

Value Creation by Chugai

Chugai aims to become a top innovator for advanced and sustainable patient-centric healthcare through its focus on innovation. This means the value we provide for patients will encompass more than just greater drug efficacy. Our goal is to provide pharmaceuticals and solutions that have been proven to have true value for each patient.

Case Study

The Value of Treating Hemophilia

Hemophilia is a rare disease characterized by a deficiency or dysfunction in the factors needed for blood clotting, which impairs the body's ability to stop bleeding after some kind of injury. Nowadays, with the advancement of treatment methods, people with hemophilia can lead normal lives and are even advised to exercise regularly. The main treatment for hemophilia A is replacement therapy, where blood clotting factor VIII is administered intravenously between one and three times a week. This treatment places a fairly substantial burden on the patient, particularly for pediatric patients, and can also result in the development of inhibitors against the replacement clotting factor. Chugai's in-house product Hemlibra is expected to transform current treatment systems, as the drug can be administered subcutaneously once every one or two weeks, or even once every four weeks, to prevent bleeding regardless of inhibitor status. Hemlibra is one major outcome of our goal of realizing advanced and sustainable patient-centric healthcare.

Hemlibra

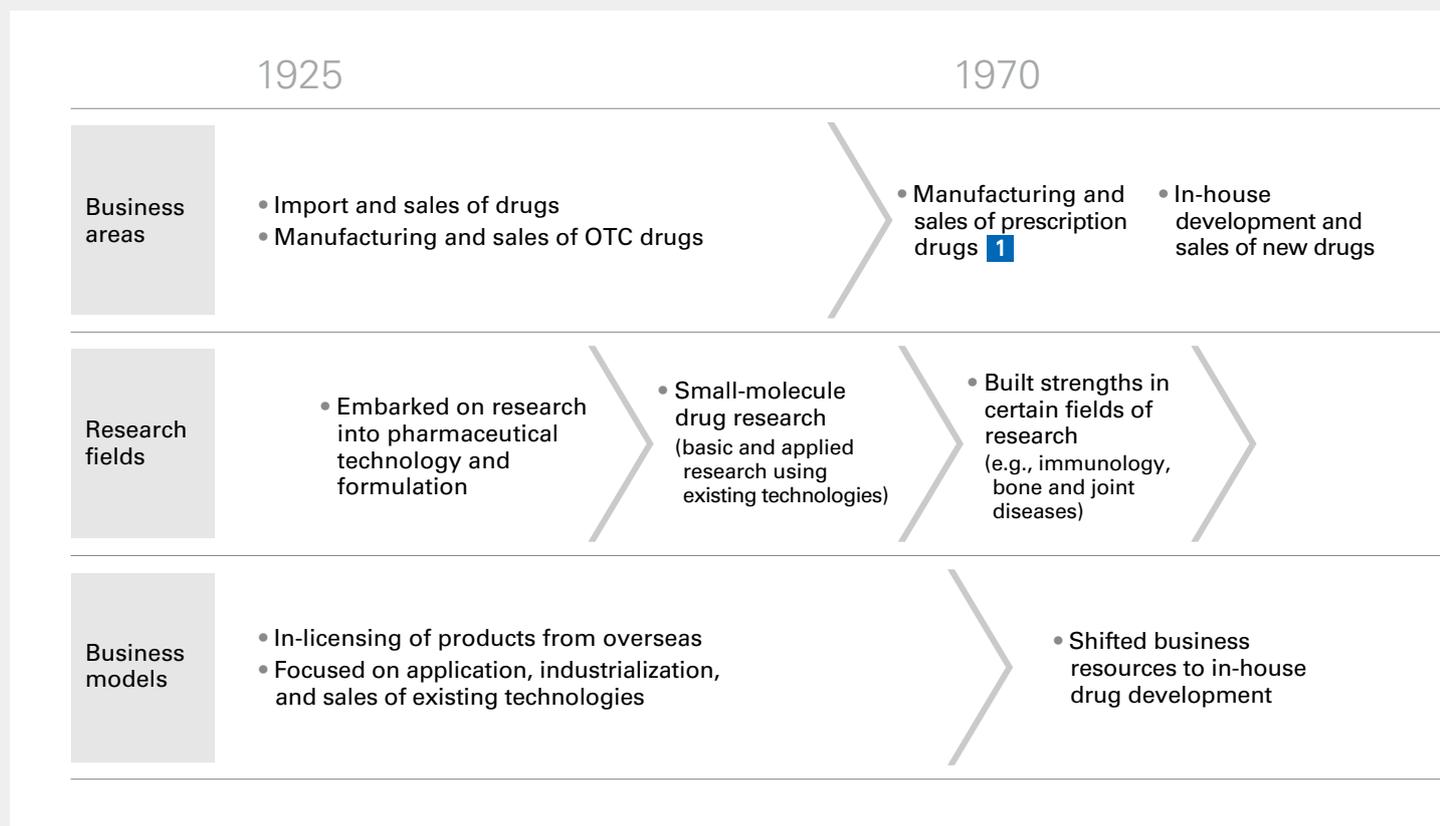
Total of more than **11,000** patients treated

Approved in over **100** countries (As of April 2021)



Our History and Shared Value

Chugai was founded in 1925 in response to the shortage of medicine after the Great Kanto Earthquake. The business environment has changed significantly over the years, but Chugai has continued to operate even as it implemented changes in business areas, research fields, and business models, all the while sharing value with patients and society. Looking back, there have been six major turning points when important decisions were made that allowed us to change and evolve our shared value. This section presents an overview of Chugai's history and the shared value it provides.



1960s

1 Shift to Prescription Pharmaceuticals

After Japan's National Health Insurance (NHI) system was established in 1961, advances in healthcare necessitated a broader range of pharmaceuticals to provide more treatment options. In response, Chugai shifted its core business from manufacturing and sales of over-the-counter (OTC) drugs to prescription drugs, also increasing the Company's focus on research and development. As a result, our stagnating business performance began to recover.

Main Shared Value

Patients: Access to comprehensive medical care

Society: Expansion of treatment options; a stable healthcare system; further advances in the healthcare and pharmaceutical industries

1980s

2 Commitment to Development of Biopharmaceuticals

In the 1980s, Chugai decided to invest business resources into the research and development of biopharmaceuticals, which offered new approaches to diseases and promising therapies with high efficacy and safety, because the Company believed that unmet medical needs could not be fully addressed with the chemically synthesized small-molecule drugs that were the mainstream at the time. We also worked to establish mass-production technologies, which laid the foundations for the subsequent development of our strengths.

Main Shared Value

Patients: Treatment options for a wide range of diseases; promising therapies with high efficacy

Society: Evolution and diversification of treatment methods; advancement of approaches to diseases; development of bioscience

Since 2000s

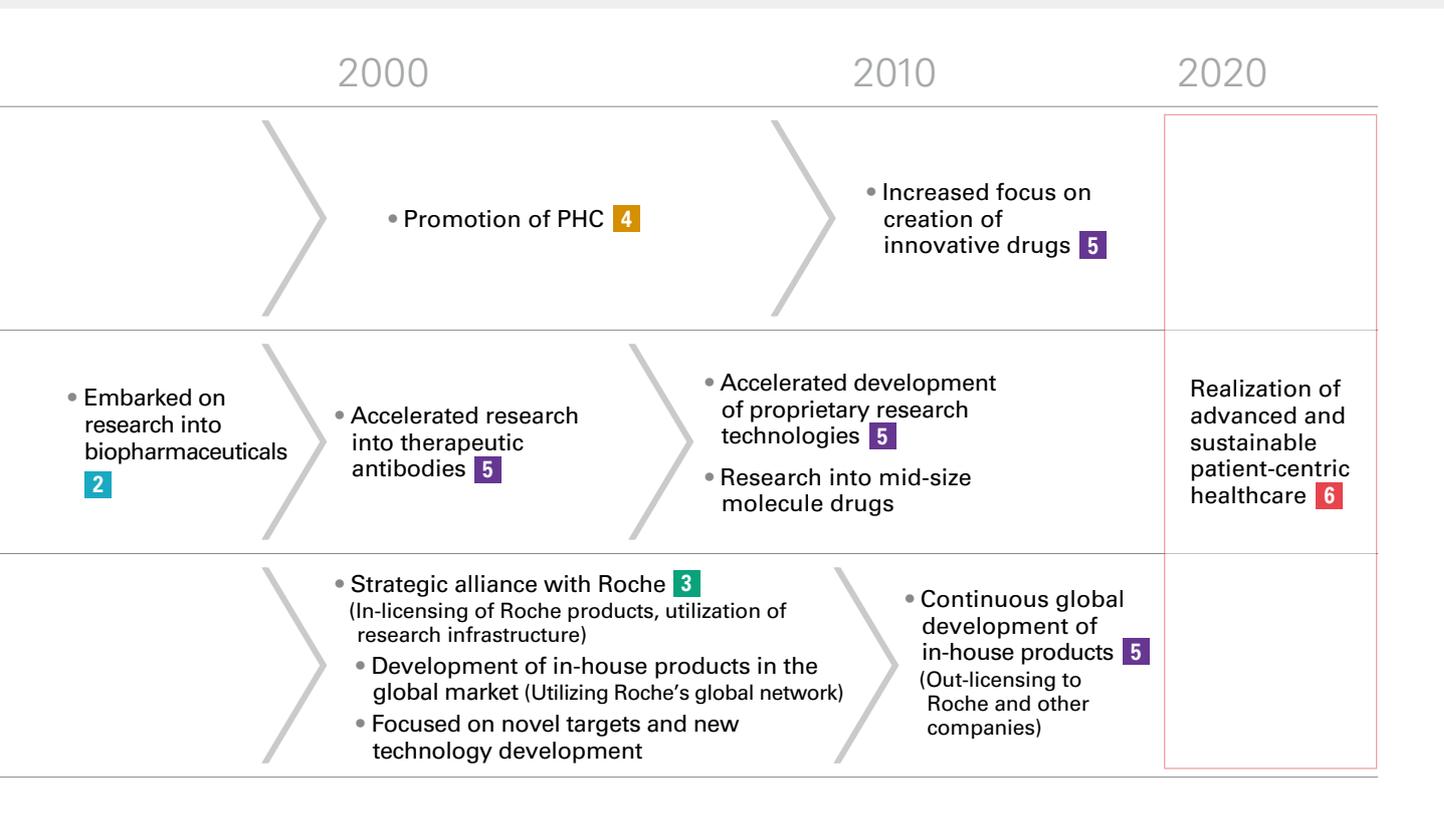
3 Strategic Alliance with Roche

Seeking to benefit patients globally and accelerate innovation, in 2002 Chugai embarked on a strategic alliance with Roche, one of the world's leading pharmaceutical companies. From this alliance, a unique business model emerged, which enabled us to in-license Roche products that had already been approved overseas, and to utilize Roche's cutting-edge expertise and infrastructure to expand our value contribution.

Main Shared Value

Patients: Use of excellent Roche products (elimination of drug lag)

Society: Rapid expansion of treatment options; world-class quality in products and solutions



Since 2000s

4 Promotion of PHC

Personalized healthcare (PHC), in which the optimal treatment is provided based on the patient's genetic profile and other diagnostic information, is a trend in healthcare that offers significant benefits to all stakeholders. Ever since the launch of Herceptin (in-licensed from Roche), Chugai has played a pioneering role that has driven the uptake of PHC, not only through research and development but also through support activities such as providing information to healthcare professionals and creating guidelines.

Main Shared Value

Patients: Administration of drugs only when they are expected to be effective; improved QoL; reduced burden

Society: Optimal treatments for each patient stratum; avoidance of unnecessary administration

Since 2000s

5 Launch of Therapeutic Antibody and Continuous Creation of Innovative Drugs

In 2005, Chugai launched Actemra, the first therapeutic antibody created in Japan, to further address unmet medical needs. Since then, we have produced a succession of innovative drugs by investing our resources in creating products from our own research and the advancement of technologies. So far, Chugai products have received breakthrough therapy designations from the U.S. FDA eight times.

Main Shared Value

Patients: Superior efficacy and safety; groundbreaking outcomes

Society: Evolution of treatment paradigms; enhanced treatment adherence and diagnosis; response to rare diseases

Since 2019

6 Commitment to Realizing Advanced and Sustainable Patient-Centric Healthcare

Given the challenges facing the healthcare industry in terms of patient trends, systems for the provision of medical care, and healthcare finances, Chugai declared in 2019 that it would work toward becoming a top innovator for advanced and sustainable patient-centric healthcare based on the creation of shared value. Our commitment to contribute to all patients, healthcare, and society has remained unchanged since our founding.

Main Shared Value

At Chugai, we have defined shared value with each group of stakeholders that goes beyond simple cooperation, as we work to achieve advanced and sustainable patient-centric healthcare.

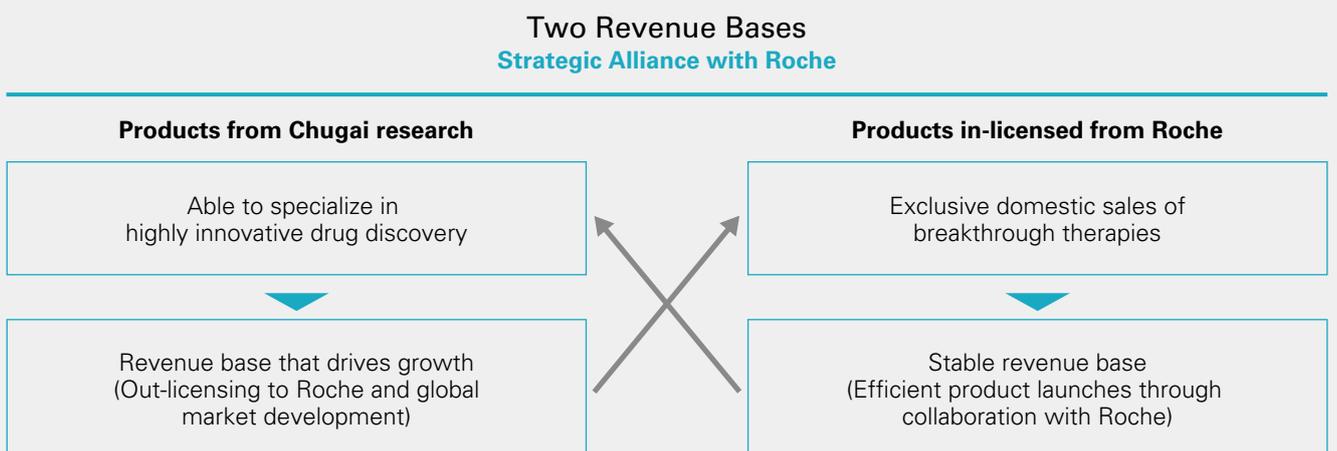
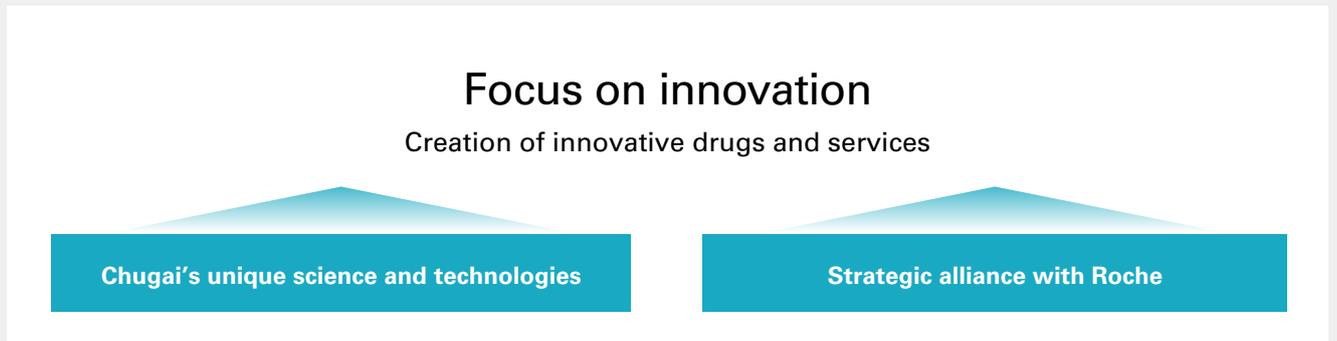
▶ P26 Value Shared by a Top Innovator

Value Creation Model



Envisioned Future for 2030
Top innovator in the healthcare industry

Chugai business model



▶ P32 Collaboration with Roche

Commitment to “Creating Shared Value”

Chugai has adopted “creating shared value” as its basic management policy, in line with its philosophy of growing together with its various stakeholders by resolving social issues through business activities. The goal (outcome) of this shared value, which is also part of our Envisioned Future, is to realize advanced and sustainable patient-centric healthcare.

Sustainable healthcare systems are needed around the world, as expectations and needs for pharmaceuticals increase further due to world population growth and demographic aging combined with the spread of COVID-19. Dramatic advances in life sciences and digital technology are providing more opportunities for innovation to solve issues in healthcare, but governments are implementing more and more stringent policies to curb medical expenditures, including drug costs, as healthcare finances come under pressure. Given the limited resources available, we expect the medical community to converge even faster on value-based healthcare (VBHC), where only those solutions that deliver true value are adopted.

Top Innovator in the Healthcare Industry

To create shared value under these circumstances, we have defined the steps we need to take to become a top innovator in the healthcare industry and realize our Envisioned Future for 2030 (see the diagram below). Chugai is a company that generates expectations from patients all over the world, attracts healthcare-related talent and players, and is a global role model that resolves social issues. Through our collaboration with Roche, we will continue to place “innovative new drugs” at the core of our business, while aiming to become a leading innovator in the global healthcare field, where a diverse range of players, not

limited to pharmaceutical companies, are taking on the challenge of innovation.

The key to the value created by Chugai is its focus on innovation. We look to create new drugs to address the increasing number of unmet medical needs by searching for new therapeutic targets and further creating innovative drug discovery technologies. We cannot survive in the future business environment without constant innovation. Powered by its unique strengths in science and technology, Chugai will focus all its business resources on innovation through the utilization of digital technologies and the active promotion of external collaborations.

Business Model for Value Creation Based on Material Issues

We believe that this value creation is achievable, as Chugai has a unique business model being a member of the Roche Group while also maintaining autonomy and management independence. Based on this business model, Chugai has established two revenue bases—products from Chugai research and products in-licensed from Roche. The model creates a sustainable cycle in which stable revenue from products in-licensed from Roche enables Chugai to make a concentrated investment in innovation, leading to the continuous creation of innovative products. The subsequent out-licensing of these products to Roche provides Roche with the resources to further invest in the development of innovative products.

In addition, we have established 25 Material Issues in eight categories to be given priority in our efforts to create shared value. We are constantly reviewing the Material Issues alongside changes in the business environment but have made no changes to them in the new growth strategy for 2030.

Realizing the Vision of Chugai as a Top Innovator in 2030

Expectation from patients all over the world



With world-class drug discovery capabilities, patients around the world expect that “Chugai will surely create new treatments.”

Attracting talent and players from around the world



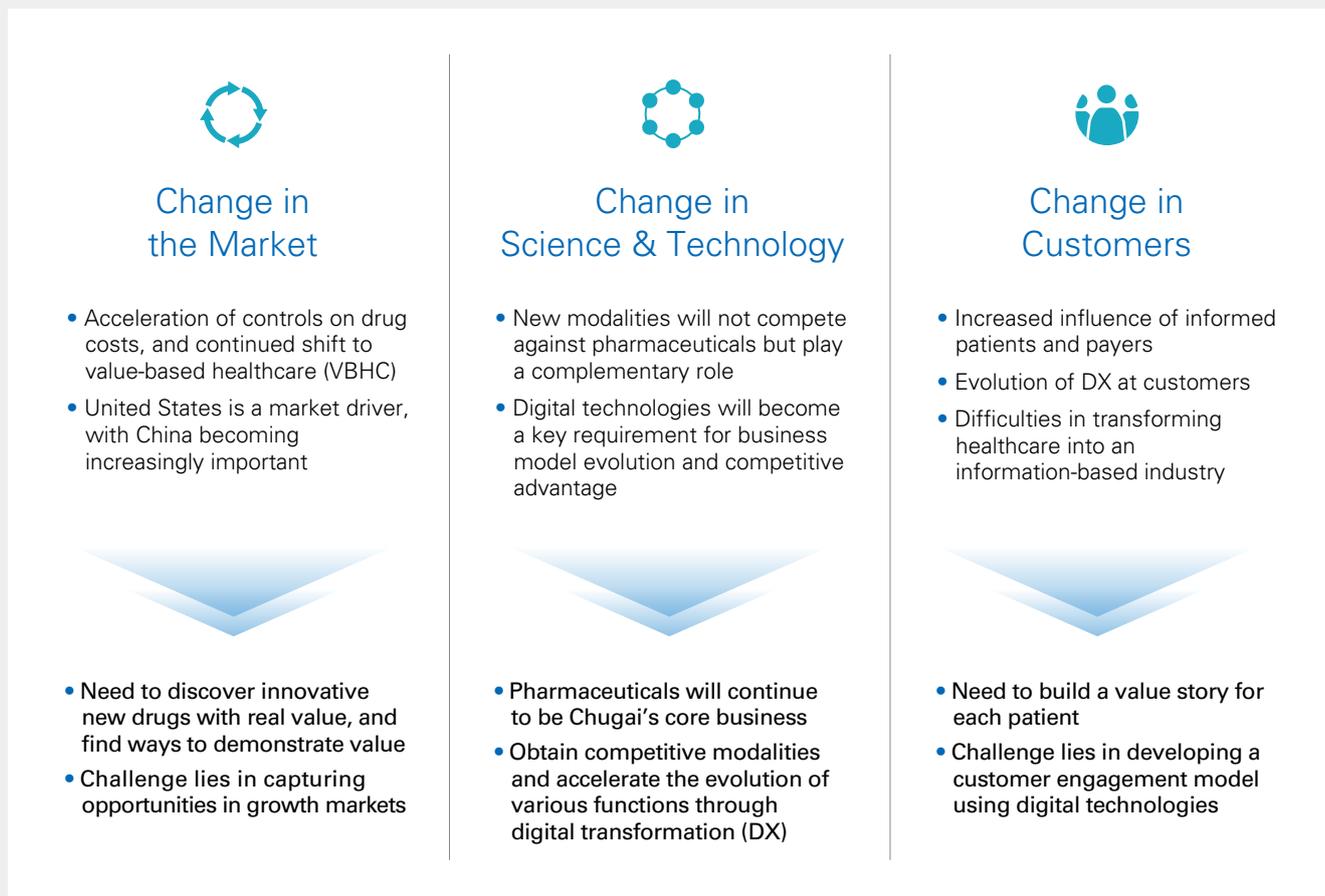
Attract passionate talent from all over the world and inspire players globally to think they can create something new by partnering with Chugai.

Role model for the world



Recognized for its ESG initiatives through its business activities, Chugai will become a global role model as a leader in resolving social issues.

Outlook for Chugai's Business Environment in 2030



Severity of drug pricing policies and shift to VBHC are accelerating; opportunities arise from changes in science, technology, and customers

Above, we summarize the changes anticipated in the market, science, technology, and customers through 2030 and the implications of these changes on our business based on the medium-to-long term scenario analyses of various surveys.

In developed countries as well as in the rest of the world, measures to contain drug costs will surely accelerate due to fiscal pressures, including the impact of population growth, aging, and COVID-19. We are entering an era when only products or solutions that offer true value will succeed. The value of innovative pharmaceuticals to society is expected to grow. Informed patients and payers will have an increasingly important presence, as we are starting to see already through payers moving to merge and expand business scope. More than ever, we must demonstrate value to patients in

terms of QoL and lifetime value. Cell therapies, nucleic acid drugs, and other new modalities need to be developed alongside existing pharmaceuticals in a mutually complementary fashion, and we need to embrace DX to evolve each value chain, including drug discovery, and restructure customer engagement models.

In light of this outlook for the business environment, we conclude that innovative drug discovery will remain as our core business and that Chugai needs to continue providing value across society and to earn the expectations of patients and other stakeholders through innovation that create new treatments and the continued evolution of technologies and platforms. The results from this analysis are the background for materializing the vision of Chugai as a Top Innovator in 2030.

Executive Insights

No Changes in Our Mission Statement or Material Issues

The year 2030 is not far away for pharmaceutical companies, where the pipeline at hand determines the next 10 years. Chugai's ongoing research of technology trends and business environment forecasts has led to a clearer understanding of the relationship between new modalities and IT platforms than we had when IBI 21 was formulated in 2019. Previously, the prevailing view was that the emergence of new modalities and IT platforms could pose a threat, but subsequent research and analysis has led us to conclude they will complement and evolve with each other through collaboration rather than conflict. It was reaffirmed that our business operations in drug discovery, manufacturing, and supply contribute significantly to social structures and economies, and are essential infrastructure for industry and society in the future.

Our Mission Statement and Material Issues remain unchanged, and we will continue to develop our core competencies in the modalities of antibodies and small molecule drugs; tackle the new challenge of mid-size molecules; and make every effort to discover innovative drugs. By strengthening our technologies and platforms, we can collaborate on new modalities and digital technologies. Currently, new drug discovery projects and development themes are emerging one after another, and we anticipate a very interesting decade ahead. My role is to take these initial ideas and turn them into corporate value and value for society. To do that, we are constantly evolving our business model and management based on careful investigation and analysis of the business environment.

Tetsuya Yamaguchi

Executive Vice President
Supervisory responsibility for Project &
Lifecycle Management Unit (Marketing),
Corporate Planning, and Quality and
Regulatory Compliance



WHAT

Value Shared by a Top Innovator

Stakeholders	Shared Value	Value Indicators (Internal)	Value Indicators (External)
Patients Families of patients	<ul style="list-style-type: none"> Better drug efficacy and safety Better QoL Treatment choices that fit each patient Burden reduction 	<ul style="list-style-type: none"> Number of new products launched and additional indications Number of safety information reports 	<ul style="list-style-type: none"> Treatment outcomes in each disease area Treatment adherence rate Medication and post-treatment care costs Total cost of care for patients
Healthcare professionals and medical institutions	<ul style="list-style-type: none"> Better disease control More treatment options 	<ul style="list-style-type: none"> Number of new products launched and additional indications 	<ul style="list-style-type: none"> Treatment outcomes in each disease area Number of standard of care guidelines
Communities	<ul style="list-style-type: none"> Advanced and sustainable community-based care Improvement of local government finances 	<ul style="list-style-type: none"> Number of liaison activities 	<ul style="list-style-type: none"> Treatment adherence rate Drug costs in hospital market
Countries, payers, and regulatory authorities	<ul style="list-style-type: none"> Growth of the healthcare industry Appropriate spending levels Sustainable healthcare financing 	<ul style="list-style-type: none"> Revenues Number of new products launched and additional indications 	<ul style="list-style-type: none"> Growth rate of healthcare industry Taxable capacity of the industry Health insurance costs
Universities, research institutions, suppliers, and other collaborating organizations and companies	<ul style="list-style-type: none"> Cocreation of innovation Elucidation of disease mechanisms Collaborative solutions 	<ul style="list-style-type: none"> Number of joint research projects Number of research agreements/alliances Number of risk evaluations 	<ul style="list-style-type: none"> Number of clinical studies Growth rate of healthcare industry
Employees	<ul style="list-style-type: none"> Job satisfaction and sense of fulfillment Enhanced abilities 	<ul style="list-style-type: none"> Employee awareness survey Productivity indicators 	<ul style="list-style-type: none"> Diversity and inclusion-related indices
Shareholders and other investors, etc.	<ul style="list-style-type: none"> Higher added value Increased profits 	<ul style="list-style-type: none"> Core EPS CAGR Payout ratio 	<ul style="list-style-type: none"> ESG rating Market capitalization

Going beyond improvements in drug efficacy and safety to also change the lives of patients

Collaboration with our stakeholders is essential if we are to achieve advanced and sustainable patient-centric healthcare. As such, Chugai has examined the value shared with stakeholders and key value indicators (see the table above).

As we work to become a top innovator by 2030, we do not anticipate any change in the value shared with stakeholders or the key value indicators, but we recognize the need to contribute to patients at a higher level if we are to become a company with global first-class drug discovery capabilities and earn the expectations of patients.

Drug treatment is not the end goal for each patient. Patients value their lifestyle during treatment and convalescence. They want to have a good prognosis, be free from regular hospital

visits, and live without feeling the burden of disease. In other words, our goal should be to provide innovative new drugs that can cure or completely control their disease. If we are to support patients in this way, we must also measure a patient's QoL and level of satisfaction. Rather than only using conventional measures of drug efficacy, we need to establish True Endpoints that can measure the true value to the patient. Our goal is to research various parameters and clarify what the True Endpoints are.

If patients can be treated appropriately through this value-based healthcare (VBHC) approach, we expect to generate even more value shared with healthcare professionals, partners, and all other stakeholders.

Executive Insights

Helping Patients Return to Their Pre-Illness Lifestyles

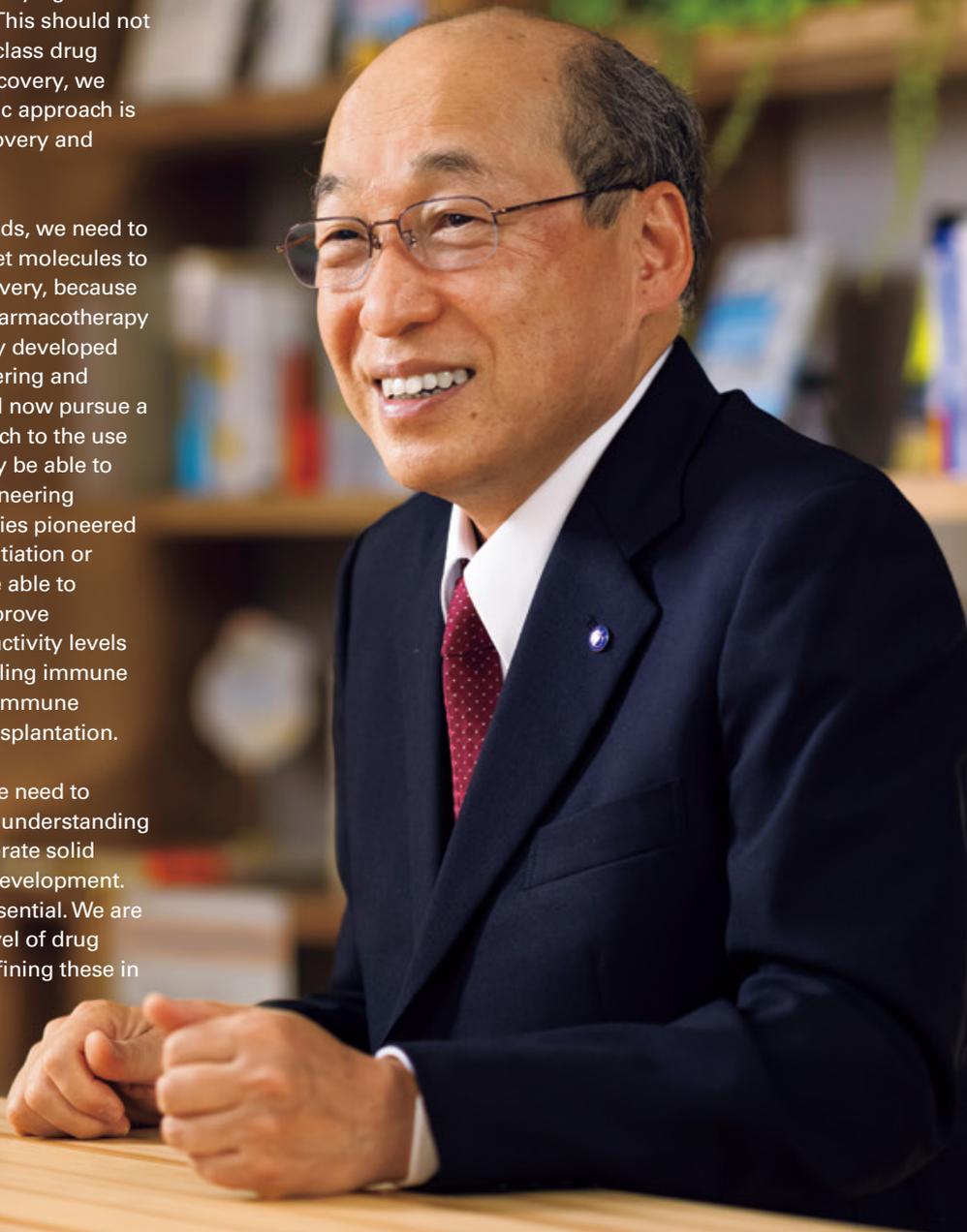
There will always be unmet medical needs. Patient demands, and our goals for meeting them, will constantly grow. For example, Hemlibra provides unprecedented patient convenience and efficacy to prevent bleeding, making a significant contribution to QoL. But what patients want next is to exercise and lead active lives without worrying about bleeding, just like those without hemophilia. This should not be an impossible dream if we use our world-class drug discovery capabilities. As a player in drug discovery, we believe the best expression of a patient-centric approach is to make full use of our expertise in drug discovery and continuously address patient hopes.

In order to address higher unmet medical needs, we need to research disease biology and investigate target molecules to expand our modality platforms for drug discovery, because the mechanisms and modalities needed for pharmacotherapy will become more diverse. Chugai has already developed world-class technologies for antibody engineering and mid-size molecule drug discovery, and we will now pursue a multi-modality strategy with a flexible approach to the use of external technologies. For instance, we may be able to create a new modality by combining cell engineering technologies with the gene therapy technologies pioneered by Roche. By precisely controlling the differentiation or action of mesenchymal stem cells, we may be able to prevent muscle or bone deterioration and improve metabolism, thereby increasing the physical activity levels of the elderly. In addition, by precisely controlling immune cells, we may be able to cure intractable autoimmune diseases and broaden the scope of organ transplantation.

Finally, to provide true value for the patient, we need to develop these technologies as well as a better understanding of biology, establish True Endpoints, and generate solid proof of concept (PoC) at the early stages of development. The mutual evolution of all these factors is essential. We are committed to fostering the world's highest level of drug discovery and development capabilities by refining these in an integrated and focused fashion.

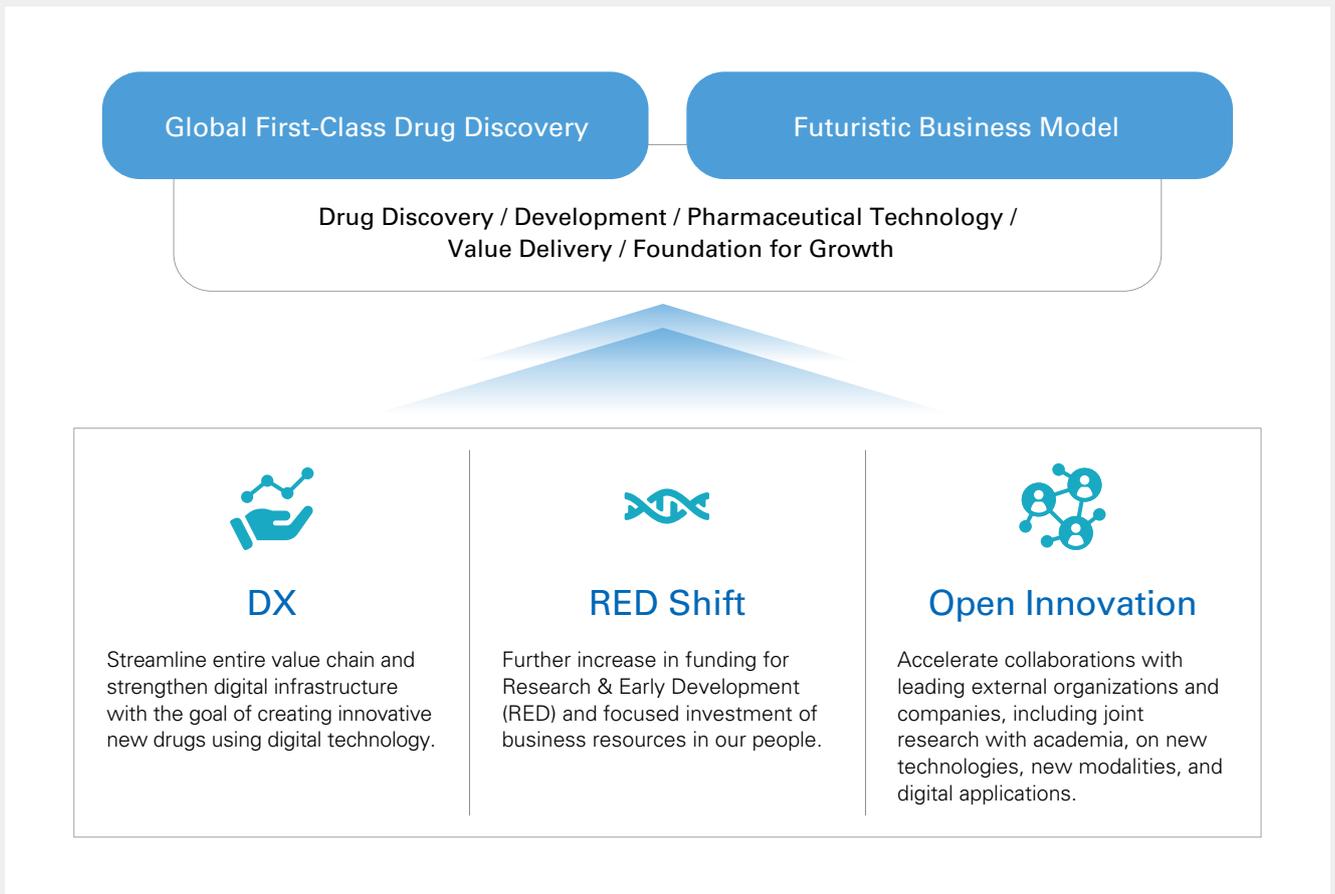
Dr. Hisafumi Okabe

Executive Vice President
Supervisory responsibility for
Project & Lifecycle Management (R&D),
Research and Translational Research



HOW

Key Drivers to Becoming a Top Innovator



Key drivers are RED Shift, DX, and Open Innovation

To become a top innovator in 2030, we need to make significant advancements in our drug discovery capabilities over the next decade to achieve global first-class drug discovery and build a futuristic business model that can continuously create solutions to the world's unmet medical needs. Our growth strategy to achieve this is named TOP I 2030, and the key drivers behind this strategy are RED Shift, digital transformation (DX), and Open Innovation. (see page 58 for more details on the new growth strategy TOP I 2030.)

In order to develop our drug discovery capabilities further, we have defined RED functions (which correspond to the research, translational research, and the early development

stages of the pharmaceutical technology functions) as our value creation engine. We will make even bolder investments in both human and financial resources in these areas. We must make greater use of digital technologies to implement this RED Shift. We have defined CHUGAI DIGITAL VISION 2030 and will implement the three basic strategies of creating innovative new drugs using digital technology, optimizing all value chains, and strengthening our digital infrastructure. At the same time, we will accelerate collaborations with external organizations and companies to allow us to respond in an agile manner to developments in life sciences and digital technology.

Executive Insights

Accelerating DX with a Focus on ROI

Chugai has made great strides in DX under CHUGAI DIGITAL VISION 2030 announced in March 2020.

This vision reflects the management team's determination to focus on innovative drug discovery as a top innovator and foreshadows the approach described in TOP I 2030. Each department is visualizing and integrating their digital programs, which has allowed the drafting of resource allocation plans that reflect the business strategy and enabled agile progress with various initiatives. We have also worked to change employee awareness of DX through the appointment of Digital Leaders in each division, and I feel that one of our biggest successes has been the establishment of organizational structures across all divisions that support a proactive approach to DX initiatives.

As a result of these initiatives, Chugai is recognized by external parties for its outstanding DX, including selection as a DX Stock 2020. As we move forward to achieve TOP I 2030, we need to place an even greater emphasis on cost benefits and timelines. Our goal is to set precise ROI and KPI targets for each initiative and establish appropriate PDCA cycles.

The pharmaceutical industry has huge potential to evolve through DX, particularly with regard to managing the enormous amounts of sensitive data that pharmaceutical companies handle. Progress in DX is also becoming a key element when assessing corporate value, just like ESG. Chugai plans to contribute to DX across the industry as a whole while also accelerating innovation driven by Chugai Digital in order to improve corporate value.

Satoko Shisai

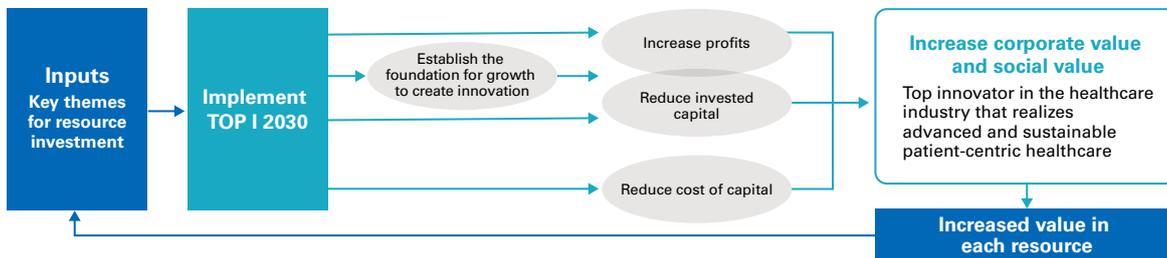
Vice President
Head of Digital & IT Supervisory Division



Capital Investment with a Focus on 2030

Chugai needs a wide range of resources (capital) in order to become a top innovator in the healthcare industry and decisions on how to invest these resources require inputs corresponding to the key themes for resource investment, as shown in the table below. Through this process of capital investment, we aim to establish the foundation for growth to create innovation, increase profits, reduce invested capital, and reduce cost of capital, with the goal of increasing corporate value and creating value for patients and society. These initiatives will lead to an increase in the value of our resources, which will enable further value creation.

Resources	Key themes for resource investment (Inputs)	Scenarios for contributing to increased corporate value and value creation	
		Establish the foundation for growth to create innovation	Increase profits
Human resources (Human capital)	<ul style="list-style-type: none"> • Manage human resources, assigning the right people to the right positions • Acquire, develop, and fulfill highly competent specialists • Develop understanding and support for Mission Statement and TOP I 2030 • Continuously pursue diversity and inclusion (D&I) 	<ul style="list-style-type: none"> • Develop a culture that encourages bold challenges • Foster active and strategically consistent participation by human resources, ensure appropriate compensation 	<ul style="list-style-type: none"> • Create innovation in each function in the value chain
Technology and IP (Intellectual capital)	<ul style="list-style-type: none"> • Enhance drug discovery and pharmaceutical technology platforms for antibodies and small molecules, and build similar platforms for mid-size molecules • Create new modalities • Deepen our understanding of biology research • Expand portfolio of patents for highly competitive technology platforms 	<ul style="list-style-type: none"> • Progress multi-modality approach • Strengthen and expand drug discovery platforms using digital technologies 	<ul style="list-style-type: none"> • Create innovative new drugs that break through limitations of existing modalities • Use digital technologies to accelerate opportunities for innovation • Progress to secure rights for products
Collaborations with Roche and external partners (Social capital)	<ul style="list-style-type: none"> • Develop products from Chugai research globally via the Roche Group and other networks • Utilize the Roche Group's information and research infrastructure • Collaborate with cutting-edge companies and academia on DX and state-of-the-art technologies and science • Engage in dialogue with various stakeholders 	<ul style="list-style-type: none"> • Create new value through collaborations with the Roche Group and realization of open innovation and digital technologies 	<ul style="list-style-type: none"> • Grow innovative products developed in-house on global markets • Secure revenue bases by in-licensing promising Roche products
Pharmaceutical technology and facilities (Manufacturing capital)	<ul style="list-style-type: none"> • Build research facilities and production systems suited to continuously evolving modalities and technologies • Achieve digital plants through the use of digital applications and robotics • Develop systems for flexible and rapid development and next-generation production • Ensure stable supply and rigorous quality assurance 	<ul style="list-style-type: none"> • Build research infrastructure that can accelerate innovation • Build development and production infrastructure that can handle drugs of high difficulty 	<ul style="list-style-type: none"> • Shorten development timeframes and reduce manufacturing costs • Flexibly respond to changing demand in product supply and sale
Environment and energy (Natural capital)	<ul style="list-style-type: none"> • Invest in new technologies and new facilities to switch energy sources and reduce greenhouse gas (GHG) emissions • Reduce resource use, including energy and water • Recycle resources consistent with a circular economy 	<ul style="list-style-type: none"> • Design and plan facilities and equipment for reduced environmental burden, lower costs, and greater productivity 	<ul style="list-style-type: none"> • Build foundations for sustainable growth
Financial related (Financial capital)	<ul style="list-style-type: none"> • Increase cash flows to ensure a growth trajectory • Continuously evolve revenue structures • Increase cash to enable strategic investments 	<ul style="list-style-type: none"> • Raise funds for innovation • Actively invest in digital technologies • Investment in RED 	—



Increased value in each resource

Reduce invested capital	Reduce cost of capital
<ul style="list-style-type: none"> Secure and develop diverse, high-caliber talent Use digital technologies to make business processes more efficient 	<ul style="list-style-type: none"> Maintain a culture that prioritizes compliance Reduce the risk of high-caliber talent leaving the Company
<ul style="list-style-type: none"> Create technology and research outcomes that attract external parties Use digital technologies to build a futuristic business model 	<ul style="list-style-type: none"> Respond to the emergence of new modalities and solutions Reduce IP risk
<ul style="list-style-type: none"> Improve resource efficiency through global development Use digital technologies to build a futuristic business model 	<ul style="list-style-type: none"> Reduce supply risk and supply chain risk Improve external evaluation of environmental, social, and governance (ESG)
<ul style="list-style-type: none"> Use digital technologies to improve the efficiency of business processes 	<ul style="list-style-type: none"> Reduce quality and reliability risk Reduce supply risk
<ul style="list-style-type: none"> Reduce costs in the future 	<ul style="list-style-type: none"> Reduce risks from climate change, water, etc. Reduce risk from waste materials
<ul style="list-style-type: none"> Improve capital efficiency through cash management 	<ul style="list-style-type: none"> Continuously build up reputation on capital markets Reduce credit risk

<p>Human resources</p> <ul style="list-style-type: none"> Increase employees' job satisfaction, improve sense of fulfillment Improve employees' capabilities and skills <p>Technology and IP</p> <ul style="list-style-type: none"> Solve unmet medical needs Advance global drug discovery technologies Increase the level of science in the healthcare industry <p>Collaborations with Roche and external partners</p> <ul style="list-style-type: none"> Pursue cocreation of innovation Create added value in all functions <p>Pharmaceutical technology and facilities</p> <ul style="list-style-type: none"> Develop more advanced, next-generation facilities and equipment <p>Environment and energy</p> <ul style="list-style-type: none"> Reduce environmental burden Promote circular economies <p>Financial related</p> <ul style="list-style-type: none"> Increase cash flows

Collaboration with Roche

Win-Win Relationship with Roche

Chugai's unique business model, in which Chugai is a member of the Roche Group while maintaining autonomy and management independence, allows it to concentrate on innovation through an emphasis on originality and diversity. This contributes to the enhancement of Chugai's corporate value as well as the growth of the Roche Group in a business model unlike any other worldwide.

Based on this unique model, Chugai has established two revenue bases—products from Chugai research and products in-licensed from Roche. This model creates a sustainable cycle in which stable revenue from products in-licensed from Roche enables Chugai to make a concentrated investment in innovation, which accelerates the continuous creation of innovative products, and the subsequent out-licensing of these products to Roche contributes in turn to Roche's growth over the long term. This enables Roche to further invest in research and development. Completing the cycle, Chugai can then launch innovative new products in Japan that arise from Roche's powerful research infrastructure and wide-ranging partnerships.

To achieve steady and strong growth, both of these revenue bases must grow. Since forming this alliance with Roche, Chugai has launched many products in Japan that were developed and marketed globally by Roche. However, looking at the breakdown of total domestic and overseas sales since 2010, the share from products in-licensed from Roche, on a rising trend in the early part of the decade, started to decline in 2016 due to the rapid growth of Chugai products in the global market. Analysis of global sales of Chugai products supplied through Roche's network shows that this growth has been driven by overseas approvals for Actemra in 2009, Alecensa in 2015, and Hemlibra in 2017, with the Hemlibra approval in particular driving an acceleration in sales growth. Moreover, with the addition of the approval of Enspryng in 2020, we expect further growth driven by these global products.

This revenue structure, in which products from Chugai research and products in-licensed from Roche are both growing while global expansion of products from Chugai research serves as a growth driver, is evidence that our business model through the strategic alliance with Roche is successful.

Key Features of the Collaboration with Roche

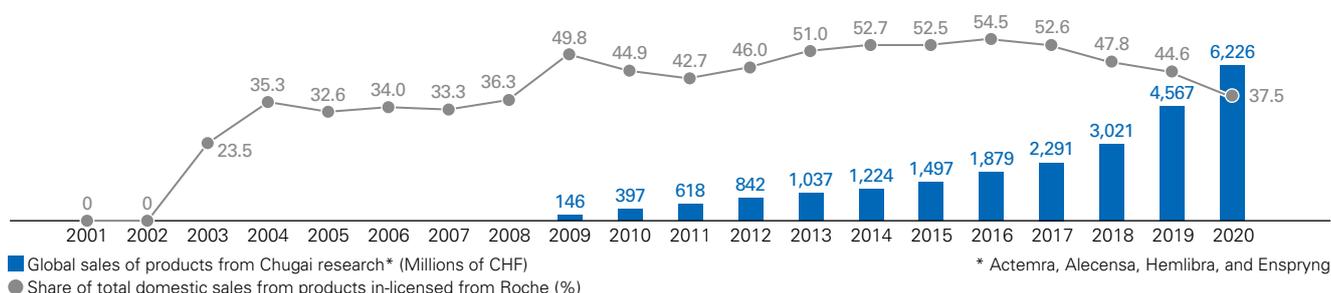
Independent management (Stock listing maintained)	Concentrate on innovation through an emphasis on originality and diversity	Access emphasizing economies of scale and regional optimization	<p>▶ Products from Chugai research Global marketing utilizing Roche's network</p> <p>▶ Products in-licensed from Roche Development and marketing in Chugai's territory (Japan, South Korea, and Taiwan)</p>
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Advantages for Roche	<ul style="list-style-type: none"> • Handling of innovative drugs created by Chugai • Presence in Japan, one of the world's largest markets 	<ul style="list-style-type: none"> • Marketing that matches Japan's business environment • Increase in the Roche Group's corporate value
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Contractual arrangements regarding Chugai and Roche products

- Chugai has right of first refusal on the development and marketing of Roche products in Japan
- Roche has right of first refusal on the development and marketing of Chugai products outside Japan
 - Worldwide except in Chugai's territory
 - Chugai offers all development projects to Roche at the early proof of concept (PoC) stage
 - Co-promotion rights in the United Kingdom, Germany, France, etc. (Discussions about China on a drug-by-drug basis)

Global Sales of Products from Chugai Research, and Sales Share for Products In-Licensed from Roche



Business Model Evolution

Our business model has continued to evolve since Chugai entered into the strategic alliance with Roche in 2002. For nearly 20 years, we have collaborated with Roche in a wide range of fields, from business management to research, clinical development, pharmaceutical technology, marketing, medical affairs, and drug safety, generating excellent outcomes as a result. In clinical development for example, since 2014, Chugai has been able to offer development projects for licensing to Roche at the early PoC stage, which

is the optimal timing for collaboration. This has allowed licensing agreements with Roche to be signed earlier and global development to continue with a sense of speed and unity without having to pause at the clinical development stage. From the perspective of supply chain management and environment, health, and safety (EHS) as well, we have been able to enhance our operations by drawing on Roche's initiatives and expertise at the cutting edge of global markets. We aim to evolve our collaboration further in order to deliver advanced and sustainable patient-centric healthcare.

Features and Outcomes by Business Model Function

Area / Function	Features of business model	Outcomes of relationship and cooperation with Roche
Management	<ul style="list-style-type: none"> • Stock listing maintained by guaranteeing independence • Ensuring the interests of minority shareholders • Management with a broad, long-term view 	<ul style="list-style-type: none"> • Basic agreement emphasizes Chugai's management independence and maintenance of stock listing. • Executive directors, independent outside directors, and directors concurrently sitting on Roche's Board of Directors each comprise one-third of Chugai's Board of Directors. • Joint committees with Roche and close consultation between senior managers take place routinely. Chugai and Roche share and confirm each other's mission, values, and direction.
Research	<ul style="list-style-type: none"> • Concentration on innovation through independent decision-making • Efficient research activities • Acceleration of efforts driven by a sense of competition within the Roche Group 	<ul style="list-style-type: none"> • Activities are based on Chugai's independent decision-making, including selection of research projects and investment of resources. • Chugai can use Roche's research infrastructure, including its large, high-quality compound library. • In the Roche Group, a culture of friendly competition between the research divisions of each company provides mutual motivation.
Clinical Development	<ul style="list-style-type: none"> • Optimal timing of collaboration with Roche • Efficient and rapid global marketing utilizing the Roche Group's infrastructure • Access to latest market information globally 	<ul style="list-style-type: none"> • While Roche has right of first refusal on the global development of Chugai products, Chugai has exclusive development and marketing rights to Roche products in Japan. • Out-licensing of products from Chugai research is immediately offered to Roche upon achievement of early PoC. This has enabled faster development by reducing "white space" in the development process. • Participation in global studies conducted by Roche for in-licensed and out-licensed products that extend worldwide (Chugai manages clinical trials in Japan). • Chugai is establishing its own independent global development system in order to quickly achieve early PoC.
Pharmaceutical Technology	<ul style="list-style-type: none"> • Optimization of global production system • Conformance with the world's most advanced management standards • Information-sharing in the areas of supply chain management and EHS 	<ul style="list-style-type: none"> • In principle, products from Chugai research are manufactured by Chugai and exported to Roche, but for Actemra, technology has also been transferred to Roche Group production bases. • Roche, which manufactures and markets products worldwide, shares its knowledge on the latest good practice guidelines and regulations (GxP) compliance. • In addition to incorporating Roche's expertise in supplier due diligence and management, Chugai and Roche keep each other informed about EHS management of production bases.
Marketing Medical Affairs Drug Safety	<ul style="list-style-type: none"> • Provision of solutions tailored to regional characteristics • Sharing of various information with Roche and establishment of common infrastructure for safety information 	<ul style="list-style-type: none"> • Chugai provides solutions in each territory with a focus on local healthcare systems and regional characteristics. • However, when necessary Chugai and Roche share information and cooperate across regions in marketing strategy, generation of evidence, and other matters for each product. • Safety information on each product is collected and analyzed in real time in cooperation with Roche.