprietary extraction and purification technologies, Seikagaku manufactures high-purity and high-quality hyaluronic acid and chondroitin sulfate and sells them to pharmaceutical and cosmetic companies, and others globally.

The bulk products are widely applied as active pharmaceutical ingredients for orthopedics and ophthalmology. In recent years, those bulk products are also being considered as new application materials in the regenerative medicine area.

■ Contract development and manufacturing organization (CDMO)

A contract development and manufacturing organization (CDMO) is a business that supplies comprehensive services in drug development and manufacturing to pharmaceutical companies, including contract drug manufacturing, pharmaceutical formulation planning at the development stage, manufacturing of investigational drugs, and optimization of manufacturing conditions. In March 2020, we added to our business by acquiring Dalton Chemical Laboratories, Inc. as a subsidiary.

[Supply Chain for Main Products]



■ LAL business

Seikagaku is engaged in the development of the LAL business in Japan, which is mainly used in quality control of injectable pharmaceuticals and medical device manufacturing processes and water quality control of dialysate used in artificial dialysis.

Wholly owned subsidiary Associates of Cape Cod, Inc. (ACC) handles overseas business development. ACC is the first company in the world to successfully develop endotoxin-detecting reagents from limulus amoebocyte lysate (LAL), and it obtained U.S. Food and Drug Administration (FDA) approval in 1977. ACC plays an important role in the overseas business expansion through

its global sales network, mainly in the U.S. and Europe, through the manufacturing and sales of endotoxin-detecting reagents, as well as beta-glucan-detecting in vitro reagent to diagnose invasive fungal disease.

Furthermore, Seikagaku has successfully developed the world's first product consisting of recombinant proteins of Factor C, Factor B, and a coagulating enzyme precursor, which are components of horseshoe crab blood cells. We launched gene-recombinant endotoxin-detecting reagent PyroSmart NextGen through ACC and in Japan in 2021.

Production

Seikagaku steadily manufactures high-quality products at its two pharmaceutical manufacturing plants in Japan and endotoxin-detecting reagent manufacturing plant in the U.S. and plant related to CDMO business in Canada.



■ Production structure compliant with global standards

Companies that manufacture pharmaceuticals and medical devices must comply with the current regional regulations and engage in stable, continuous manufacturing. In order to deliver high-quality products to patients, Seikagaku complies with Good Manufacturing Practice (GMP) in Japan, the U.S., and Europe and strives for ever more rigorous manufacturing processes.

Also, in the area of manufacturing control and quality control, we use computer systems to improve the completeness of records and work to improve production efficiency through rigorous regular checks, elimination of human error, and improvement of manufacturing processes. We will continue to pursue continuous improvement so as to manufacture and supply high-quality products that comply with global standards.

■ Ensuring a stable supply of products

It is important for pharmaceutical companies to provide stable supplies. Seikagaku prepares for major disasters and other risks by diversifying raw materials suppliers and maintaining appropriate inventory levels. At the Takahagi Plant, responsible for manufacturing the finished products, we have introduced a quake-absorbing structure that helps isolate the main production buildings from earthquakes. Through these measures, we now have a system capable of stable, reliable product production even in an emergency.

Furthermore, to cope with product supply risk from disruption of distribution in a disaster, we maintain a certain level of product inventory and have pharmaceutical warehouses in two separate locations: at the Takahagi Plant in Ibaraki Prefecture near Tokyo and in Hirakata City, near Osaka.

[Overview of Production Sites]

Takahagi Plant (Takahagi City, Ibaraki Prefecture)

The Takahagi Plant is responsible for manufacturing finished pharmaceuticals and medical devices, including the joint function improvement agents that are Seikagaku's mainstay products. Today, the Takahagi Plant occupies a site of approximately 86,000 square meters and has five production buildings and some 200 employees. The Takahagi Plant is one of the world's largest manufacturing sites for hyaluronic acid pre-filled syringe formulations*, producing more than 25 million units per year for the Japanese and overseas markets. Sterility assurance is strictly required for the manufacture of injectable formulations, and the plant has minimized the risk of contamination by implementing unattended, automated manufacturing processes. The plant possesses facilities and equipment that can be adapted to optimal sterilization methods suited to the product characteristics.

*A kit with an injectable syringe that has been filled with solution.



Information on U.S.-based Associates of Cape Cod, Inc. and Canada based Dalton Chemical Laboratories, Inc. is provided in the section "Overseas Subsidiaries" on page 58.

Kurihama Plant (Yokosuka City, Kanagawa Prefecture)

The Kurihama Plant, which manufactures bulk products, has some 100 employees and manufactures high-purity hyaluronic acid and chondroitin sulfate for use mainly as active pharmaceutical ingredients. The most important characteristic of the Kurihama Plant is that it specializes in the manufacturing of bulk products by extraction and fermentation. The plant applies advanced chondroitin sulfate extraction and fermentation technologies nurtured over many years since the founding of Seikagaku and has expertise in the efficient manufacture of high-purity bulk products from chicken combs, the raw material of hyaluronic acid, and shark cartilage, the raw material of chondroitin sulfate.

The Kurihama Plant is also responsible for some of the manufacturing processes for condoliase, the active pharmaceutical ingredient of HERNICORE, a treatment for lumbar disc herniation. The plant is currently preparing to start up new bulk condoliase manufacturing facilities to further strengthen the production scale.



Sustainability Progress

Sustainability Management P33

Environment P34

Social P38

Corporate governance P41



Sustainability Management

■ Basic Policy on Sustainability

Seikagaku Corporation Group, guided by the core values expressed in the motto Creativity, Fairness, Dreams and Passion, aims to sustainably develop together with society by living up to its management creed: “Under the principle of respect for learning, we contribute to human well-being by creating and supplying the world with safe and useful pharmaceutical products based on glycoscience.”

In undertaking this, we meet the expectations of our diverse stakeholders and practice behaviors aimed at creating fair and honest relationships on the basis of high

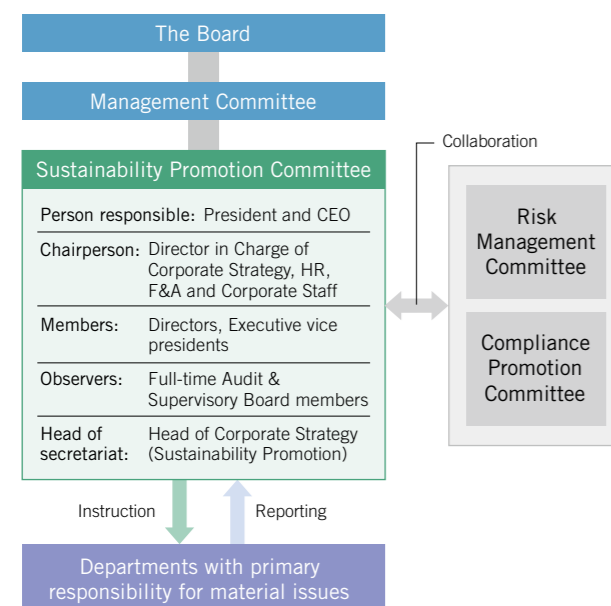
corporate ethical standards that reflect profound awareness of our social mission and responsibilities as a life sciences company.

On the basis of these ideals, Seikagaku Corporation Group seeks to grow as a corporate group that is valued by the world by providing a stable supply of truly useful, high-quality products created from innovative R&D activities and will contribute to the health and well-being of people around the world by working toward the sustainable development of the Earth and society.

■ Sustainability Promotion Structure

Seikagaku has designated the president and CEO as the person responsible for promotion of sustainability-related activities and established the Sustainability Promotion Committee, which is chaired by the director in charge of Corporate Strategy, HR, F&A and Corporate Staff. The committee discusses the policy on sustainability-related

activities, promotion measures, and other sustainability-related matters and verifies and assesses progress toward objectives. Important matters are reported on and considered at meetings of the Board following deliberation by the Management Committee.



1) Board of Directors

The Board decides, gives instructions, and supervises important matters relating to basic management policies, the mid-term management plan, the business plan, etc.

2) Management Committee

The Committee discusses and decides important matters relating to corporate management, such as the conclusion of important contracts, establishment of company rules and regulations, and formulation and modification of business execution plans.

3) Sustainability Promotion Committee

The Committee formulates basic policies and promotion measures relating to sustainability promotion, examines and assesses progress, and provides guidance and education. As a rule, the Committee meets twice yearly, and agenda items and deliberation results are reported or submitted for consideration by the Board of Directors and Management Committee as the chairperson considers necessary.

Fiscal 2021 Results

- **Establishment of integrated policies and information disclosure**

https://www.seikagaku.co.jp/en/sustainability/our_policy.html

- **Gathering of materiality-related information and publication of an ESG data book**

<https://www.seikagaku.co.jp/en/sustainability/materiality.html>

- **Preparation and implementation of an education and training plan for Seikagaku officers and employees**

- **Analysis of climate change-related risks and opportunities**

<https://www.seikagaku.co.jp/en/sustainability/tcfd.html> P35

- **Setting of CO₂ emissions reduction targets and formulation of reduction measures**

P34

Future Initiatives

- **Implementation of CO₂ emissions reduction measures (facilities replacement and updating, procurement of renewable energy, etc.)**

- **Establishment of a supply chain risk assessment process**

- **Enhancement of communication with business partners**

- **Creation of an organization that enables all employees to fully demonstrate their capabilities**



Basic Policy on Sustainability

Seikagaku Corporation recognizes that the global warming problem is a critical challenge facing the world and considers contributing to the realization of a sustainable society an important mission for companies. As a pharmaceutical company and as a member of society, Seikagaku Corporation aims to achieve balance between environmental measures and the company's growth and will implement initiatives to achieve business activities with low impact on the environment.



[Environmental Policy]

<https://www.seikagaku.co.jp/en/sustainability/policy.html>

CO₂ emissions reduction initiatives

Keenly aware of the importance of protecting the global environment and the responsibilities associated with manufacturing activities, Seikagaku observes environment-related laws and regulations and voluntarily engages in environmentally friendly business activities. We aim to balance environmental measures and business growth by continuing the energy-saving activities implemented heretofore and strengthening initiatives for efficient utilization of water resources, waste reduction and recycling, and other environmental improvements.

We have established the Energy Conservation Promotion Committee with the objective of promoting energy conservation activities and reducing CO₂ emissions and are managing energy use, implementing improvement measures for achieving energy use reduction targets established at each business site, and conducting energy conservation-related education and

training. Furthermore, we have put in place a structure for increasing groupwide efficiency in which the Committee coordinates energy use and CO₂ emissions volume and reduction measures each fiscal year, reports to the Management Committee, and discusses these matters. At the Takahagi Plant, the production site that uses the most energy, we have increased thermal efficiency and reduced CO₂ emissions by updating boilers to convert boiler fuel from heavy fuel oil A to high-efficiency liquid natural gas (LNG). Furthermore, we have reduced energy use through initiatives such as conversion to LED lighting fixtures at production sites and laboratories and repairing and reinforcing steam pipes and steam traps. In this way, by continuously engaging in energy conservation activities groupwide, we have achieved our average energy reduction rate targets for the five years up to fiscal 2021.

TOPIC

Surviving the “decisive decade” — Efforts to reduce environmental impacts

In the Glasgow Climate Pact, an outcome of the 26th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26), held in 2021, a target of limiting atmospheric temperature increase to 1.5°C above pre-industrial levels was set. The ten-year period until 2030 has been called the “decisive decade” for climate action.

To do its part in achieving Seikagaku's fiscal 2030 CO₂ emissions target (page 36), on October 3, 2022 the Takahagi Plant launched the 2030 Promotion Committee to boost collaboration with involved departments and steadily implement reduction measures. The Committee consists of four teams: Energy; Process Improvement and Materials; Industrial Waste and the Environment; and Awareness. The Committee will formulate and implement plans through close cooperation among the teams. It aims to formulate concrete measures for reducing environmental impacts and conduct education and training activities within the Takahagi Plant.



Information Disclosure Based on the TCFD Recommendations

Seikagaku Corporation considers addressing climate change to be an important management priority and is implementing measures to combat climate change. Since June 2022, Seikagaku has disclosed the status of its response to the TCFD*1 recommendations and to climate-related risks and opportunities.

*1 The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB) in December 2015 at the request of the G20 Finance Ministers and Central Bank Governors Meeting to examine climate-related information disclosure and the response of financial institutions to climate change. In its final report, published on June 2017, the TCFD recommended disclosure by companies and other organizations of information on climate change risks and opportunities in the areas of governance, strategy, risk management, and metrics and targets.

Governance

In accordance with the Basic Policy on Sustainability, Seikagaku Corporation has identified by a resolution of the Board of Directors important issues that should be addressed on a priority basis (materiality) in the interest of achieving sustainable growth for Seikagaku and realizing a sustainable society.

We established the Sustainability Promotion Committee for the main purpose of addressing sustainability-related issues. In principle, the Committee meets twice a year to discuss the action policy for climate

change issues, promotion measures, and related matters and to examine and assess progress. Also, climate change risks and opportunities are included among the group-wide risks evaluated by the Risk Management Committee, discussed by the Sustainability Promotion Committee, and reported to the Board of Directors, and the Board monitors and oversees progress in addressing these risks. The president and CEO serves as the officer responsible for the Sustainability Promotion Committee and Risk Management Committee.

Strategy

To conduct a climate-related risk and opportunity materiality assessment, we used the following scheme to identify and assess scenarios for three categories: transition risks, physical risks, and opportunities. In addition to the Net Zero Emissions by 2050 Scenario*2 (NZE) proposed by the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA), which assumes a temperature rise of 1.5°C, and the IEA's Stated Policies Scenario (STEPS), which

assumes a 4°C rise, we carefully examined internal and external information and assessed the potential effects of climate-related risks and opportunities on businesses, strategy, and financial planning.

*2 Seikagaku analyzes risks and opportunities based on the following scenarios: Net Zero Emissions by 2050 Scenario (NZE): 1.5°C rise Stated Policies Scenario (STEPS): 4°C rise

Scenario Analysis Scheme



Risk Management

In risk management, each division and department implements initiatives in response to risks and opportunities in accordance with the Corporate Risk Management Regulations. The Sustainability Promotion Committee, established in December 2021, and the Risk

Management Committee share information on climate change risks, integrate and manage these risks as a form of business risk, and periodically report important risks to the Board of Directors.

Risk and Opportunity Analysis Based on Medium- and Long-term Scenarios

Transition risk

Risks and Opportunities	Details	Scale of Financial Impacts 1.5°C / 4°C	Time Frame	Response and Resilience
Policy and legal risk	Rising costs due to tightening of regulations, such as introduction of a carbon tax	Medium / Medium	Medium to long term	Mitigation of carbon tax burden through promotion of energy conservation and introduction and expanded use of renewable energy; cost reductions from initiatives such as reduction of raw materials use
Market risk	Rising costs due to introduction of eco-friendly raw materials, etc.	Medium / Medium	Medium to long term	Mitigation of carbon tax burden through promotion of energy conservation and introduction and expanded use of renewable energy; cost reductions from initiatives such as reduction of raw materials use
Reputation risk	Investor resistance or decline in personnel recruitment opportunities due to inadequate sustainability information disclosure, etc.	Medium / Small	Short to medium term	Pursuit of corporate value enhancement and greater opportunities to secure investment and personnel through proactive sustainability information disclosure

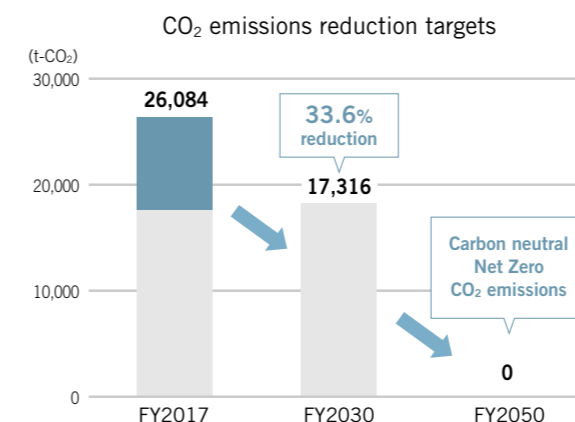
Physical risk

Risks and Opportunities	Details	Scale of Financial Impacts 1.5°C / 4°C	Time Frame	Response and Resilience
Acute	Risk of damage to production facilities, etc. resulting from increasingly serious extreme weather events; rising costs of restoration and prevention measures; temporary shutdowns due to supply chain disruption	Medium / Large	Medium to long term	Damage minimization through a continuous review of the business continuity plan (BCP), upgrading of BCP measures and strengthening of impact assessment and response capabilities along supply chains
Chronic	Declining outpatient numbers due to a healthcare crunch accompanying climate change-related spread of infectious disease	Medium / Medium	Long term	Promotion of R&D of long-acting drugs that entail little outpatient burden
Chronic	Decrease in natural resources used as raw materials or quality deterioration due to the impact of climate change on ecosystems	Small / Medium	Medium to long term	Promotion of research on substitute raw materials and transition from biological raw materials to recombinant raw materials, such as fermented materials

Opportunities

Risks and Opportunities	Details	Scale of Financial Impacts 1.5°C / 4°C	Time Frame	Response and Resilience
Energy and resource efficiency	Production facilities efficiency improvement	Small / Small	Medium to long term	Cost reductions from promotion of energy conservation and introduction and expanded use of renewable energy
Products, services, and markets	Climate-change related spread of infectious disease	Medium / Medium	Long term	Promotion of R&D in the infectious disease diagnosis field, etc.

Metrics and Targets



CO₂ emissions reduction targets (Scope 1&2: non-consolidated)

- 33.6% reduction by 2030 (compared to the fiscal 2017)
- Pursuit of carbon neutrality by 2050

Effective measures to consider in the medium- to long-term

- Thorough energy conservation actions and educational activities
- Installation of high-efficiency equipment and solar power generation facilities
- Procurement of carbon-free energy and credits

E

Environment

Initiatives for Biodiversity

Recognizing the importance of biodiversity in business as a life sciences company, Seikagaku Corporation strives for biodiversity preservation and the sustainable use of biological resources.

[Biodiversity Policy]
<https://www.seikagaku.co.jp/en/sustainability/biodiversity.html>

Horseshoe Crab Conservation Activities of Associates of Cape Cod, Inc.

Since Seikagaku's U.S. subsidiary Associates of Cape Cod, Inc. (ACC) manufactures and sells reagents using a substance extracted from horseshoe crab blood cells as a raw material, it continuously engages in horseshoe crab conservation activities to protect this precious natural resource. In addition to supporting the American horseshoe crab, in 2019, ACC began providing assistance for activities to maintain the population of Asian horseshoe crabs in the form of customized aquaculture equipment and training. Maintaining the population involves growing survivable juveniles produced by in vitro fertilization of sperm and eggs and releasing them into the natural environment. ACC has long engaged in this activity and accumulated related technology and expertise.

This assistance will be made available to academic institutions and private sector researchers around the world. Organizations receiving assistance are granted a license to use intellectual property relating to horseshoe crabs owned by ACC free of charge and are also provided with instructions regarding in vitro fertilization methods and training in the operation of highly efficient aquaculture equipment. The number of American horseshoe crabs that ACC has released in the Commonwealth of Massachusetts had reached about 1.2 million as of December 31, 2022.

In parallel with these conservation activities, ACC has also focused on development of gene-recombinant endotoxin-detecting reagents that can be manufactured without using blood harvested from horseshoe crabs.

PyroSmart NextGen, launched by ACC for sale in overseas markets in April 2021 and launched by Seikagaku for sale in Japan in May, was commercialized by ACC based on the results of R&D conducted for many years at Seikagaku.

Since PyroSmart NextGen follows the same cascade pathway as naturally sourced products, the same test methods and instrumentation can be used when the product is substituted for traditional naturally sourced reagents. ACC seeks to contribute to sustained environmental conservation by providing the option of choosing a gene-recombinant reagent in addition to taking measures to maintain the population of horseshoe crabs.

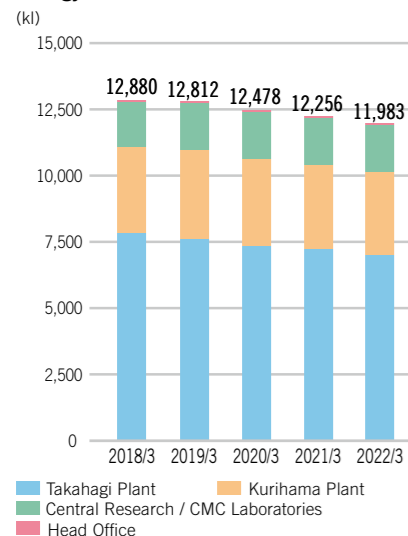
The Seikagaku Group will continue to actively support activities to conserve horseshoe crab populations and strive to use this resource in a sustainable manner.



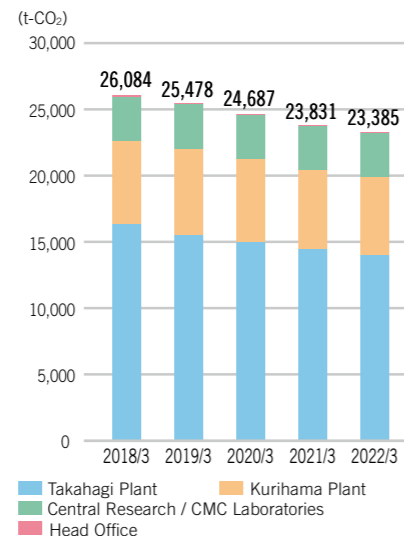
Horseshoe crab juveniles

Environmental Highlights

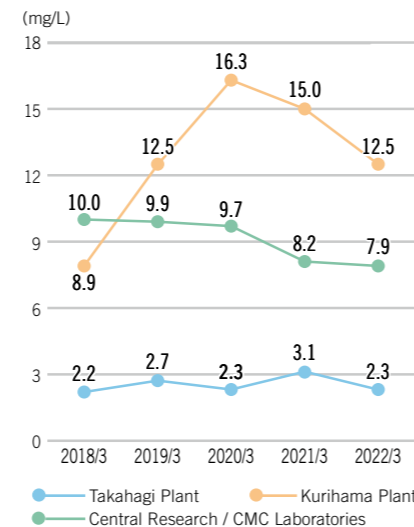
Energy Use



CO₂ Emissions



Water Pollution Load (COD)



S

Social

Social Contribution Activities

Seikagaku engages in initiatives to address social and environmental problems in pursuit of harmony and continuous growth together with local communities. And we pursue respect for learning by engaging in global research assistance and sponsoring activities that support the development of glycoscience.

Glycoforum, a website for comprehensive information on glycoscience research

<https://www.glycoforum.gr.jp/index.html>



Since 1997, Seikagaku has operated "Glycoforum," an academic website that shares information about research findings to contribute to the development of glycoscience, which is one of Seikagaku's areas of specialization.

As a portal site for glycoscience information, the website promptly disseminates science paper information, including commentary from global leading researchers and academic conference information. The site enjoys strong support from researchers in Japan and overseas.

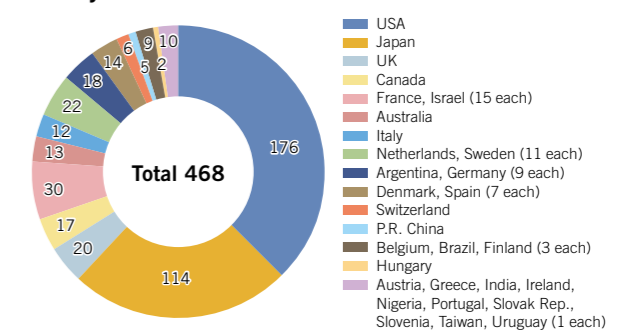
Support for the Mizutani Foundation for Glycoscience

<https://www.mizutanifdn.or.jp/index.html>

The Mizutani Foundation for Glycoscience, a public interest incorporated foundation, was established in 1992 with an endowment from the late Masakane Mizutani, former president of Seikagaku Corporation, for the purpose of contributing to the welfare of humanity through the advancement and development of glycoscience. The foundation provides research grants to glycoscience researchers in Japan and overseas and supports conferences. In fiscal 2021, the foundation provided research grants totaling ¥74.18 million to 14 grant recipients.

Seikagaku endorses the purpose of the Foundation and has continuously supported its activities since its founding.

Number of Grant Recipients by the Mizutani Foundation for Glycoscience (By country and area: 1993–2022)



TOPIC

Helping patients obtain early treatment

■ Knee osteoarthritis *Hiza Ikiiki* (Sprightly Knees), a website for provision of information concerning knee osteoarthritis to the general public

Knee osteoarthritis is a disorder by which the knee joint is strained due to aging, excessive exercise, or weight increase and the cartilage gradually wears away. Hiza Ikiiki explains basic knowledge concerning knee osteoarthritis and diagnosis and treatment methods in an easy to understand way.

■ Koshi-hernia.jp, a website for the provision of information concerning lumbar disc herniation a to the general public

Koshi-hernia.jp explains basic knowledge concerning lumbar disc herniation and its symptoms in an easy to understand way. It also provides information on changes in symptoms according to the season or weather, the impact of the disorder on work and lifestyles, and other information obtained from the findings of online patient surveys.

Through these websites, Seikagaku will provide correct knowledge and information to enable as many patients as possible to obtain early, correct treatment.

<https://www.ehiza.jp>
(Japanese only)



<https://koshi-hernia.jp/>
(Japanese only)





HR Initiatives

Seikagaku Corporation recognizes that respecting human rights through business activities is important for remaining a company that contributes to healthy and fulfilling lives for people around the world, and also creates a prosperous future. Upholding and respecting human rights in accordance with the UN Guiding Principles on Business and Human Rights, we hereby initiate the Seikagaku Corporation Human Rights Policy (the "Policy").

Human Rights Policy
https://www.seikagaku.co.jp/en/sustainability/our_policy/humanright.html

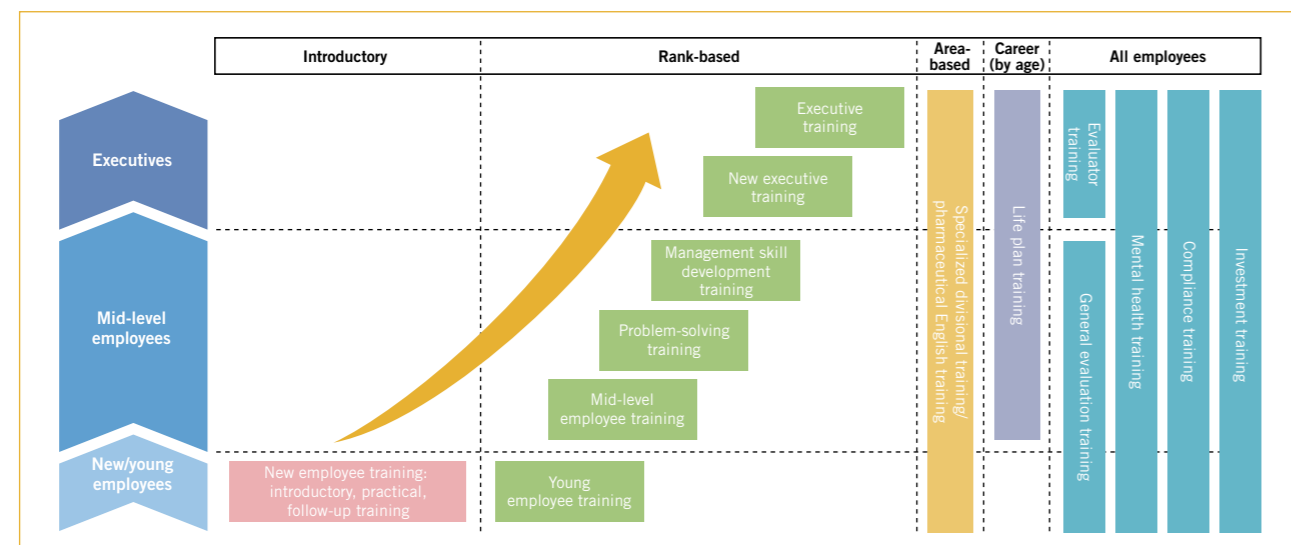
Development of human resources

Seikagaku Corporation considers human resources to be an important corporate asset and seeks people who understand and put into practice our core values "creativity," "fairness," and "dreams and passion" and are capable of self-growth while fulfilling their roles with a sense of responsibility.

Seikagaku also strives to provide fields for each person to grow and thrive in. We endeavor to cultivate autonomous employees who go about their work with enthusiasm and pride and produce results. We promote upskilling and career development through a combination of systematic education in various training programs, workplace education through day-to-day work, and job rotation.

The curriculum for systematic education is depicted in the diagram below. We conduct a variety of training programs for everyone from young employees to executives with the objective of promoting the growth of individual employees and the Company. In response to the spread of COVID-19, we continue to switch from group training to online training.

Training Systems



Work-life balance

To help its employees achieve a good work-life balance, Seikagaku has introduced flextime at all business sites, including laboratories and plants, and established a weekly "no overtime day." To help employees balance their personal lives with their work, Seikagaku encourages them to develop their own work styles. For example, we now have a reduced-working-hours system for employees who provide childcare and nursing care, and employees may also accumulate lapsed annual paid leave for use during prolonged illnesses or to cope with extended childcare and nursing care needs.

In the fiscal year ended March 31, 2021 (fiscal 2020), we instituted a work-from-home system as an option for diversifying work styles. Other objectives for introducing this system were to increase productivity through greater operational efficiency and create a means of maintaining continuity of operations in the event of a disaster.

Employees used an average of 80.7% of paid leave in fiscal 2021. From fiscal 2007 to fiscal 2021, 100% of staff who left work for childcare reasons returned, and the number of male employees taking childcare leave has also increased. Furthermore, Seikagaku creates employee friendly workplaces through staff assignments that

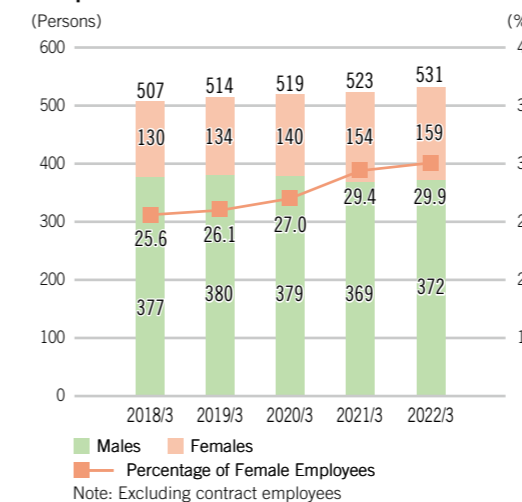
correspond to the nature and amount of work, improvement of workplace environments, and by limiting long working hours.

Diversity management

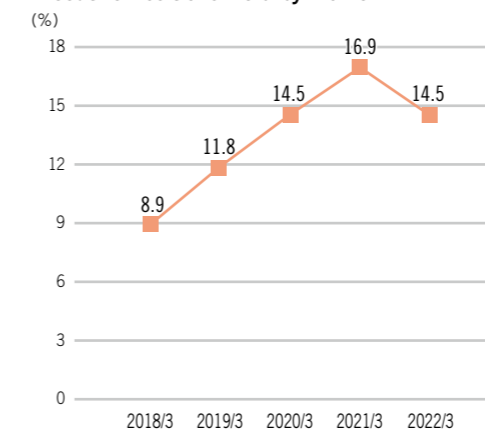
Seikagaku is creating an environment and developing systems, programs, and mechanisms to enable female employees to fully demonstrate their capabilities and is implementing measures to support the advancement of women as part of diversity management efforts.

In fiscal 2019, we revised the project to promote women's advancement in the workplace and relaunched it as the diversity and inclusion project. To ensure that the contributions and successes of diverse employees are the driver of Seikagaku's sustained growth, we have set concrete targets for each business site and have proceeded with reforms to create an organization in which individuals can demonstrate their full potential. The project concluded in March 2022, and going forward we will engage in initiatives for "Promotion of diversity and development of human resources," one of Seikagaku's material issues, and continue efforts to create an

Composition of Workforce



Executive Positions Held by Women



*The figures provided on this page are all on a non-consolidated basis.

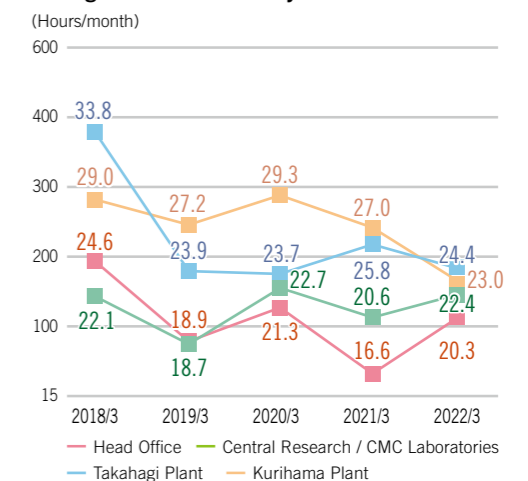
organization in which all employees can fully demonstrate their capabilities.

In October 2022, we revised the previous single-track personnel promotion system to a multiple-track system to make possible personnel assignment and development that take aptitude into account.

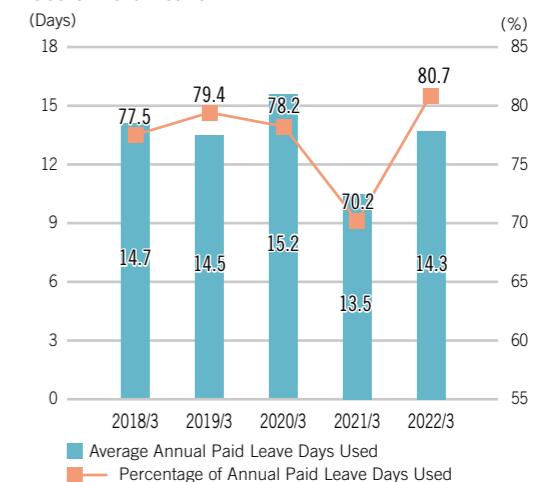
Mental healthcare

Since 2009, Seikagaku has implemented measures aimed at maintaining the physical and mental health of employees to vitalize workplaces and increase productivity. Specifically, we are improving the overall workplace environment by obtaining the advice and assistance of industrial physicians and public health nurses periodically and as needed, by conducting mental health care seminars for managers that utilize the results of annual stress checks, and other means. We have also instituted an external hotline and counseling service that employees and family members can freely utilize and are developing a self-care support system to enable employees themselves to recognize physical disorders and stress and learn how to cope with them.

Average Overtime Hours by Business Site



Use of Paid Leave



Members of the Board (as of June 21, 2022)

Directors



President & CEO
Ken Mizutani

Term of office as Director: 32 years
Number of the Company's shares owned: 460,180 shares

- Apr. 1970 Joined Mitsubishi Chemical Industries Limited (current Mitsubishi Chemical Corporation)
- Aug. 1988 Joined the Company
- June 1990 Member of the Board, Head of Research Biologicals and Diagnostics Marketing
- June 1993 Member of the Board, Senior Executive Vice President responsible for Planning and Manufacturing
- June 1998 Member of the Board, Senior Executive Vice President responsible for Marketing
- June 2000 Member of the Board, Senior Executive Vice President and Head of Central Research Laboratory
- June 2002 Representative Director and Member of the Board, Senior Executive Vice President responsible for Pharmaceuticals, Fine Chemicals, Oral Care, Glycoforum, and Head of Central Research Laboratory
- June 2005 Representative Director and Member of the Board, President & Chief Executive Officer (CEO)
- June 2018 Representative Director and Member of the Board, President & CEO and Head of Manufacturing
- June 2019 Representative Director and Member of the Board, President & CEO (current position)



Executive Vice President
Business Development & Marketing
Toshiyuki Okada

Term of office as Director: 5 years
Number of the Company's shares owned: 12,724 shares

- Apr. 1989 Joined Dow Corning Japan Co., Ltd.
- Sept. 1996 Joined Johnson & Johnson Medical K. K. (current Johnson & Johnson K. K.)
- Feb. 2015 Vice President and Chief Technology Officer
- Sept. 2015 Joined the Company
- Executive Vice President, Deputy responsible for Quality Assurance, Pharmacovigilance and Regulatory Affairs Auditing
- June 2016 Executive Vice President responsible for Quality Assurance, Pharmacovigilance and Regulatory Affairs Auditing
- Jan. 2017 Executive Vice President responsible for Marketing
- June 2017 Member of the Board, Executive Vice President responsible for Marketing
- June 2018 Member of the Board, Executive Vice President responsible for Business Development & Marketing (current position)



Executive Vice President
Research & Development
Yosuke Funakoshi

Term of office as Director: 4 years
Number of the Company's shares owned: 13,324 shares

- Apr. 1990 Joined ONO PHARMACEUTICAL CO., LTD.
- June 2008 Joined Takeda Pharmaceutical Company Limited
- Aug. 2012 Takeda Global Research & Development Center Inc. (current Takeda Development Center Americas, Inc.)
- Vice President of Strategic Project Management
- Aug. 2014 Joined the Company
- Senior Vice President and assistant to Senior Executive Vice President responsible for Research & Development
- Oct. 2014 Senior Vice President and Head of Clinical Development
- June 2016 Executive Vice President, Deputy responsible for Research & Development and Head of Clinical Development
- June 2017 Executive Vice President responsible for Research & Development and Head of Clinical Development
- June 2018 Member of the Board, Executive Vice President responsible for Research & Development and Head of Clinical Development
- Oct. 2021 Member of the Board, Executive Vice President responsible for Research & Development (current position)

Audit & Supervisory Board Members



Audit & Supervisory Board Member
Toru Takeda

Term of office as Director: 6 years
Number of the Company's shares owned: 2,200 shares

- Apr. 1983 Joined The Long-Term Credit Bank of Japan, Limited (current Shinsei Bank, Limited)
- Oct. 2000 Joined The Industrial Bank of Japan, Limited (current Mizuho Bank, Ltd.)
- Oct. 2008 General Manager, Risk Management Department, Mizuho Trust & Banking Co., Ltd.
- Apr. 2012 Corporate Auditor (full-time)
- Apr. 2016 Joined the Company as Senior Vice President
- June 2016 Audit & Supervisory Board Member (current position)



Audit & Supervisory Board Member
Mikako Torii (New election)

Term of office as Director: —
Number of the Company's shares owned: 14,059 shares

- Apr. 1988 Joined the Company
- June 2011 Head of Corporate Staff
- June 2015 Executive Vice President and Head of Corporate Staff
- June 2022 Audit & Supervisory Board Member (current position)



Outside Audit & Supervisory Board Member
Mie Fujimoto

Term of office as Director: 7 years
Number of the Company's shares owned: 1,400 shares

- Apr. 1993 Admitted to the bar in Japan
- Apr. 1993 Joined New Tokyo International (Later, Bingham Sakai Mimura Aizawa (foreign law joint enterprise))
- Apr. 2015 Joined TMI Associates (current position)
- June 2015 Outside Audit & Supervisory Board Member of the Company (current position)



Executive Vice President
Corporate Strategy, HR, F&A and Corporate Staff and Head of Corporate Strategy
Takayuki Akita

Term of office as Director: 4 years
Number of the Company's shares owned: 9,924 shares

- Apr. 1986 Joined The Mitsubishi Bank, Limited (current MUFG Bank, Ltd.)
- May 2016 Executive Vice President, Head of Transaction Banking
- June 2017 Joined the Company as Advisor
- June 2017 Executive Vice President responsible for Corporate Planning
- Oct. 2017 Executive Vice President and Head of Corporate Strategy
- June 2018 Member of the Board, Executive Vice President responsible for Corporate Strategy, HR, F&A and Corporate Staff and Head of Corporate Strategy (current position)



Outside Member of the Board
Mio Minaki

Term of office as Director: 3 years
Number of the Company's shares owned: —

- Apr. 1999 Joined MIT Corporation
- Oct. 2003 Public prosecutor, Tokyo District Public Prosecutors Office
- Apr. 2004 Public prosecutor, Osaka District Public Prosecutors Office
- Apr. 2005 Public prosecutor, Fukuoka District Public Prosecutors Office
- Apr. 2014 Litigation Department Attorney, Ministry of Justice Fukuoka Legal Affairs Bureau
- Apr. 2016 Public prosecutor, Tokyo District Public Prosecutors Office
- Apr. 2017 Assigned as Head of Legal Affairs Department to Agriculture, forestry and fisheries Fund corporation for Innovation, Value-chain and Expansion Japan
- Apr. 2019 Admitted to the bar in Japan
- Apr. 2019 Joined Minaki & Kitazawa Law Office (current position)
- June 2019 Outside Director of the Company (current position)



Outside Member of the Board
Yasuyuki Sugiura

Term of office as Director: 1 years
Number of the Company's shares owned: —

- Apr. 1978 Joined Mitsubishi Corporation
- Apr. 1998 General Manager, Washington Office, Mitsubishi International Corporation
- Apr. 2006 CFO and SVP in charge of Corporate Department, Mitsubishi International Corporation
- Apr. 2009 Executive Officer and General Manager, Corporate Communications Department, Corporate Strategy & Planning Division
- Apr. 2012 President & Director and Head of Chicago Branch, Mitsubishi International Corporation
- Apr. 2013 Executive Vice President, Mitsubishi Corporation and President & Director, Mitsubishi Corporation (Americas)
- Apr. 2016 Advisor, Mitsubishi Corporation (current position)
- June 2017 Managing Director, Toyo Bunko (current position)
- June 2021 Outside Director of the Company (current position)



Outside Audit & Supervisory Board Member
Shinkichi Matsuo

Term of office as Audit & Supervisory Board Member: 3 years
Number of the Company's shares owned: —

- Apr. 1991 Joined Mitsubishi Electric Corporation
- Apr. 1993 Joined Yokohama City Government
- Oct. 1995 Joined Ota Showa Audit Corporation (current Ernst & Young ShinNihon LLC)
- Apr. 1999 Registered as a certified public accountant
- June 2018 Representative Director, NextLeap Co., Ltd. (current position)
- June 2019 Outside Audit & Supervisory Board Member of the Company (current position)



Outside Audit & Supervisory Board Member
Takayuki Maruyama

Term of office as Audit & Supervisory Board Member: 2 years
Number of the Company's shares owned: —

- Apr. 2000 Admitted to the bar in Japan
- Apr. 2000 Joined Nagashima Ohno & Tsunematsu
- Sep. 2005 Joined Smith, Anderson, Blount, Dorsett, Mitchell & Jernigan, LLP
- Jan. 2006 Admitted to the bar in New York State, US
- Feb. 2008 Joined OH-EBASHI LPC & PARTNERS (current position)
- June 2020 Outside Audit & Supervisory Board Member of the Company (current position)

Executive Vice Presidents

Quality Compliance & Medical Affair
Executive Vice President

Yuji Shimojima

Head of Takahagi Plant
Head of Production
Executive Vice President

Masayuki Ito

Notes:

1. Ken Mizutani concurrently serves as Executive Vice President.
2. Terms of office are as of June 21, 2022.
3. Number of the Company's shares owned is as of March 31, 2022.

■ Basic Concept

In accordance with the management creed, “We create safe and useful products for human well-being with basic research based on glycoscience” and on the basis of profound awareness of our social mission and responsibilities as a pharmaceutical company, Seikagaku seeks to increase the speed of transparent and fair decision-making and strengthen oversight of business execution and is focusing on development of internal control systems, including for compliance and risk management. Our policy is to aim for sustainable growth and corporate value enhancement by striving to further strengthen corporate governance, which we view as an important management priority, and building a management system that rewards the trust of our shareholders and other stakeholders, and of society at large, through these initiatives.

■ Corporate Governance Structure

The Company has adopted a Company with an Audit & Supervisory Board governance system, having determined that the most effective and appropriate form of corporate governance for the Company is for the Board of Directors to oversee business execution and for the Audit & Supervisory Board to perform auditing and oversight in cooperation with the accounting auditor and Audit Department. Furthermore, the Company has introduced an executive vice president system to separate management oversight by the Board of Directors from business execution and, in accordance with the basic policy determined by the Board of Directors, as a rule holds weekly Management Committee meetings to discuss important management matters.

The Board of Directors has established the Nomination and Remuneration Committee, comprising the president & CEO and all outside members of the Board, to advise on matters concerning selection of candidates for members of the Board and Audit & Supervisory Board members, remuneration for members of the Board, etc.

The Sustainability Promotion Committee discusses the policy on sustainability-related activities, promotion measures, and other matters and supervises their implementation, and the Compliance Committee discusses promotion measures to improve compliance effectiveness. The Risk Management Committee appropriately manages business risks and implements risk prevention measures.

Board of Directors

The Board of Directors comprises six members, including two outside members of the Board. The Company aims to enhance management oversight from an independent standpoint by appointing outside members of the Board to one-third of the Board seats.

To decide important matters stipulated in laws and regulations, the Articles of Incorporation, and rules for the Board, such as formulation of basic management policy, the mid-term management plan, and the annual management plan and the election of executive vice presidents, and to supervise business execution, in principle the Board holds regular monthly meetings and extraordinary meetings convened as necessary.

To enable sufficient deliberation at Board meetings, as a rule, materials on matters for resolution and reporting matters are distributed to the Board members at least three days before meetings to provide time to review the materials.

Also, advance explanations of important agenda items are provided, as well as additional materials and supplemental explanations upon request.

A meeting of outside officers, comprising two outside members of the Board and three outside Audit & Supervisory Board members, undertakes improvement of Board operation by periodically analyzing and evaluating the effectiveness of the Board of Directors and reporting the results to the Board.

Both outside members of the Board are reported to the Tokyo Stock Exchange, Inc. as independent officers by the Company.

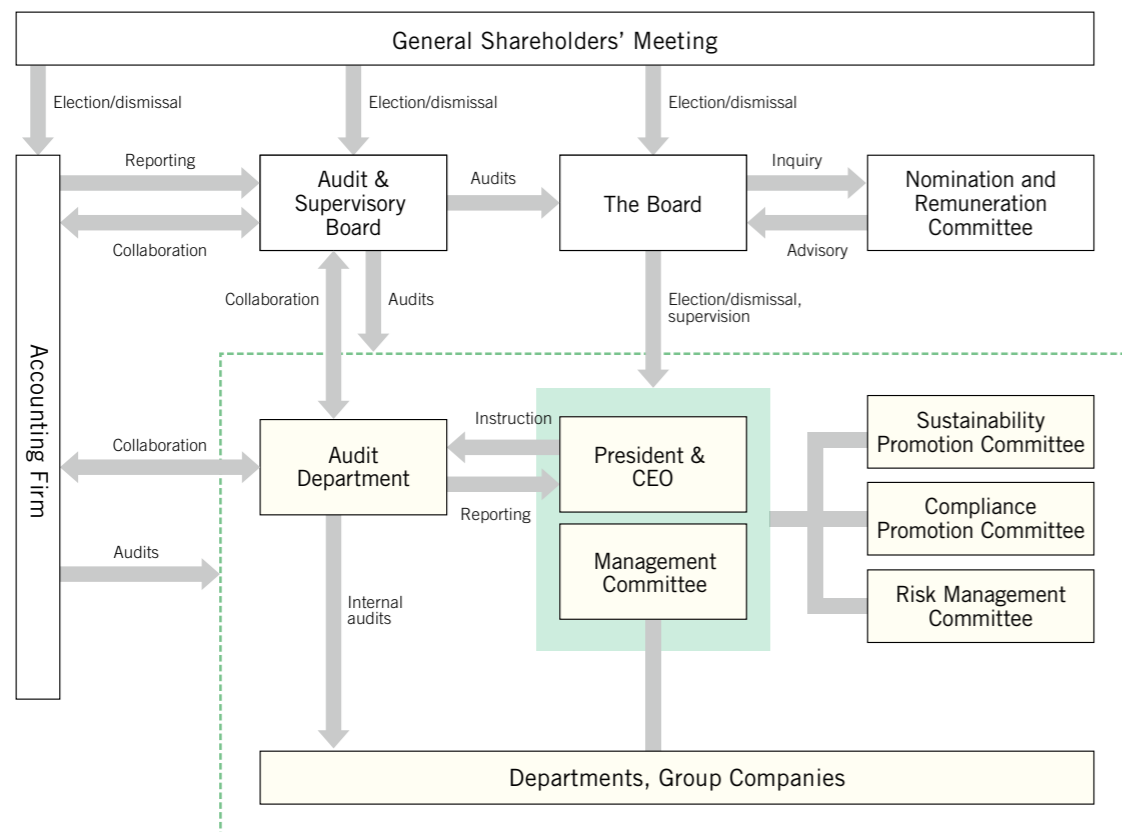
Enhancing functions of the Board of Directors

To achieve sustained growth and medium- and long-term enhancement of corporate value, following deliberation by the Nomination and Remuneration Committee, the Board of Directors determines skills required by the Board on the basis of basic management policy, the mid-term management plan, and other criteria. To maintain a structure capable of effectively fulfilling the Board’s role and duties, the Board selects candidates for corporate officer positions taking into consideration their knowledge, experience, abilities, and character, in addition to identified skills and Board diversity.

Since the skills required by the Board of Directors constantly change according to the business environment and other factors, the Company periodically reviews them. The term of office for members of the Board is one year with the aim of creating a management structure that would be able to adapt quickly and flexibly to changes in the business environment.

The outside members of the Board are responsible for oversight from an objective standpoint, a perspective that incorporates the common interests of shareholders, and is based on expert knowledge and insights into corporate management. The outside members of the Board also attend meetings held among the president & CEO, Audit & Supervisory Board members, and heads of each department to share views of the Company’s business issues and the external environment.

Corporate Governance Structure



Main Expertise and Experience of Directors and Audit & Supervisory Board Members

Title	Name	Corporate management	Finance/Accounting	Legal affairs/Risk management	R&D	Global	Production/Quality	Sustainability	Human Resources/Diversity
President & CEO	Ken Mizutani	●		●	●		●	●	
Executive Vice President	Toshiyuki Okada	●			●	●	●	●	
Executive Vice President	Yosuke Funakoshi	●			●	●			
Executive Vice President	Takayuki Akita	●	●	●		●		●	●
Outside Member of the Board	Mio Minaki			●					●
Outside Member of the Board	Yasuyuki Sugiura	●	●			●		●	●
Audit & Supervisory Board Member	Toru Takeda		●	●					
Audit & Supervisory Board Member	Mikako Torii			●				●	●
Outside Audit & Supervisory Board Member	Mie Fujimoto			●		●			●
Outside Audit & Supervisory Board Member	Shinkichi Matsuo	●	●						
Outside Audit & Supervisory Board Member	Takayuki Maruyama			●		●			

Audit & Supervisory Board

The Audit & Supervisory Board, comprising five members, including three outside members, audits and supervises the execution of director's duties by each member of the Board.

Audit & Supervisory Board members attend meetings of the Board of Directors, offer advice and recommendations as necessary, interview directors in charge and corporate officers of subsidiaries in accordance with an annual plan, and exchange views with the president & CEO. Furthermore, they have periodic meetings with the accounting auditor and Audit Department and receive audit reports, audit results, and other reports, exchange views, and strive for cooperation.

The full-time members attend Management Committee meetings and other important meetings; examine minutes, approval documents, and other important documents; perform audits of business sites; and share information about business execution and development of the internal control system and confirmation of its status of operation with the outside members at Audit & Supervisory Board meetings.

The outside members perform the role of auditing and supervising the Board members' execution of duties from an objective standpoint, a perspective that incorporates the common interests of shareholders, based on expert knowledge and insights into corporate management. All three outside Audit & Supervisory Board members are reported to the Tokyo Stock Exchange, Inc. as independent officers by the Company.

Nomination and Remuneration Committee

To increase fairness, transparency, and objectivity relating to matters including the selection of candidates for members of the Board and Audit & Supervisory Board and determination of remuneration for members of the Board and enhance corporate governance, Seikagaku has established the Nomination and Remuneration Committee as a voluntary advisory body to the Board. The Committee comprises the president & CEO and both outside members of the Board, and the Company believes that appointing outside Board members as a majority of Committee members ensures independence.

The Committee deliberates and reports to the Board of Directors on its views on the composition of the Board, matters relating to the selection and dismissal of members of the Board and Audit & Supervisory Board members, and matters relating to remuneration for members of the Board. It also discusses and decides the amounts of basic compensation, performance-linked compensation, and earnings-linked compensation for members of the Board as well as matters for which decision-making has been delegated by the Board of Directors.

In fiscal 2021, the Committee deliberated matters relating to the selection of candidates for members of the Board and determination of remuneration for members of the Board, the amounts of monetary remuneration for individual members of the Board (including evaluation of each Board member pertaining to performance-linked compensation), and other matters.

Initiatives to Strengthen Corporate Governance

(Fiscal 2022)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Number of members of the Board	11	9	7						8				5				6			
Number of outside members of the Board							1										2			
Number of female members of the Board																	1			
Number of Audit & Supervisory Board members		4											5							
Number of outside Audit & Supervisory Board members		2										3								
Number of female Audit & Supervisory Board members																1			2	
Advisory body to the Board of Directors																				Nomination and Remuneration Committee
Measures to improve Board of Directors effectiveness																				Board of Directors' effectiveness evaluation
																				Outside Officers' meeting
Term of office for members of the Board		2 year											1 year							
Executive vice president system																				Executive vice president system

Status of Holding of Board of Directors and Other Meetings (Fiscal 2021)

Organizational body	Composition	Frequency of convocation	Purpose
The Board*1	Members of the Board: 6 (including 2 outside members of the Board)	Once monthly in principle	The Board of Directors decides important matters stipulated in laws, the Articles of Incorporation and the Board of Directors Regulations, and oversees business execution. The Board of Directors met 14 times in fiscal 2021.
Audit & Supervisory Board	Audit & Supervisory Board members: 5 (including 3 outside members of the Board)	Once monthly in principle	The Audit & Supervisory Board discusses and decides important audit-related matters. The full-time members share information about business execution and development of the internal control system and its status of operation with the outside members at Audit & Supervisory Board meetings. The Audit & Supervisory Board met 15 times in fiscal 2021.
Nomination and Remuneration Committee	Members of the Board: 3 (including 2 outside members of the Board)	Meetings held as necessary	The Nomination and Remuneration Committee is a voluntary advisory body to the Board of Directors that reports to the Board on matters about which the Board has sought consultation, such as the nomination of candidates for corporate officer positions and remuneration for members of the Board and decides matters delegated by the Board. The majority of the committee members are independent outside members of the Board. The committee met four times in fiscal 2021.
Management Committee	Members of the Board: 4 Executive vice presidents: 3 Full-time Audit & Supervisory Board members: 2*2	Once weekly in principle	The Management Committee confers agendas of executive functions they have been tasked for implementation by the Board, based on the basic policy of the Board. The Management Committee met 36 times in fiscal 2021.

*1 Audit & Supervisory Board members also attend meetings of the Board of Directors. *2 Observers

Reasons for Election and Main Expertise of Outside Members of the Board and Outside Audit & Supervisory Board Members

Category	Name	Reasons for election
Outside member of the Board	Mio Minaki	Ms. Mio Minaki has a wealth of experience developed over many years in the judicial field and insight relating to corporate legal affairs as a lawyer. The Company has judged that she is capable of appropriately fulfilling the role of outside member of the Board from a professional standpoint based on this knowledge and experience.
	Yasuyuki Sugiura	Mr. Yasuyuki Sugiura has been involved in corporate management for many years at a general trading company, mainly in the U.S. and Canada, and has a wealth of international experience and wide-ranging insight. The Company has judged that he is capable of appropriately fulfilling the role of outside member of the Board by reflecting this experience and insight in the Company's management.
Outside Audit & Supervisory Board member	Mie Fujimoto	As a lawyer, Ms. Mie Fujimoto has expertise on labor-related laws and regulations and corporate compliance. The Company has judged that she is capable of appropriately performing a management oversight role from a professional standpoint based on this knowledge and experience.
	Shinkichi Matsuo	Mr. Shinkichi Matsuo is highly knowledgeable in finance and accounting as a certified public accountant and also has a wealth of experience relating to corporate management. The Company has judged that he is capable of appropriately performing a management oversight role from a professional standpoint based on this knowledge and experience.
	Takayuki Maruyama	As a lawyer, Mr. Takayuki Maruyama has expertise in corporate restructuring, business revitalization, and international contracts. The Company has judged that he is capable of appropriately performing a management oversight role from a professional standpoint based on this knowledge and experience.

Main Activities of the Outside Members of the Board (Fiscal 2021)

Category	Name	Main activities
Outside member of the Board	Mio Minaki	Ms. Mio Minaki offered advice and recommendations on numerous occasions at meetings of the Board of Directors from an independent, objective point of view based on a wealth of experience in the legal field and professional insight into corporate legal affairs. In her capacity as a member of the Nomination and Remuneration Committee, she attended all four Committee meetings and actively offered advice and recommendations in discussions about selection of candidates for members of the Board, determination of remuneration for members of the Board, identification of skills necessary for the Board, and other matters.
	Yasuyuki Sugiura	Mr. Sugiura offered advice and recommendations on numerous occasions at meetings of the Board of Directors from an independent, objective point of view based on a wide range of insights obtained through a wealth of management experience and international experience at a general trading company. In his capacity as a member of the Nomination and Remuneration Committee, he attended both Committee meetings held after he took office and actively offered advice and recommendations in discussions about selection of candidates for members of the Board, determination of remuneration for members of the Board, identification of skills necessary for the Board, and other matters.
Outside Audit & Supervisory Board member	Mie Fujimoto	Ms. Mie Fujimoto actively expressed opinions at Audit & Supervisory Board meetings from an independent, objective point of view based on professional insight, mainly relating to labor-related laws and regulations and corporate compliance. In addition, she received reports from the full-time Audit & Supervisory Board members, accounting auditor, and Audit Department and increased the effectiveness of auditing by gathering information through interviews with the president & CEO, corporate officers in charge, and corporate officers of subsidiaries. She also attended meetings of the Board of Directors and offered advice and recommendations on numerous occasions from an expert point of view.
	Shinkichi Matsuo	Mr. Shinkichi Matsuo actively expressed opinions at Audit & Supervisory Board meetings from an independent, objective point of view based on professional insight into finance and accounting accumulated over many years. In addition, he received reports from the full-time Audit & Supervisory Board members, accounting auditor, and Audit Department, and increased the effectiveness of auditing by gathering information through interviews with the president & CEO, corporate officers in charge, and corporate officers of subsidiaries. He also attended meetings of the Board of Directors and offered advice and recommendations on numerous occasions from an expert point of view.
	Takayuki Maruyama	Mr. Takayuki Maruyama actively expressed opinions at Audit & Supervisory Board meetings from an independent, objective point of view based on professional insight, mainly concerning corporate restructuring and international contracts. In addition, he received reports from the full-time Audit & Supervisory Board members, accounting auditor, and Audit Department, and increased the effectiveness of auditing by gathering information through interviews with the president & CEO, corporate officers in charge, and corporate officers of subsidiaries. He also attended meetings of the Board of Directors and offered advice and recommendations on numerous occasions from an expert point of view.

■ Compensation for corporate officers

At a meeting held on February 5, 2021, the Board of Directors resolved to adopt the Policy for Determining the Details of Individual Remuneration for Members of the Board and Audit & Supervisory Board Members, and Seikagaku now operates a compensation scheme in accordance with this policy. At the time of Board of Directors resolutions pertaining to compensation for corporate officers, the Board consults with the Nomination and Remuneration Committee beforehand and receives a report concerning the details of matters to be resolved.

Basic Policy

The Company's basic policy on compensation for directors (excluding outside members of the Board; the same applies hereinafter in this section "Compensation for corporate officers"), is to maintain a compensation structure designed to contribute to sustained earnings improvement by increasing incentives for directors to meet the expectations of shareholders. Specifically, compensation consists of basic compensation; earnings-linked compensation and performance-linked compensation, which serve as short-term incentives; and restricted stock compensation, which serves as a long-term incentive.

Compensation for outside members of the Board and Audit & Supervisory Board members consists of basic compensation only, in view of their role of management oversight independent from business execution.

Overview of types of compensation

The following is an overview of the types of compensation. <Basic compensation (monthly monetary compensation)> The amount of compensation for members of the Board is determined taking into consideration the balance between the going rate, management performance, and employee salaries. The amount of compensation for outside members of the Board and Audit & Supervisory Board members is determined by making reference to the going rate.

<Performance-linked compensation (monthly monetary compensation)>

Performance-linked compensation is determined through qualitative assessment based on achievement by each director of objectives for the previous fiscal year pertaining to important measures in the mid-term management plan. Qualitative assessment according to level of achievement is a three-stage to five-stage assessment, and the amount is calculated according to each assessment by multiplying basic compensation by a predetermined coefficient.

<Earnings-linked compensation (monthly monetary compensation)>

Earnings-linked compensation is determined through SKK EBITDA* in the previous fiscal year. SKK EBITDA is a numerical target in the mid-term management plan (fiscal 2019 to fiscal 2021). Assessment using SKK EBITDA is a three-stage evaluation, and the amount is calculated by multiplying basic compensation by a predetermined coefficient according to the assessment of each member of the Board.

* SKK EBITDA is Seikagaku's own profit indicator consisting of operating income plus depreciation expense. The Company has selected SKK EBITDA because it considers it appropriate as a short-term incentive with respect to business performance each fiscal year. The SKK EBITDA target for fiscal 2021, the final year of the current mid-term management plan, is ¥5,000 million. Actual SKK EBITDA for fiscal 2021 was ¥5,546 million.

<Restricted stock compensation (non-monetary compensation)>

Restricted stock compensation, which involves the granting each year at a certain time of common shares of the Company for which transfer is restricted until retirement ("restricted stock"). Compensation paid for the granting of restricted stock is a monetary claim, and the amount is calculated by multiplying the basic compensation of each member of the Board by a fixed rate for each position.

Policy on the ratio of each type of compensation for members of the Board

Compensation for members of the Board is designed so that the ratio of earnings-linked compensation increases the higher the position, taking into consideration the results of an external survey and using as a benchmark compensation levels at other companies similar in size to Seikagaku or in the same industry.

The Board of Directors receives a report from the Nomination and Remuneration Committee and reviews compensation design from time to time, taking into consideration factors such as the business environment and the Company's medium- to long-term trend in business performance.

The ratio of each type of compensation for members of the Board is roughly as follows in the case of maximum target achievement.

Basic compensation : 70–80%
Performance-linked compensation: 10%
Earnings-linked compensation : 5–10%
Restricted stock compensation : 5–10%

Method of determining compensation

By a resolution of the Board of Directors, monetary compensation for individual full-time and outside members of the Board is delegated to the Nomination and Remuneration Committee. The Committee's authority extends to determination of the amount of basic compensation, the amount of performance-linked compensation (including assessment of each director), and the amount of earnings-linked compensation.

The reason for delegation of this authority is so that the Nomination and Remuneration Committee, on the basis of the expert knowledge and insights into corporate management of the outside members of the Board, to determine the amount of monetary compensation for individuals from an objective standpoint, a perspective that includes the common interests of the shareholders.

Evaluation coefficients pertaining to performance-linked compensation, as well as evaluation categories and evaluation coefficients pertaining to earnings-linked compensation, are determined beforehand by the Board of Directors, giving respect to the content of a report from the Nomination and Remuneration Committee. With regard to restricted stock compensation, a form of non-monetary compensation, the timing of payment and method of distribution of monetary compensation claims are determined by the Board of Directors, giving respect to the content of a report from the Nomination and Remuneration Committee.

Compensation for Audit & Supervisory Board members is determined through discussion among them.

■ Analysis and evaluation of the effectiveness of the Board of Directors

At Seikagaku, a meeting of outside officers, comprising the outside members of the Board and outside Audit & Supervisory Board members, analyzes and evaluates the effectiveness of the Board of Directors on the basis of the content of a questionnaire survey conducted prior to the evaluation and reports the results of evaluation and points for improvement to the Board.

The evaluation for fiscal 2021 confirmed that decision-making on important matters and oversight of business execution functions properly and effectiveness of the Board of Directors has been sufficiently ensured by holding Board meetings without delay even amid the COVID-19 crisis thanks to utilization of a remote meeting system, by continuing to provide advance explanations concerning important agenda items, and by having further clarified Board meeting agenda proposal criteria.

To help activate deliberation, Seikagaku provides opportunities for sharing management issues and other matters with the outside officers and as a rule distributes materials at least three days before Board meetings to ensure sufficient time to review them beforehand.

Proposals for improvement included explanation of discussion content in the Board meeting agenda item consideration process and setting up a forum for meetings between outside officers and departments in charge about matters including sustainability promotion, and the Board will respond to these proposals.

Total Amount of Compensation for Each Category of Officer, Total Amount by Type of Compensation, and Number of Relevant Officers

Officer category	Total compensation (Millions of yen)	Total by type of compensation (Millions of yen)				Number of officers
		Basic compensation	Performance-linked compensation	Earnings-linked compensation	Restricted-Stock compensation	
Members of the Board (excluding outside members of the Board)	210	179	12	3	13	4
Outside members of the Board	20	20	—	—	—	3
Total	230	199	12	3	13	7
Audit & Supervisory Board members (excluding outside officers)	46	46	—	—	—	2
Outside Audit & Supervisory Board members	23	23	—	—	—	3
Total	69	69	—	—	—	5
Grand total	299	269	12	3	13	12

Notes: 1. Based on the status at the time of adjournment of the 75th Ordinary General Shareholders' Meeting, held on June 22, 2021, one retired outside Member of the Board is included in the table above.
2. The amount of pay for a member of the Board does not include the employee portion of salary of someone who is concurrently an employee and a member of the Board.
3. Stock compensation is the amount of compensation claims in respect of restricted stock compensation.
4. The total amount of compensation paid to all members of the Board was resolved at the 61st Ordinary General Shareholders' Meeting held on June 22, 2007, to be no more than ¥400 million per year (of which the outside members of the Board proportion shall be no more than ¥50 million per year). (Seven persons were eligible at the time of the shareholders' meeting resolution.) Also, the amount of compensation for separately granting restricted stock to directors (excluding outside members of the Board) was resolved at the 73rd Ordinary General Shareholders' Meeting held on June 19, 2019 to be no more than ¥50 million per year, and the total number of restricted stock shares issued or divested for granting to eligible members of the Board set at no more than 40,000 shares. Four persons were eligible at the time of the shareholders' meeting resolution.
5. The total amount of compensation paid to all Audit & Supervisory Board members was resolved at the 61st Ordinary General Shareholders' Meeting held on June 22, 2007, to be no more than ¥80 million per year. Five persons were eligible at the time of the shareholders' meeting resolution.

Measures to facilitate the exercise of voting rights

The Company takes appropriate measures to ensure that shareholder rights, including voting rights at the General Shareholders' Meeting, are substantially secured. Specifically, to secure sufficient time for consideration in the exercise of voting rights, in a typical year the Company sends out the Notice of Convocation three weeks before the date of the General Shareholders' Meeting and also posts the Notice of Convocation on the corporate website four weeks before the meeting. For foreign shareholders, the Company prepares an English translation of the Notice of Convocation and posts the English version on the corporate website at the same time as the Japanese version. Furthermore, the Company has responded to the diversification of methods of exercising voting rights by adopting electronic methods, including the Electronic Voting Platform for Foreign and Institutional Investors, in addition to voting in writing.

The Company has introduced measures to help increase shareholder understanding at the General Shareholders' Meeting, such as by using video and narration to provide business reports and explanations of shareholder proposals. The Company also discloses on its website a summary of the visual content of the business report provided at the General Shareholders' Meeting.

Cross-shareholdings policy

The Company strategically holds shares of other companies only when it is deemed to contribute to the enhancement of the Company's corporate value over the medium to long term on the basis of comprehensive consideration of business strategy, business relationships, and other factors.

The Financial Asset Management Committee, comprising the members of the Board, the corporate officer in charge of administration, and the managers of the Finance & Accounting Department and Corporate Planning Department, verifies each year whether the shareholding purpose and benefits and risks associated with the holdings are appropriate, and the Board of Directors evaluates the verification results. The Company's policy is to reduce any shareholding whose holding rationale is deemed unacceptable by the Board.

The Company makes decisions regarding voting rights of cross-shareholdings from the perspective of whether the content of shareholder proposals conforms to the abovementioned shareholding policy by contributing to the enhancement of the Company's corporate value over the medium to long term. In addition, financial results and other business conditions of investee companies and careful examination of whether or not the proposals contribute to increasing the shareholder value of these companies are considered.

Policies concerning constructive dialogue with shareholders and investors

The Company places importance on constructive dialogue with shareholders and investors for the purpose of realizing sustained growth and enhancement of corporate value over the medium to long term.

The Company has named the member of the Board in charge of administration as the officer in charge of investor relations and has assigned a person in charge of corporate communication to the Corporate Staff Department. The person in charge of corporate communication has developed a system that makes possible appropriate and fair disclosure by striving to gather and share information through the holding of regular and ad hoc meetings with the Finance & Accounting Department, the Research & Development Division, the Business Development & Marketing Division, and other interested divisions and departments.

As a rule, when the Company receives requests for interviews or other forms of dialogue, an appropriate person is selected according to the purpose and promptly responds. In fiscal 2021, the Company held 99 interviews or other interactions with shareholders and investors. The content of dialogues and opinions or requests obtained through such interactions are shared internally through reporting at meetings of the Board of Directors and Management Council as appropriate and through submission of quarterly IR activities reports to the members of the Board and managers of interested departments.

In addition, the Company holds biannual financial results briefings for institutional investors, securities analysts, and the media. The president & CEO provides a review of operations, progress in R&D, measures to improve shareholder value, and other updates. The Company also strives to provide information in a more understandable manner by posting audio files, presentation materials, etc. from the financial results briefings on the corporate website thereby enhancing content for individual investors.

Furthermore, the Company follows the Fair Disclosure Rules and rigorously manages insider information and disclosure information under the provisions of the Company's Insider Trading Prevention Regulations and Disclosure Policy. Additionally, the Company designates the period from the day following the quarterly closing date until the time of the announcement of the financial results as a quiet period to prevent financial information from leaking during the preparations for the announcement. During the quiet period, Seikagaku refrains from answering questions or making comments about financial results. However, the Company responds to inquiries about information that has already been published.

■ Messages from an outside member of the Board and outside Audit & Supervisory Board member



Yasuyuki Sugiura

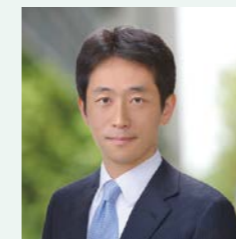
Outside Member of the Board

A functional governance system constructed on the basis of substantive discussion

It is my view that all agenda items receive necessary and sufficient discussion at meetings of the Board of Directors and that an appropriate governance system has been instituted. Thorough explanations of important matters are provided in advance of Board meetings, and the fact that sufficient consideration is given to enable participants to quickly begin substantive discussion on Board meeting days merits high praise. Another indication of the Company's earnest governance posture is that the executives responsible for business execution take discussions at Board meetings seriously and reflect them in actual management. A

Nomination and Remuneration Committee has been established, ensuring objectivity and transparency in the design of compensation for officers and in the decision-making process. Constant efforts are made to improve periodic business reports and other documents; measures have been taken to make them easier to read and understand; and there are ample glossaries of technical terms and other materials. Also, opportunities are provided for the Audit & Supervisory Board members and outside directors to regularly have direct dialogues with executives, and these valuable opportunities for in-depth exchanges of views assist in deepening mutual understanding.

From now on, reliable sustainability management will be considered a corporate social responsibility. Steady implementation of measures that address the six material issues on the basis of sufficient discussion of Seikagaku's purpose and mission is likely to directly contribute to enhancement of corporate value. In my role as an outside director, I hope to make contributions to ensure that Seikagaku receives even greater recognition from society through such sustainability activities.



Takayuki Maruyama

Outside Audit & Supervisory Board Member

The desire to contribute to establishment of a more robust compliance framework and sustained growth

Outside corporate auditors are independent from the corporations they audit, and they perform the role of monitoring corporate management and business execution. Seikagaku's outside Audit & Supervisory Board members, in addition to attending meetings of the Board of Directors and Audit & Supervisory Board, have meetings with the president and have interviews with the executives in charge of divisions to inquire about the execution of business. In this way, we actively exchange views with executives, maintaining a governance and compliance perspective, while deepening our understanding of the business.

At a time when medical cost containment is being implemented through NHI drug price revisions and other means, pharmaceutical companies face an increasingly difficult management environment. Seikagaku has formulated a new mid-term management plan covering the four-year period beginning in fiscal 2022 and is attempting to advance to the next growth step. To gain social trust and realize sustained growth, a pharmaceutical company dealing in life-related products that is required to demonstrate a high sense of ethics must instill a compliance mindset internally and, furthermore, firmly entrench it in the corporate culture. While compliance-focused management is practiced at Seikagaku now, compliance is an endless process, and tireless efforts to improve corporate "self-cleansing" capabilities are essential. I want to apply my experience and legal expertise as an attorney involved in corporate legal affairs to contribute to the establishment of a more robust compliance structure and sustained growth at Seikagaku.

Compliance and Risk Management

■ Compliance

To ensure high ethical standards across all aspects of corporate activities as required of a pharmaceutical company, Seikagaku has positioned honest and fair behavior as the basis of all activities. This involves not only complying with strict laws and regulations, but also putting into practice the principle of “Conducting oneself in a disciplined manner in accordance with morals and also courageously correcting the misdeeds of others.”

To embody these ideals, Seikagaku has instituted a compliance program (including the SKK Group Compliance Code of Conduct) based on the Creed and the Guidelines for Our Activities. To more appropriately and smoothly implement the program, Seikagaku has developed a compliance program implementation structure, established the Compliance Promotion Committee, and installed a compliance officer and compliance promotion officers. The Compliance Promotion Committee, which is chaired by the president & CEO and has the Management Committee members as its members, increases compliance effectiveness by promoting and implementing measures to increase compliance awareness on a company-wide level through an activity plan set every year.

Outline of the SKK Group Compliance Code of Conduct

As an employee of a life sciences company, each Seikagaku employee makes respect for life the primary consideration and behaves on the basis of high corporate ethical standards that earn the trust and support of society.

For details on the Compliance Program, please visit the Seikagaku corporate website.

<https://www.seikagaku.co.jp/en/corporate/compliance.html>

■ Compliance initiatives

Seikagaku instills compliance by distributing to all employees the Compliance Program Handbook, which sets down compliance standards, procedures, and a promotion framework, and the Compliance Card, which summarizes key points of employee behavior.

コンプライアンスカード

経営戦略とコンプライアンス

当社は「独善 公正 謙と情熱」の経営理念のもと、独創的な医薬品等の開発を通じて世界の人の健康でもっと貢献したいと目指します。経営戦略を反映したコンプライアンス・プログラムは、当社の行動の基本方針となるものです。

私たちの使命

私たちは、生命関連企業に求められる高い倫理観のもと、コンプライアンス・プログラムおよび法令等を遵守して、誠実かつ公正に行動します。* 当社コンプライアンス行動規範より

生化学工業株式会社

行動のポイント

- これからは「九つ行動」を心がけて、法律違反などの誤謬変化等によって「いつものこと」が違反行為に変わる可能性があります。
- 自分だけでなく周囲の人にも目を向け、組織での対応や専門家の知恵を借りることにより、早期解決につながります。
- 「疑わしきは「告げる」こと」

あなたが「告げる」ことにより、問題の深刻化を防ぐことができます。上記に報告・相談する際、相談窓口も利用することができます。

【誰に相談するか】

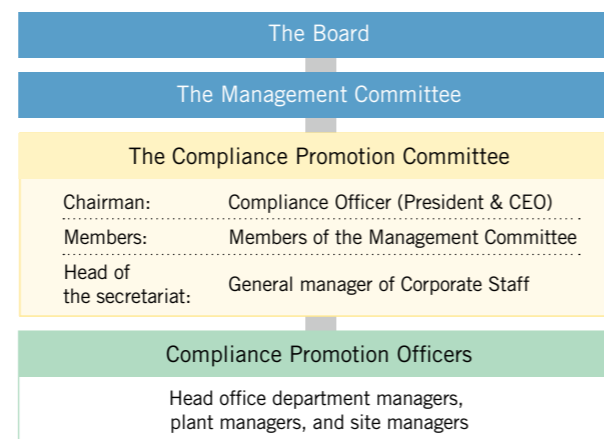
①ホットライン（社内・社外）
②コミュニケーション相談員
※詳細は「相談窓口の手引き」をご覧ください。

Compliance Card

■ Compliance education and training

In other measures to promote compliance, Seikagaku provides internal training on specific compliance-related themes every fiscal year to constantly raise compliance awareness. In fiscal 2021, Seikagaku made “Reaffirming the importance of compliance throughout the company and strengthening and putting into practice the compliance promotion structure” an action policy and engaged in compliance promotion activities centered on online training and e-learning.

Diagram of Implementation Structure



*Overseas subsidiaries Associates of Cape Cod, Inc. and Dalton Chemical Laboratories, Inc. have developed their own compliance frameworks that conform to their local environments, laws, and regulations and have instituted a system of reporting important compliance-related incidents to Seikagaku following reporting to their respective boards of directors.

<Role of Compliance Promotion Committee>

The committee approves measures to promote compliance in accordance with the Compliance Program and supervises the status of their implementation.

<Role of Compliance Promotion Officers>

They are responsible for implementing the Compliance Program in their respective divisions, carrying out self-inspections, and also implementing the resolutions of the Compliance Promotion Committee.

■ Consultation and reporting (whistleblowing) contact points

The Compliance Program is closely connected to appropriate business execution as well as maintenance of a worker-friendly workplace environment for employees.

In the interest of early detection of Compliance Program violations and suspected violations and the resolution of problems, Seikagaku has instituted hotline operation standards and has also set up a communications counseling system (male and female staff appointed at each business site) to respond to internal communication issues. Furthermore, by establishing multiple internal and external consultation contact points, such as utilization of an external whistleblowing channel, Seikagaku has put in place an environment that enables persons seeking advice to use the contact point that makes them feel most at ease, depending on the problems they face or individual circumstances.

Seikagaku has also put in place the necessary mechanisms to comply with the amended Whistleblower Protection Act, and have ensured that all employees are aware of the whistleblower system's process and its importance.

Consultation and Reporting Route



Protection of employees who seek advice and whistleblowers

Seikagaku gives the highest priority to protecting the confidentiality and privacy of employees who seek advice and to whistleblowers. Information about employees who seek advice, whistleblowers, and those involved shall be disclosed on a need-to-know basis and their privacy and anonymity shall be protected. Seikagaku stipulates in its internal regulations that sufficient care must be taken to ensure that whistleblowers and those who have cooperated with investigations do not suffer any detriment as a result of speaking out.

■ Risk management

Seikagaku has established Corporate Risk Management Regulations and developed a structure for monitoring and managing risks related to the execution of business operations. The President has overall responsibility for managing corporate risk, while officers and general managers are responsible for properly managing risks and preventing risks from being realized in the operations under their jurisdiction.

Business risks are described on our website.

<https://www.seikagaku.co.jp/en/ir/management/risk.html>

■ Risk management structure

Seikagaku has also established a Risk Management Committee, which deliberates and establishes company-wide risk management policies and preventive measures. When a new major risk emerges, the Risk Management Committee is also responsible for setting up a task force immediately and implementing countermeasures to minimize any damage.

The occurrence of an emergency, the establishment of a task force, the response policy, and the implemented response measures are reported to the Board of Directors.

Risk Management Structure



Consolidated 10-year Summary

(Millions of yen / %)

	2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	2019/3	2020/3	2021/3	2022/3
Net Sales*1	25,265	27,586	27,589	29,211	28,321	31,434	27,559	29,206	27,734	34,851
Overseas Sales*1	6,499	8,569	9,753	11,530	11,319	12,281	12,098	13,205	14,361	17,918
Cost of Sales	9,867	11,223	12,130	12,871	13,247	13,008	13,114	12,513	12,112	14,323
Selling, General and Administrative Expenses*1	11,643	11,319	12,833	13,833	13,113	13,872	12,727	12,796	13,372	16,033
R&D Expenses	6,838	6,588	8,146	8,649	7,834	8,408	7,148	6,877	7,209	9,005
Operating Income*1	3,755	5,043	2,624	2,506	1,960	4,552	1,718	3,896	2,248	4,495
Ordinary Income	4,302	5,878	4,008	3,500	2,477	5,327	2,859	3,981	3,024	5,395
Net Income	3,256	4,745	3,650	2,578	1,787	3,922	2,244	(10,839)	4,262	3,733
Total Equity	61,316	64,785	70,410	69,815	70,646	73,945	73,036	59,767	63,604	66,340
Total Assets	70,471	73,826	80,889	80,218	80,048	84,098	80,238	68,746	69,915	75,244
Overseas Sales Ratio (Excluding Royalty Income)*1	24.6	30.8	34.8	38.7	38.7	41.5	43.8	46.8	50.5	56.6
Cost of Sales Ratio (Excluding Royalty Income)*1	40.1	40.8	44.4	44.6	47.9	46.0	48.9	45.9	44.8	46.4
Selling, General and Administrative Expenses Ratio*1	46.1	41.0	46.5	47.4	46.3	44.1	46.2	43.8	48.2	46.0
R&D Expenses Ratio (Excluding Royalty Income)*1	27.8	24.0	29.8	30.0	28.3	29.7	26.7	25.2	26.7	29.2
Operating Income Ratio*1	14.9	18.3	9.5	8.6	6.9	14.5	6.2	13.3	8.1	12.9
Ordinary Income Ratio*1	17.0	21.3	14.5	12.0	8.7	16.9	10.4	13.6	10.9	15.5
Net Income Ratio	12.9	17.2	13.2	8.8	6.3	12.5	8.1	—	15.4	10.7
Return on Equity (ROE)*2	5.5	7.5	5.4	3.7	2.5	5.4	3.1	—	6.9	5.7
Return on Assets (ROA)*2	6.2	8.1	5.2	4.3	3.1	6.5	3.5	5.3	4.4	7.4
Turnover of Total Assets*2	0.38	0.41	0.38	0.38	0.37	0.37	0.35	0.39	0.40	0.48
Shareholders' Equity Ratio	87.0	87.8	87.0	87.0	88.3	87.9	91.0	86.9	91.0	88.2
Number of R&D Personnel	224	215	216	221	222	233	233	242	231	223
R&D Personnel Ratio	34.9	33.6	33.3	33.3	32.3	32.5	31.3	27.9	25.3	23.8
Number of Employees	641	639	649	663	687	718	744	868	913	937
Amount of Capital Expenditure	9,164	7,222	2,095	1,975	1,173	1,591	1,310	2,109	2,127	2,194
Depreciation and Amortization	2,175	1,767	2,610	3,191	2,920	2,925	2,902	1,778	808	1,051
Net Income per Share	57.33	83.55	64.27	45.39	31.55	69.30	39.76	(192.15)	75.54	66.32
Total Equity per Share	1,079.38	1,140.48	1,239.51	1,229.05	1,248.07	1,306.37	1,294.88	1,059.40	1,127.14	1,179.46
Dividends per Share	25.00	26.00	26.00	26.00	31.00*3	26.00	26.00	26.00	24.00*4	30.00*5
Dividend Payout Ratio	43.6	31.1	40.5	57.3	98.3	37.5	65.4	—	31.8	45.2
Dividends as a Percentage of Total Equity (DOE)	2.4	2.3	2.2	2.1	2.5	2.0	2.0	2.2	2.2	2.6

*1 New revenue recognition standard has been applied retroactively to fiscal 2012-fiscal 2020 figures.

*2 Total Equity and Total Assets are average amounts of the numbers for the end of previous FY and the end of current FY, respectively.

*3 Including a 70th anniversary commemorative dividend of ¥5 per share.

*4 Including a JOYCLU approval commemorative dividend of ¥4 per share.

*5 Including a JOYCLU launch special dividend of ¥10 per share.

Review of Operations (April 1, 2021–March 31, 2022)

Overall net sales and income

In the fiscal year ended March 31, 2022 (fiscal 2021), net sales were ¥34,851 million, up 25.7% year on year. The result is attributable to a rebound from the impact of the spread of COVID-19 infection in Japan and abroad in the previous fiscal year as well as a substantial increase in royalty income (reclassified from non-operating income to net sales beginning in fiscal 2021) and solid growth from the LAL business and overseas products, factors that offset the impact of National Health Insurance (NHI) drug price reductions in Japan. The overseas sales ratio (excluding royalty income) was 56.6%, an increase of 6.1 points year on year.

Operating income rose 99.9% year on year to ¥4,495 million, with the sales increase more than offsetting higher SGA expenses, mainly R&D expenses accompanying progress with an additional clinical study underway in the U.S. for SI-6603, a treatment for lumbar disc herniation. Ordinary income rose 78.4% year on year to ¥5,395 million, while net income attributable to owners of parent fell 12.4% to ¥3,733 million due to non-recurrence of deferred income tax assets recognized in fiscal 2020, which had a positive impact on prior-year profit.

(Millions of yen)

	2021/3	2022/3	Year on Year
Net Sales	27,734	34,851	+25.7%
Operating Income	2,248	4,495	+99.9%
Ordinary Income	3,024	5,395	+78.4%
Net Income	4,262	3,733	-12.4%
R&D Expenses	7,209	9,005	+24.9%

Net sales by segment

Pharmaceuticals business

The Pharmaceuticals business is the core business of our company, which manufactures and sells pharmaceuticals, medical devices, and bulk products based on glycoconjugates such as hyaluronic acid. In the Pharmaceuticals business, net sales increased 23.6% year on year to ¥25,696 million, accounting for 73.7% of total sales.

Domestic Pharmaceuticals (¥11,447 million, down 0% year on year)

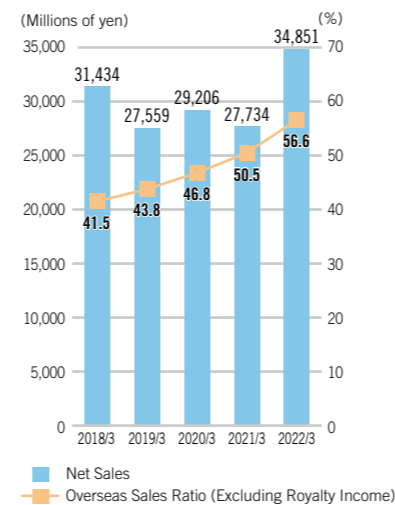
Deliveries to medical institutions of ARTZ, a joint function improvement agent for knee osteoarthritis, increased year on year as a result of successful measures to promote switching from competing products coupled with a rebound in outpatient services following a decline in the previous fiscal year caused by the spread of COVID-19 infection. The Company's sales fell slightly due to the impact of NHI drug price reductions.

The Company is continuing cooperative efforts with sales partner Ono Pharmaceutical Co., Ltd. to proactively gather side effects reports and other information and provide safety-related information about the joint function improvement agent JOYCLU, launched on May 19, 2021. The Company has begun clinical research to identify the cause of the side effects with the cooperation of medical professionals and institutions.

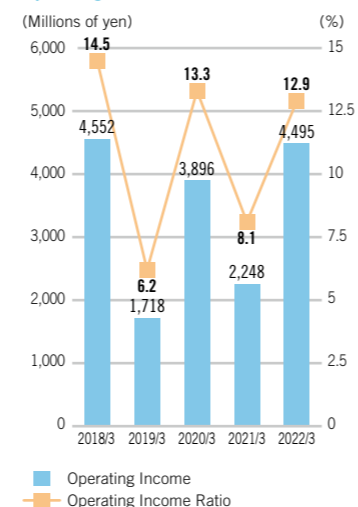
Deliveries to medical institutions of the OPEGAN series of ophthalmic viscoelastic devices increased year on year amid an ongoing rebound in the number of cataract surgeries following a decrease in the previous fiscal year due to the spread of COVID-19 infection. The Company's sales fell as a result of NHI drug price reductions and a decline in shipments from a high level in fiscal 2020.

The Company's sales of MucoUp, a submucosal injection agent for endoscopic surgery, were at the prior-year level as a result of inventory adjustment by the sales partner, despite a rebound from the impact of the spread of COVID-19 infection in the previous fiscal year.

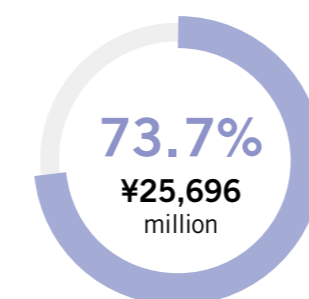
Net Sales and Overseas Sales Ratio



Operating Income and Operating Income Ratio



Pharmaceuticals Business Sales Composition



Deliveries to medical institutions of HERNICORE, a treatment for lumbar disc herniation, grew steadily, and the Company's sales also rose, due to active information provision activities directed at medical institutions carried out together with the sales partner.

Overseas Pharmaceuticals (¥7,652 million, up 12.9% year on year)

Local sales volume in the U.S. and the Company's sales of Gel-One, an intra-articular single-injection viscosupplement for the treatment of knee osteoarthritis, increased year on year, reflecting continuation of the trend toward preference for products requiring few injections and successful measures by the sales partner to promote switching from competing products.

Local sales volume in the U.S. of SUPARTZ FX, an intra-articular 5-injection viscosupplement for the treatment of knee osteoarthritis, increased due to a rebound from the powerful impact of the spread of COVID-19 infection experienced in the previous fiscal year, despite continuation of unfavorable market conditions for multiple-injection products. The Company's sales increased as a result of bringing forward shipments to avoid distribution risk.

Local sales volume in China of ARTZ increased because of active sales promotion in regions where successful bids were submitted in the centralized procurement system and higher orders from medical institutions concerned about sluggish distribution due to the spread of COVID-19 infection. The Company's sales rose sharply, partly as a result of bringing forward shipments due to a packaging materials change.

Bulk Products and CDMO (contract development and manufacturing organization)* (¥2,607 million, up 41.2% year on year)

Although sales of bulk products declined, overall sales increased due to the addition of sales from contract development and manufacturing at Dalton Chemical Laboratories, Inc.

*Starting from the second quarter, the sales of Dalton Chemical Laboratories, Inc., which became a subsidiary in March 2020, are included in the pharmaceuticals business segment.

Royalty income (¥3,989 million, up 455.6% year on year)

Royalty income has significantly increased. Beginning in fiscal 2021, royalty income has been reclassified from non-operating income to net sales.

LAL business

We manufacture and sell endotoxin-detecting reagents used in the quality control of pharmaceuticals and medical devices in Japan and overseas. Net sales of LAL business for the fiscal year under review were ¥9,155 million, up 31.9% from the previous fiscal year.

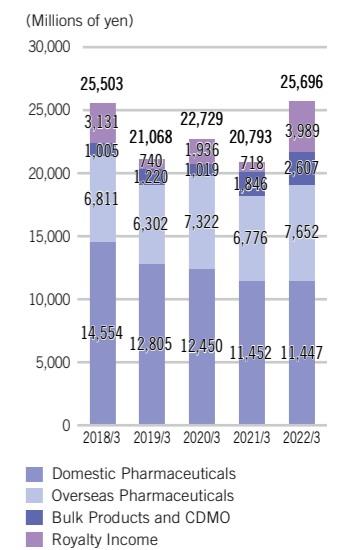
LAL Business

Sales of Bacterial Endotoxin Testing (BET) reagents and Clinical Diagnostic (Fungitell) reagents increased thanks to reinforcement of sales activities at overseas subsidiary Associates of Cape Cod, Inc., coupled with steady sales in Japan.

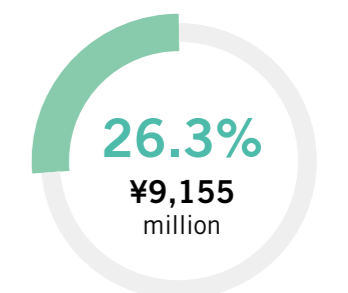
(Millions of yen)

Sales by Segment	2021/3	2022/3	Year on Year
Pharmaceuticals Business	20,793	25,696	+23.6%
Domestic Pharmaceuticals	11,452	11,447	-0.0%
Overseas Pharmaceuticals	6,776	7,652	+12.9%
Bulk Products and CDMO	1,846	2,607	+41.2%
Royalty Income	718	3,989	+455.6%
LAL Business	6,941	9,155	+31.9%
Total	27,734	34,851	+25.7%
(Overseas Sales)	14,361	17,918	+24.8%

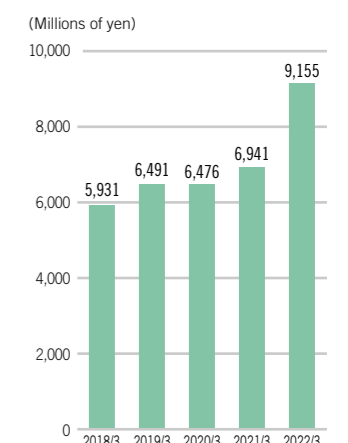
Sales of Pharmaceuticals Business



LAL Business Sales Composition

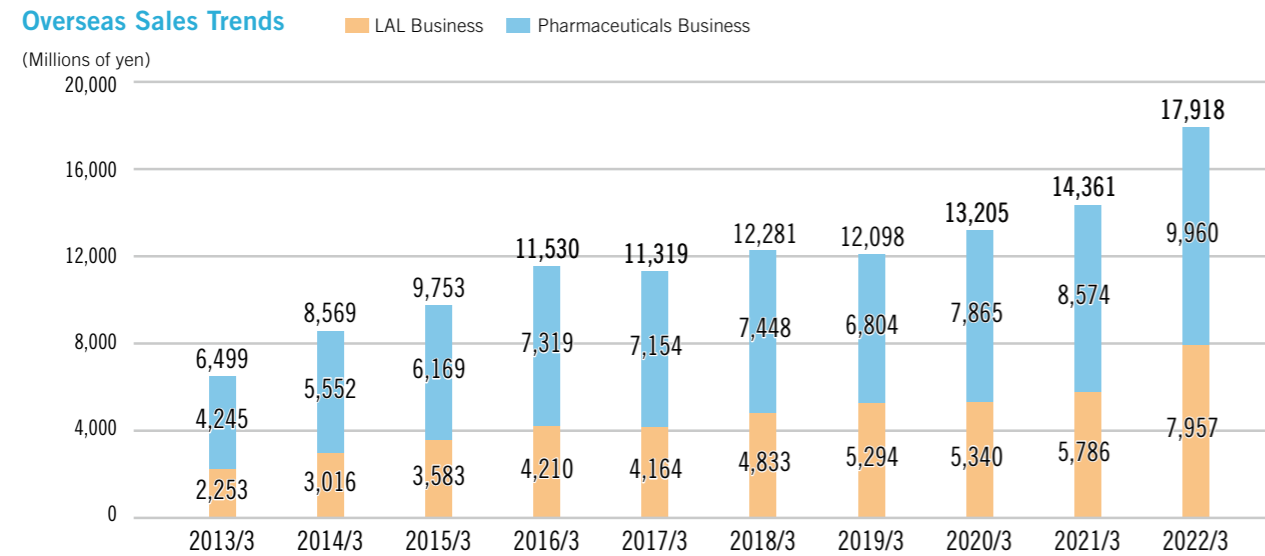


Sales of LAL Business

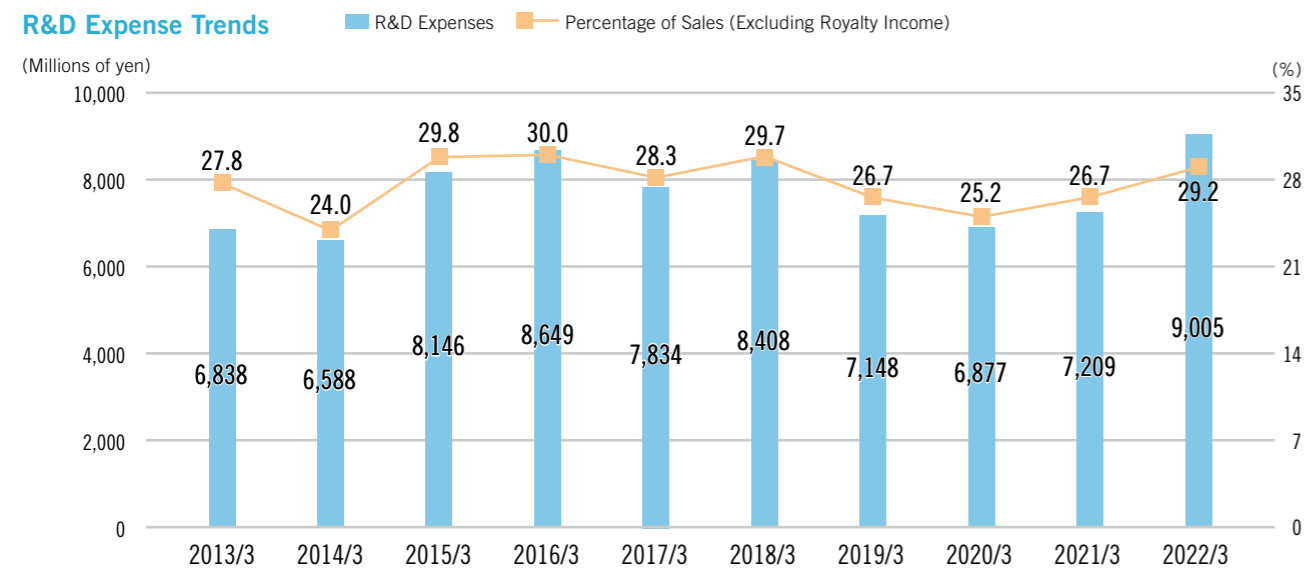


Financial/Non-financial Highlights

Overseas Sales Trends

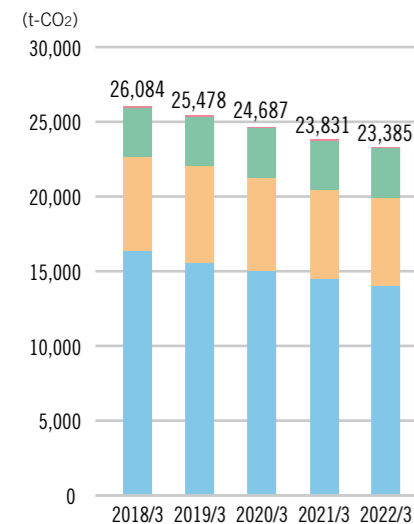


R&D Expense Trends



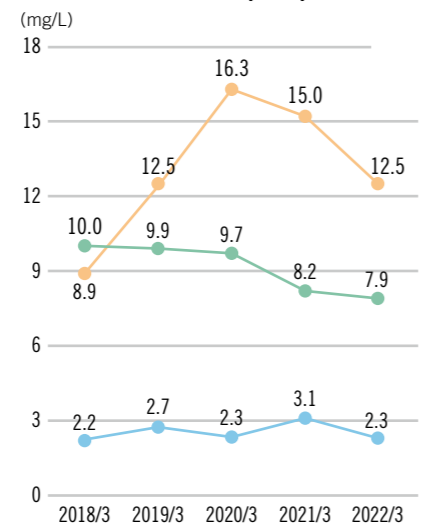
Non-financial Highlights (Non-consolidated Basis)

CO₂ Emissions



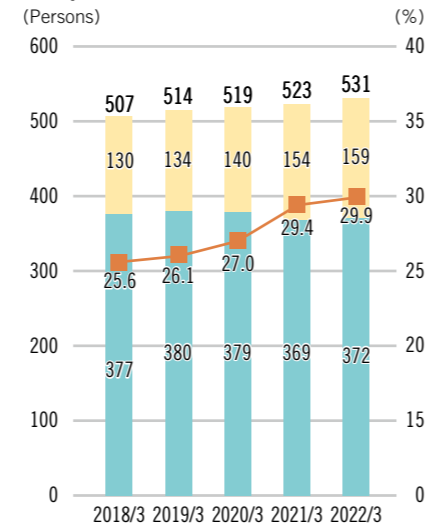
■ Takahagi Plant ■ Kurihama Plant
■ Central Research / CMC Laboratories ■ Head Office

Water Pollution Load (COD)



● Takahagi Plant ● Kurihama Plant
● Central Research / CMC Laboratories

Composition of Workforce



■ Males ■ Females
■ Percentage of Female Employees
Note: Excluding contract employees

Overseas Subsidiaries

■ Associates of Cape Cod, Inc. (Massachusetts, USA)

Associates of Cape Cod, Inc. (ACC), a wholly owned subsidiary of Seikagaku, was the first FDA-licensed LAL manufacturer in the world.

It was established in 1974, became a Seikagaku subsidiary in 1997, and currently plays a central role in the global Bacterial Endotoxin Testing (BET) and clinical glucan detection sectors. ACC employs approximately 250 employees and has operations in the U.K. and Germany.

ACC's reagent and diagnostics production facility, located at their campus in Falmouth Technology Park in Massachusetts, is vertically integrated with an end-to-end manufacturing operation that extends from harvesting horseshoe crab blood cells, a reagent raw material, to manufacturing, testing, packaging/labeling and distributing endotoxin and glucan in vitro diagnostic agents. From the perspective of promoting the appropriate use of natural resources and biodiversity, we have also recently focused on the manufacture and sale of gene-recombinant endotoxin-detecting reagents (see P07) without the blood harvested from horseshoe crabs.

Corporate Outline (As of March 31, 2022)

Paid-in Capital \$2,080

Ownership Ratio 100%

Business Manufacturing and sales of reagents and diagnostics

URL <https://www.acciusa.com>



■ Dalton Chemical Laboratories, Inc. (Ontario, Canada)

Dalton Chemical Laboratories, Inc., which became a Seikagaku subsidiary in March 2020, is a company that provides services including contract development and manufacturing (CDMO) services for pharmaceutical companies, such as manufacturing of chemical synthetics and pharmaceutical ingredients as well as manufacturing process development. Dalton was established in 1986 and has a U.S. and Canadian GMP*¹-compliant manufacturing site for pharmaceuticals and other products in Ontario, Canada. Dalton currently has approximately 150 employees.

Seikagaku will utilize Dalton's chemical synthesis technologies and expertise in manufacturing process development in its new drug development. In addition, Seikagaku will transfer the manufacturing of investigational drugs and some Seikagaku products to Dalton, as well as switch from the outsourced manufacturing of chemical synthetics used for research and other purposes to in-house production by Dalton.

*1 GMP: Good Manufacturing Practice Standards for manufacturing control and quality control in manufacturing.

Corporate Outline (As of March 31, 2022)

Paid-in Capital CAD 49,800 thousand

Ownership Ratio 100%*²

Business CDMO

URL <https://www.dalton.com/>



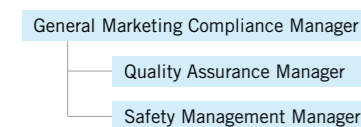
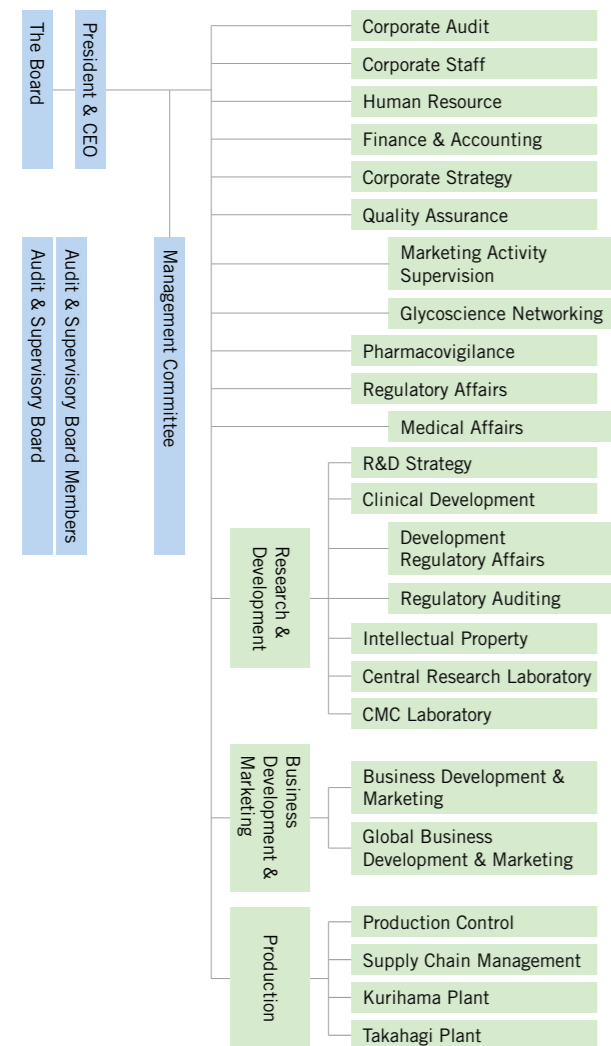
*² Dalton is a wholly owned subsidiary of SKK CANADA ENTERPRISES CORPORATION, an intermediate holding company established in Canada by Seikagaku.

Corporate Data

■ Overview (As of March 31, 2022)

Company Name	SEIKAGAKU CORPORATION
President	Ken Mizutani
Establishment	June 2, 1947
Business Activities	Manufacturing and sales of pharmaceuticals and medical devices specifically related to glycoconjugates
Fiscal Year	April 1 to March 31
Stock Exchange Listing	Tokyo Stock Exchange, Prime Market (Stock code: 4548)
URL	https://www.seikagaku.co.jp/en/
Number of Employees	937 (Consolidated)
Paid-in Capital	¥3,840 million
Net Sales	¥34,851 million (As of March 31, 2022)

■ Organization Chart (As of January 1, 2023)



■ Locations

Head Office	Marunouchi Center Building 6-1, Marunouchi 1-chome Chiyoda-ku Tokyo 100-0005, Japan Tel: (81) 3-5220-8950
Central Research Laboratory/ CMC Laboratory	1253, Tateno 3-chome Higashiyamato-shi Tokyo 207-0021, Japan Tel: (81) 42-563-5811
Kurihama Plant	3-1, Kurihama 9-chome Yokosuka-shi Kanagawa 239-0831, Japan Tel: (81) 46-835-3311
Takahagi Plant	258-5, Aza-Matsukubo Oaza-Akahama Takahagi-shi Ibaraki 318-0001, Japan Tel: (81) 293-23-1181

■ Major Subsidiaries

ASSOCIATES OF CAPE COD, INC.

124 Bernard E. Saint Jean Drive, East Falmouth
MA 02536-4445 U.S.A.
Tel: (1) 508-540-3444

DALTON CHEMICAL LABORATORIES, INC.

349 Wildcat Rd. Toronto, ON M3J 2S3
CANADA
Tel: (1) 416-661-2102 / (1) 800-567-5060

Stock Information

■ Stock Information (As of March 31, 2022)

Shares per Unit	100
Authorized Shares	234,000,000
Authorized Outstanding Shares	56,814,093
Number of Shareholders	10,677
General Shareholders' Meeting	June
Date of Record for Shareholders Eligible to Receive Dividends	March 31

■ Shareholder Registry Administrator

Mitsubishi UFJ Trust and Banking Corporation

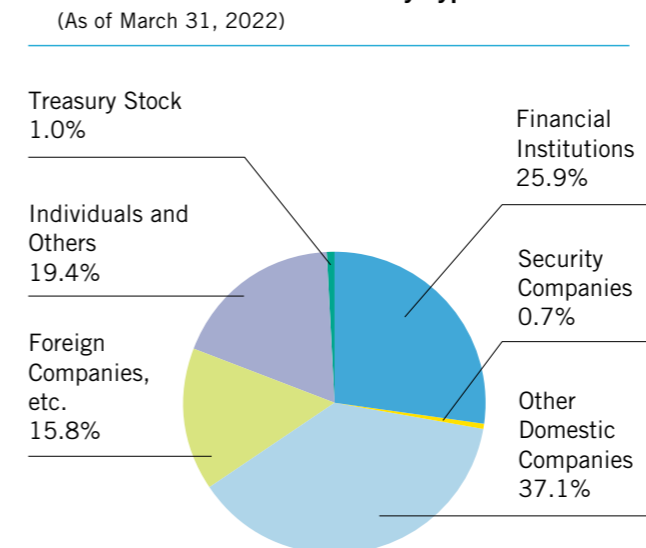
<Contact>
Mitsubishi UFJ Trust and Banking Corporation
Securities Agency Division
PO Box 29, New Tokyo Post Office, Tokyo 137-8081
Tel: 0120-232-711 (Domestic toll-free)

■ Major Shareholders (As of March 31, 2022)

Name of Shareholders	Number of Shares Held (Thousands of Shares)	Percentage of Outstanding Shares (%)
1 Shingyo KK	7,843	13.9
2 The Master Trust Bank of Japan, Ltd. (Trust account)	7,689	13.7
3 KK Kaiseisha	7,293	13.0
4 Custody Bank of Japan, Ltd. as Trustee for Mizuho Bank, Ltd. Retirement Benefit Trust Account re-entrusted by Mizuho Trust and Banking Co, Ltd.	1,573	2.8
5 MUFG Bank, Ltd.	1,536	2.7
6 The Bank of New York Mellon (International) Limited 131800	1,486	2.6
7 Custody Bank of Japan, Ltd. (Trust account)	1,229	2.2
8 Kaken Pharmaceutical Co., Ltd.	1,207	2.1
9 Mizutani Foundation for Glycoscience	828	1.5
10 Meiji Yasuda Life Insurance Company	688	1.2

Note: Treasury stock (567 thousand shares) is excluded from the calculations of the percentages above

■ Breakdown of Shareholders by Type (As of March 31, 2022)



Corporate Logo



The main motif of Seikagaku's corporate logo is a chain, which symbolizes our decades-long commitment to sugar chain R&D. The closely interlocked links represent the strong bonds that exist between science and industry, between people and people, and between a rich natural environment and an enriching life. The links also symbolize Seikagaku's emphasis on partnership with society.

The overall shape of the logo as an oval stretched toward the upper right represents Seikagaku's corporate stance of aiming for infinite growth.

The blue brand color in the corporate logo symbolizes creativity and innovation, while the black projects an impression of strength.



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