

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

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 2021 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 2020 (April 1, 2020–March 31, 2021), but it also includes references to activities in fiscal 2021.

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.

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.

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® is scheduled for delisting 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



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 (now the JASDAQ).

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



1997

Seikagaku Corporation acquires Associates of Cape Cod, Inc. (U.S.A.).



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.

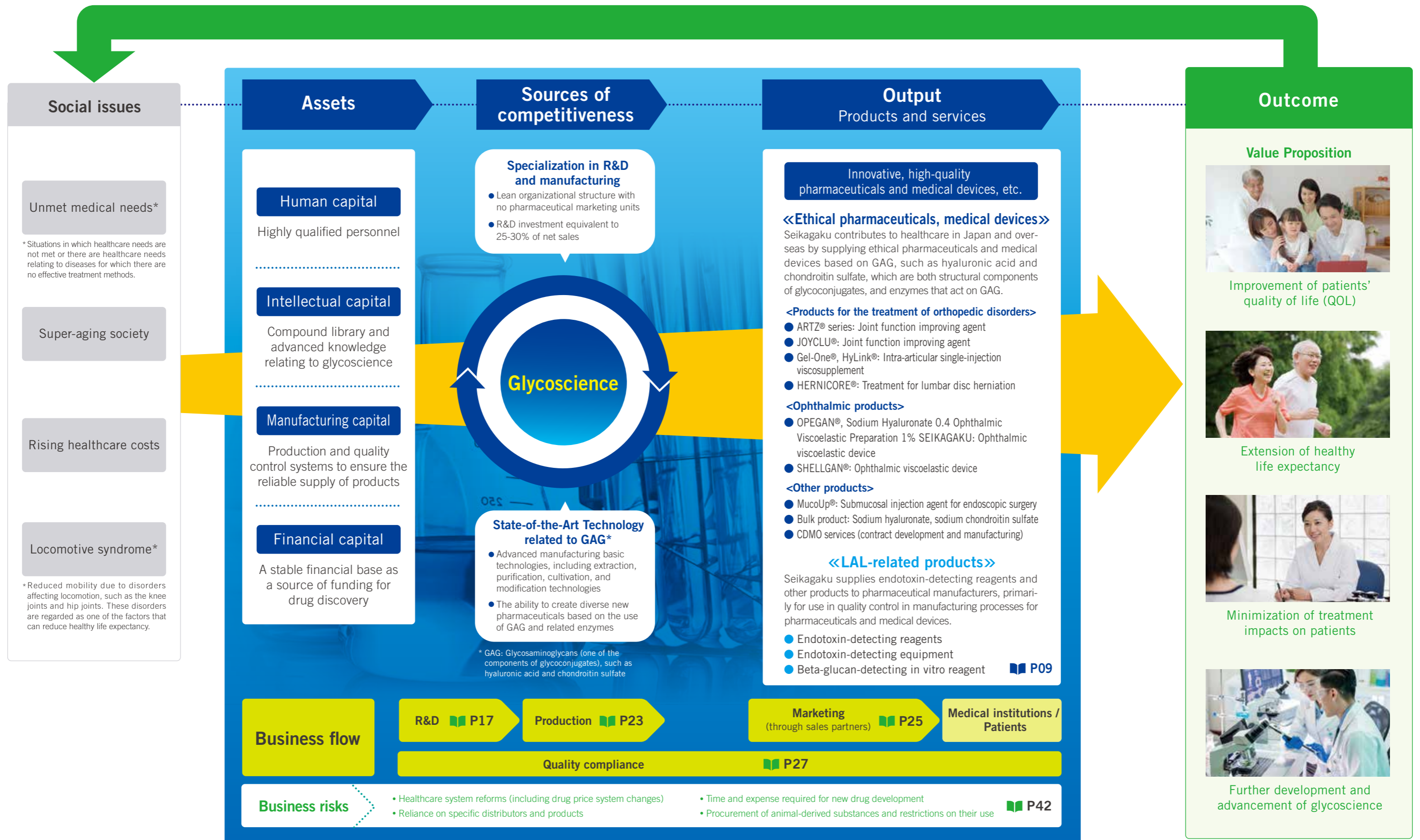
Business Structure Timeline

Net Sales (Millions of yen)

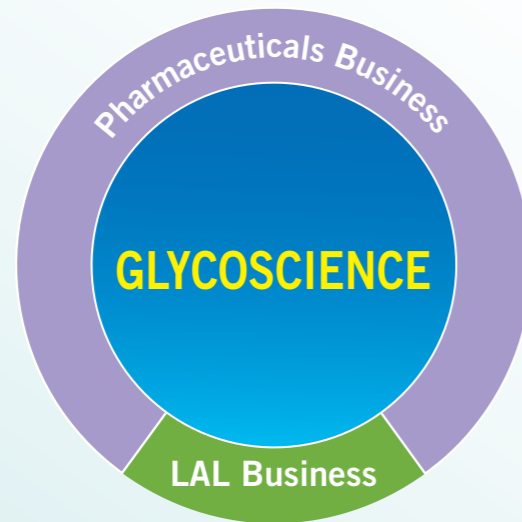


Innovating Novel Contributions and Approaches

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.



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.



Endotoxin-detecting reagents

● PyroSmart NextGen™

PyroSmart NextGen is an endotoxin-detecting reagent manufactured using genetic recombination technology without the use of blood harvested from horseshoe crabs. It was launched in April 2021 by overseas subsidiary Associates of Cape Cod, Inc. and introduced in Japan in May.

● 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.



Automatic endotoxin-detecting systems

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. It is manufactured and sold in markets outside Japan by Associates of Cape Cod, Inc.

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 been filled with solution.

*2 Scheduled for delisting 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®



HERNICORE®

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.

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 newly entered this business by acquiring Dalton Chemical Laboratories, Inc. as a subsidiary in March 2020.



We will work to further solidify the profit foundation in the final year of the mid-term management plan by steadily implementing the important measures set forth in the plan.

President & CEO Ken Mizutani

The strategic positioning of the current mid-term management plan

Seikagaku Corporation has instituted a mid-term management plan (please refer to page 14) in which we have positioned the three-year period beginning in the fiscal year ended March 31, 2020 (fiscal 2019) as a time for solidifying the profit foundation to return Seikagaku to a growth trajectory. We have identified three important measures in the plan: 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.

Seikagaku faces a difficult business environment. Our mainstay products have been heavily affected by NHI drug price reductions in Japan resulting from a drastic reform of the drug price system, and in the U.S. osteoarthritis market, new products from competitors have intensified competition. In the area of new drug development, even as the entire industry faces the challenges of escalating R&D expenses and depletion of seeds for new drug development, new therapeutic techniques, such as regenerative medicine, continue to emerge, and diversification of drug discovery modalities is progressing. To respond to these

rapidly evolving challenges, we are working to build a strong profit foundation to support Seikagaku's future growth by moving forward with these measures with a sense of alacrity and unconstrained by existing frameworks.

Progress of the mid-term management plan

Although fiscal 2020, the second year of the mid-term management plan, was a year fraught with uncertainties such as the spread of COVID-19 infections, we were able to achieve a certain measure of positive results.

"Accelerating new drug discovery to become the pillar of new profits" is the first of the three important measures set out in the management plan. Seikagaku obtained manufacturing and marketing approval in Japan for the joint function improvement agent JOYCLU (development code: SI-613) for the indication of osteoarthritis (knee joint and hip joint) in March 2021 and began distribution of JOYCLU through sales partner Ono Pharmaceutical Co., Ltd. in May. Subject enrollment in a Phase I/II clinical study in the U.S. of SI-722, a treatment for interstitial cystitis, was completed in January 2021. In tolerability evaluation, a primary objective of the study, the tolerability of SI-722 was confirmed, and we are currently considering

the next-phase study.

The second important measure is "Solidifying the profit structure through market expansion of new products." We concluded two agreements with Eisai Co., Ltd. for SI-613, an osteoarthritis treatment: an agreement concerning co-development and a marketing alliance in China in April 2020 and an agreement concerning a marketing alliance in South Korea in September 2020. Furthermore, in April 2021 overseas subsidiary Associates of Cape Cod, Inc. ("ACC") launched PyroSmart NextGen recombinant LAL reagent, an endotoxin-detecting reagent manufactured using recombinant technology resulting from research and development conducted over many years at Seikagaku. (Please refer to page 9.) Seikagaku launched PyroSmart NextGen in Japan in May, taking a first step toward new market expansion.

As part of "Productivity improvement reforms," the third important measure in the management plan, we are proceeding with the transfer of some manufacturing responsibilities to Dalton Chemical Laboratories, Inc. (Dalton), which was acquired and made a subsidiary in March 2020. We will continue our pursuit of production optimization and efficiency improvement through sequential switching from outsourced manufacturing of chemical synthetics to in-house production and the transfer of manufacturing of investigational drugs and some Seikagaku products to Dalton. Furthermore, the Company is implementing organizational moves designed to maximize the value of resources, such as appointing and training young employees to be research team leaders and persons in charge of various production activities. We are also proceeding with a complete overhaul of personnel systems for the purpose of organizational reform and aim to apply revised systems during the period of the current mid-term management plan.

In fiscal 2021, the third and final year of the current mid-term management plan, we will further strengthen initiatives to implement the three important measures in the plan in order to solidify the profit foundation in preparation for the next management plan.

Joint function improvement agent JOYCLU

On June 1, 2021, Seikagaku issued a Dear Healthcare Professionals Letter of Rapid Safety Communication (Blue Letter) concerning JOYCLU, a product launched in May 2021, in response to multiple reports of shock or anaphylaxis following administration. Although the Important Side Effects section of the JOYCLU package insert calls attention to the risk of shock and anaphylaxis, we issued the Blue Letter for the purpose of increasing awareness of these side effects among healthcare professionals and ensuring patient safety by promoting appropriate treatment and measures.

Seikagaku considers the multiple reports of side effects among patients treated with JOYCLU a matter to be addressed with the highest priority. We will continue coop-

erative efforts with sales partner Ono Pharmaceutical Co., Ltd. to proactively gather side effect reports and other information and provide safety information and will strive for early identification of the cause of the side effects.

Furthermore, we will consider how to move forward with SI-613, which is currently under development in the U.S., China, and South Korea, while carefully examining the JOYCLU situation in Japan and its impact.

The impact of COVID-19 infections on Seikagaku

In fiscal 2020, the spread of COVID-19 infections caused enormous changes in the business and work environments. Seikagaku is putting in place a system to ensure continuity of business while striving to prevent the infection of our employees and their family members by implementing measures to adapt to new ways of working, such as introduction of work from home and development of the IT environment. The Production Division is continuing production in order to fulfill our responsibility of ensuring a stable supply of Seikagaku pharmaceuticals and medical devices, while placing the highest priority on employee safety.

We will continue to swiftly gather information and promptly respond to circumstances as they arise in order to fulfill our responsibility to society and duty to ensure a stable supply of products as a pharmaceutical company.

To our shareholders and other stakeholders

When formulating the mid-term management plan, we defined the vision Seikagaku will pursue from a medium- to long-term perspective as "A company that is valued by the world through its innovative drug discovery." Seikagaku has unique knowledge and expertise in the field of glycoscience cultivated over many years, and we consider it our mission to utilize these strengths to continuously create innovative new drugs. We aim to enhance our value to society as a pharmaceutical company by contributing 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.

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 distributions

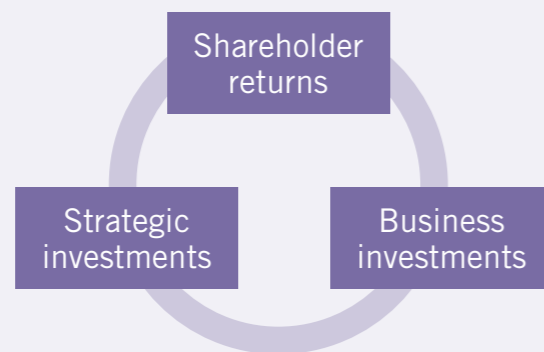
As a means of ensuring sustainable profit growth and improving corporate value, Seikagaku believes in the sharing of profits with its shareholders.

Seikagaku considers the return of profits to shareholders to be an important management challenge and has made paying dividends linked to business performance a basic policy. Seikagaku will also consider the purchase of treasury stock as appropriate, taking into consideration future business expansion and the total return ratio.

To strengthen the profit foundation and improve capital efficiency, Seikagaku will make business investments in the areas of R&D and production system development for the purpose of creating new value and also actively pursue strategic investments with prospects for future growth and synergistic effects.

Looking at shareholder returns during the period of the current mid-term management plan, Seikagaku paid annual dividends of ¥26 per share for fiscal 2019 and ¥24 per share for fiscal 2020. We will strive to maintain consistent shareholder returns in fiscal 2021, aiming for a dividend payout ratio of 50%, taking into consideration business profits and other factors.

Also, Seikagaku acquired 200,000 shares of treasury stock at an acquisition cost of ¥221 million in July 2021.



Shareholder returns	<ul style="list-style-type: none"> • Aiming for a 50% dividend payout after considering business profits etc. • Examining the purchase of company treasury stock when appropriate
Business investments	<ul style="list-style-type: none"> • Investing efficiently in R&D and production facilities etc. for creating new value
Strategic investments	<ul style="list-style-type: none"> • Carrying out initiatives for strategic investments with prospects for future growth and synergy effects

	Forecast for Fiscal 2021	Fiscal 2020 Results
2nd Quarter	¥ 15.00 (including a special dividend of ¥5.00)	¥ 10.00
Fiscal Year-end	¥ 15.00 (including a special dividend of ¥5.00)	¥ 14.00 (including a commemorative dividend of ¥4.00)
Annual Total Dividend	¥ 30.00 (including a special dividend of ¥10.00)	¥ 24.00 (including a commemorative dividend of ¥4.00)
Dividend Payout Ratio	46.3%	31.8%

With regard to the dividend forecast for fiscal 2021, Seikagaku intends to pay an annual dividend of ¥30 per share, representing a dividend payout ratio of 46.3%, to consist of an ordinary dividend of ¥20 (including an interim dividend of ¥10) and a special dividend of ¥10 to commemorate the launch of JOYCLU (including an interim dividend of ¥5).

We have formulated a mid-term management plan with the aim of strengthening the foundation for re-establishing a growth path in response to the rapidly changing business environment. We will work on priority measures with innovative thinking without being bound by existing frameworks.

Corporate Slogan of the Mid-term Management Plan

INNOVATIVE THINKING

Creating value based on innovative thinking



[Our 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
3. Productivity improvement reforms

A period to solidify our foundation in order to lay out a path for revived growth

OUR THREE IMPORTANT MEASURES

A Period to Solidify Our Foundation in Order to Lay Out a Path for Revived Growth

We will work on three important measures for sustainable growth.

1. Accelerating new drug discovery to become the pillar of new profits

Strengthening and making use of the Company's own core technology related to GAGs*

Leveraging drug discovery technology held by Seikagaku to the fullest extent and raise the possibilities for innovative drug discovery.

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

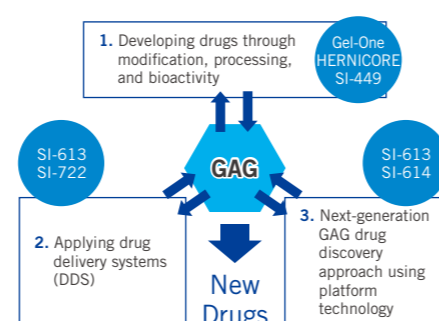
Accelerating innovative drug discovery using an Open Innovation strategy

In addition to the technologies in its possession, Seikagaku will proactively undertake initiatives toward technology having high affinity with other companies, maximize synergies, and expand the number of projects in new drug development—all to speed up its work.

Steady expansion of the development pipeline with an eye toward global expansion

Seikagaku will quickly foster the development of SI-613, a treatment for osteoarthritis and enthesopathy, as a new core product by applying for and successfully obtaining drug approval, and by achieving launching. Seikagaku also aims to step up clinical studies for SI-722, a treatment for interstitial cystitis and bladder pain syndrome, and SI-449, an adhesion barrier. With regard to SI-6603, an indication for treatment for lumbar disc herniation, the Company will focus on speeding up additional study for the Phase III clinical study as it pursues a full effort toward a U.S. market launching.

Main technologies held by Seikagaku



2. Solidifying the profit foundation through market expansion of new products

Post-marketing drug development of HERNICORE in Japan

Seikagaku places priority on information provision activities to ensure appropriate use and safety as well as the collection of aftermarket safety information. Upon agreement with the authorities while coordinating with relevant scientific societies, the Company will work toward gradual expansion of requirements for available medical practitioners and facilities together with steady market penetration. The Company will also advance the disease awareness activities related to lumbar disc herniation for patients.



HERNICORE®, a treatment for lumbar disc herniation

Accelerating multinational expansion of existing products and products in development

By expediting the cultivation of new markets for existing products and products in development to maximize product value, Seikagaku seeks to solidify its medium- to long-term profit foundation. It will also be actively engaged in product improvement and application development in accordance with medical treatment needs in the targeted expansion regions.

Global expansion of endotoxin-detecting reagents that utilize genetic recombination technology

Overseas development of the Seikagaku Group's LAL business is under its U.S.-based subsidiary, the Associates of Cape Cod, Inc. (ACC). With expectations of future adoption, ACC aims for global expansion of gene-recombinant endotoxin-detecting reagents, leading to the securing of a new profit foundation.

3. Productivity improvement reforms

Thorough cost reductions

In manufacturing costs, as a result of a project that is already underway, Seikagaku will conduct a review of procurement costs and the optimization and streamlining of production, leading to greater assurance of product profitability. In selling, general and administrative expenses, the Company will improve work efficiency and make sure that thorough cost reductions are actually done. Furthermore, in order to carry out new drug development continuously, it will address efficient use of R&D expenses determined by priority.

Diversifying the profit model

Regardless of the business model up to now, the Company will carry out a vigorous examination of ways in which to produce new profit.

Creating an organization for maximizing the value of resources

Seikagaku will advance organizational reform that enables flexible responses to changes in the business environment and the nurturing of talent that can create new value, and which also lets each person demonstrate their potential to the fullest.



Dalton Chemical Laboratories, Inc., which became a subsidiary in March 2020.

Numerical Targets

	2019/3 results	2022/3 targets
Net sales	¥28.3 billion	¥28.3 billion
Ordinary income	¥2.8 billion	¥4.5 billion
SKK EBITDA*	¥4.6 billion	¥5.0 billion
Overseas sales ratio	42.2%	50.0%

<Assumptions>

- Expansion of overseas sales in the LAL business makes up for the effects of the NHI drug price revisions in Japan
- Depreciation expense declines as a result of impairment accounting
- R&D expenses are 25–30% of sales
- Various royalty income is included as non-operating income
- Exchange rate: ¥105 to the U.S. dollar

*SKK EBITDA:

A profit indicator consisting of operating income plus depreciation expense and royalty income