

# Shionogi's Further Evolution



We are building a healthcare platform that promotes product development throughout Shionogi's value chain.

**Takuko Sawada**

Director and Executive Vice President and Senior Vice President, Integrated Disease Care Division

## ■ A Turbulent Fiscal 2020 and Creating Our Disease Strategy Vision

Fiscal 2020 was a year in which COVID-19 brought about dramatic technological innovations and changes throughout the world. In STS2030, Shionogi is setting the goal of transforming itself into a HaaS company, i.e., a company that provides healthcare services, not just therapeutic drugs. It is therefore incumbent upon us to contribute to society by always grasping these global movements and changes so that we can provide the necessary products and services in response to patients' thoughts and concerns, as well as the needs and issues facing society. We want to provide total care that runs the gamut of diagnostic, prevention, treatment, and other services that patients need and maximize value through synergy, so that we can achieve economic growth as a company. This is the concept behind our disease strategy articulated in STS2030. To execute this disease strategy throughout the company and become a HaaS company needed by all of society, we recruited representatives from our various organizations to develop a Disease Strategy Vision and work with society to achieve this Vision by 2030.

## ■ Our Disease Strategy Vision

The Disease Strategy Vision is a guideline for realizing what Shionogi wants to accomplish by 2030, which is "Building Innovation Platforms to Shape the Future of Healthcare." We selected the keywords, awareness-raising (communicating), prevention (to prevent), diagnosis (to diagnose), treatment (to cure), and care (to protect) from the standpoint of achieving total care by using information throughout the patient journey, from the discovery of symptoms to hospital treatment to prevention of exacerbation and recurrence.

Prevention is key to our Disease Strategy Vision, but in the sense of employing our strengths, it goes without

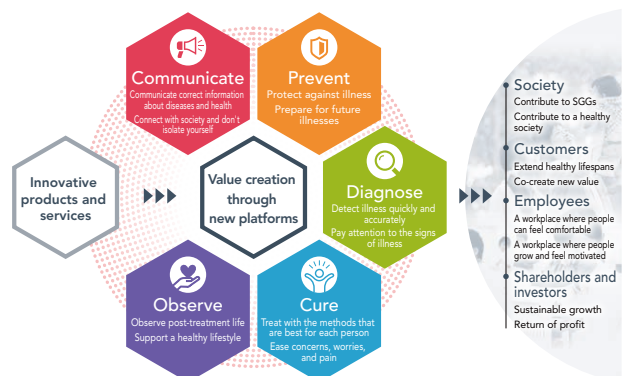
saying that curing disease is of particular importance. Also, to maximize the impact, Shionogi wants to build a healthcare platform that advances the development and distribution of the critically necessary and innovative products and services throughout its value chain, including the new DX Promotion Division established in July 2021, and from awareness-raising through care.

## ■ The Role of the Integrated Disease Care Division

The Integrated Disease Care Division needs to further broaden and expand strategies to create the values sought by our stakeholders, so that Shionogi can become a HaaS company. We reorganized the New Product Planning Department to strengthen its role and be the department that comes up with a consistent strategy, from research through the post-launch stage. Also, the new Vaccine Business Department was set up as the body overseeing vaccine business, including the COVID-19 vaccine currently under development.

We will continue to work together with the entire value chain and our stakeholders to create a bright future for healthcare based on our new Disease Strategy Vision.

## ■ Our Disease Strategy Vision, a Journey with Society





■ STS2030 and the Digital Transformation (DX): “Transformation or Die”

Our growth strategy for STS2030 is to transform our business to one that is not dependent on pharmaceutical patents, and to achieve a major transformation from a drug discovery-based pharmaceutical company into a HaaS company. As a HaaS-creating company, Shionogi will not be able to survive in society if it cannot transform itself faster than the rapidly changing world caused by COVID-19 and provide new value to society.

To create new services that meet the needs of society, we must combine the strengths that we have nurtured as a drug discovery-based pharmaceutical company with the strengths of our various partners to create services that will solve the difficulties of living for more people and raise the level of happiness in society. IT and digital technology are indispensable to creating these new healthcare services, and we need to undergo our own DX transformation and ensure the achievement of STS2030, so that we will be a HaaS-creating company that is the hub of trusted collaboration.

■ Establishment of the DX Promotion Division

If we are to achieve STS2030 by taking a DX approach, we first need to make our IT and security foundation stronger and more efficient. The IT and Digital Solutions Department is the IT control tower for the entire company. The department formulates IT strategy, is a global leader in building safe, worry-free, and stable IT and security infrastructures. In addition, for systems that will be introduced into various value chains, we will work to provide overall optimal digital solutions by being involved in implementation projects from a company-wide perspective.

Also, as DX advances, the foundation for data utilization that decides how to collect, store, and manage internal and external information and data and how to use these data to create new value will become an increasingly

important asset. The Data Science Department is building a data control framework that can be used by the entire value chain (VC), is assembling business issues involving the VC, and by using advanced analytical technology and simulation techniques, supports the use of diverse data for improving productivity and creating new value.

Furthermore, providing new value to society is a key direct contributor to Shionogi’s growth. The Digital Intelligence Department is promoting a digital transformation plan with our internal and external partners and is encouraging the creation and business development of solutions that prioritize stakeholders.

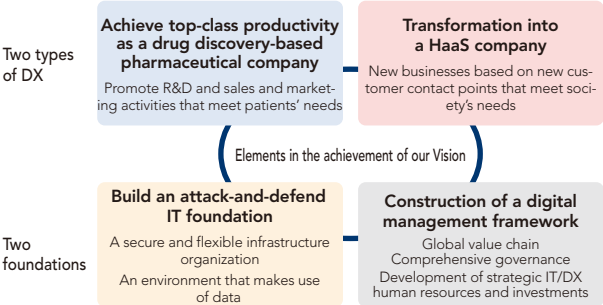
The three departments that constitute the DX Promotion Division together will work tirelessly to promote the construction of a foundation for data utilization, improve company-wide productivity, and create new healthcare solutions through close cooperation with internal and external partners, thereby effecting the necessary transformation to achieve STS2030.

■ Shionogi’s IT/DX Vision ‘24

STS2030: Delivering value by providing healthcare as a service (Healthcare as a Service: HaaS)

Vision for 2024: Become a trusted hub for co-creation as a HaaS company

- To do this: ▶▶
- Create an environment in which data can be handled safely and securely
  - Create an environment and human resources that can generate value from data
  - Acquire the IT environment and capability to achieve co-creation



# Medium-Term Business Plan

## Looking Back at Our Previous Medium-Term Business Plans

(Billions of yen)

200

100

50

0

■ Operating profit (left axis)  
— Operating profit margin (right axis)

(FY) 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

**First Medium-Term Business Plan (FY2000 - FY2004)**  
Focus on pharmaceutical business  
—Establishing a foundation

**Second Medium-Term Business Plan (FY2005 - FY2009)**  
Expansion of R&D and establishment of global structure  
—Accelerating progress

	(FY)	1999 actual	2004 target	2004 actual
Net sales		400.3	—	199.4
Net income		12.9	20.0	18.9
R&D expenses		27.0	—	29.4
ROE		5.2%	6%	6.4%

	(FY)	2004 actual	2009 target*	2009 actual
Net sales		199.4	270.0	278.5
Operating income		28.7	80.0	52.4
Net income		18.9	48.0	38.6
R&D expenses		29.4	50.0	51.8
ROE		6.4%	14%	11.9%

\* Denotes amount subsequent to the FY2007 revision. ROE is the figure at the time of formulation.

### Accomplishments

#### Establishing a foundation

- Transfer/sale of drug wholesaling, agrochemical, clinical laboratory, animal health products, industrial chemicals, and capsule businesses

#### R&D

- Established the overseas JV, Shionogi-GlaxoSmithKline Pharmaceuticals, LLC (later, Shionogi-ViiV Healthcare LLC) and launched joint R&D of an anti-HIV agent

#### Japan business

- Launched the cancer pain analgesic OxyContin

#### Overseas business

- Established Shionogi USA, Inc. (now Shionogi Inc.)



### Accomplishments

#### R&D

- Created 17 new development candidates, of which 9 moved to clinical trials
- Seven candidates moved to Phase 2 or beyond (achieving the goal of at least 5); added to our strength in infectious diseases and strengthened the two areas of metabolic diseases and pain; grew to the level at which we could build a pipeline
- Obtained good results for an anti-HIV agent through joint development with GlaxoSmithKline
- Promoted joint research with Purdue and created development candidates in the field of pain
- Established a drug discovery innovation center on the campus of Hokkaido University
- Set up a collaborative system with academia to identify drug seeds (FINDS, FLASH)

#### Japan business

- Crestor became a major product, with domestic sales of ¥23 billion

- Achieved the goal of commercializing 11 products in Japan

#### Overseas business

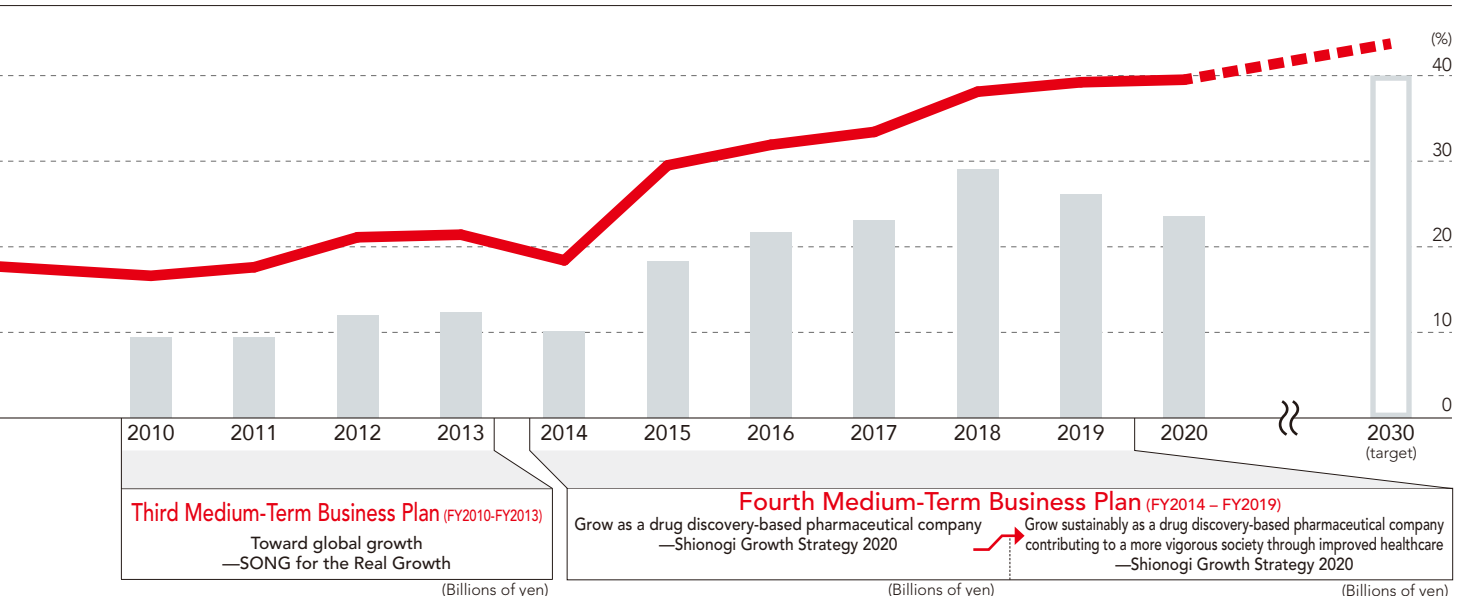
- Acquired a sales network in the US through the acquisition of Sciele Pharma, Inc.
- Expanded antimicrobial exports in the US, Europe, and Asia
- Strengthened the functions of Shionogi USA through better human resources

**Shionogi  
Transformation  
Strategy  
2030**

**2030 Vision** ▶ Building Innovation Platforms to Shape the Future of Healthcare

### Shionogi in 2030

- Continuously creating innovative products/services, with a well-established and rapidly-growing global business
- Continuing to offer solutions to health issues facing society
- Excellent business persons who never take a break from building their expertise and capabilities, leveraging their individual strengths, and creating new value



**Third Medium-Term Business Plan (FY2010-FY2013)**  
Toward global growth  
—SONG for the Real Growth

**Fourth Medium-Term Business Plan (FY2014 – FY2019)**  
Grow as a drug discovery-based pharmaceutical company  
—Shionogi Growth Strategy 2020

Grow sustainably as a drug discovery-based pharmaceutical company contributing to a more vigorous society through improved healthcare  
—Shionogi Growth Strategy 2020

	(FY)	2009 actual	2014 target	2013 actual*
Net sales		278.5	375.0	289.7
Operating income		52.4	110.0	61.9
Operating margin		18.8%	29.3%	21.4%
R&D expenses		51.8	65.0	53.6

\* The third medium-term plan was completed ahead of schedule

	(FY)	2013 actual	2016 target	2016 actual
Net sales		289.7	320.0	338.9
Ordinary income		62.2	75.0	123.0
R&D expenses		53.6	63.0	59.9
ROE		9.4%	11%	16.3%

	(FY)	2016 actual	2020 target*1	2019 actual**
New product sales		43.9	200.0	62.9
Ordinary income		123.0	150.0	151.8
ROIC		13.3%	Over 13.5%	13.8%
CCC		6.7 months	7.0 months or less	7.7 months
Ratio of proprietary discovered drugs		68.2%	Over 50%	67%
ROE		16.3%	Over 15%	18.0%
DOE		4.5%	Over 4%	4.7%

\*1 Only CCC was reviewed in FY2019.  
\*2 The fourth medium-term plan was completed ahead of schedule

**Accomplishments**

**R&D**

- Launched *Tivicay* and *Osphena*
- Implemented in-house global development (Phase 3)
- Discovered 12 development products and obtained PoC for at least 50%

**Japan business**

- Grew 8 strategic products and improved the sales ratio (from 29% in FY2009 to 55% in FY2013)
- Crestor* and *Cymbalta* obtained the number-one market share
- Improved productivity (sales per MR) (¥110 million in FY2009→¥130 million in FY2013)

**Overseas business**

- Converted and stabilized the US business with a new drug model
- Expansion in Europe and China
- Strengthened global governance

**Earnings structure**

- Modified the contract framework for the HIV integrase inhibitor portfolio
- Modified the *Crestor* royalty contract
- Strengthened cost-control capabilities

**Accomplishments**

**R&D**

- Filed applications for naldemedine (Japan & US) and guanfacine hydrochloride (Japan)
- Launched *Actair*, *Mulpleta*, and *Senshio*

**Japan business**

- Crestor* domestic sales exceeded 100 billion yen

**Alliances**

- Modified the contract framework for *Cymbalta*
- Partnered with Hoffmann-La Roche for an anti-influenza virus drug (S-033188)

**Stronger business operations**

- Operating income excluding royalties turned positive
- Strengthened cash creation capability (cost ratio: 26.9%→24.1%, inventory turnover time in months: 7.4 mos.→6.8 mos.)
- Structural reform (sold US glycomics analysis business, moved the OTC business into a subsidiary, strategic bundled accession of 24 long-term listed products, etc.)

**Accomplishments**

**Continued creation of in-house products**

- Xofluza*, *Mulpleta*, *Symproic*, cefiderocol, cabotegravir

**Strengthening of business operations**

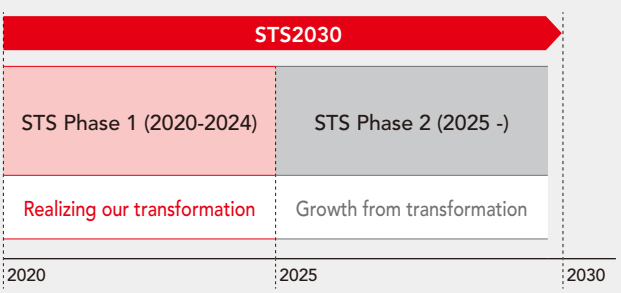
- Improvement of cost management
- Global development of in-house products, launches in overseas markets

**Achievement of main KPIs**

- Ordinary income, efficiency KPIs, shareholder return KPIs



## Strategy to Achieve 2030 Vision



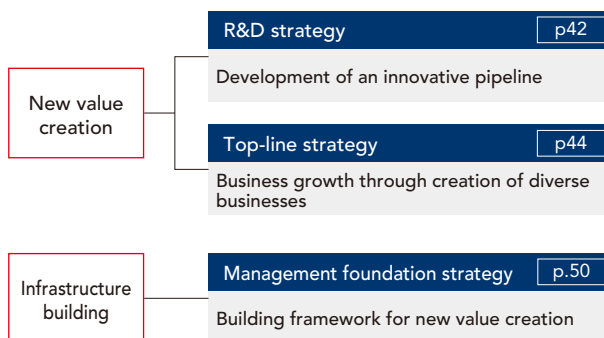
In June 2020, Shionogi created a Vision of what it wants to be in 2030 and devised STS2030 as a strategy for achieving this Vision. In STS2030, we are striving to contribute to our customers and society in resolving social issues, to achieve sustainable growth for Shionogi, and to further improve our corporate value as a HaaS company by ceaselessly providing not only conventional prescription drugs, but innovative healthcare products and services to society. STS2030 is a strategy for dealing with the 2028 patent cliff on our HIV products and 2030 beyond that, and it is divided into Phase 1, which runs through 2024, and Phase 2, which starts in 2025. Over these two stages, we will provide value with our new platform, as outlined in our Vision.

## The Positioning and Goals of STS Phase 1

To overcome the HIV product patent cliff and achieve sustainable growth, we need to accomplish a major transformation away from the style of a drug discovery-based pharmaceutical company, which is supported by earnings from drug patent royalties, and into a HaaS company. In STS Phase 1, we will work on expanding our own sales of medicines in Japan, the US, and China and concentrate on building and strengthening a new business model that is not patent-reliant, while continuing to focus on developing the pipeline products that will serve as our next earnings pillars. While honing our strengths as a drug discovery-based pharmaceutical company, we will consummate our transformation into a HaaS company so that we can ensure a sustainable and stable earnings foundation.

### ■ The Three Strategies for STS Phase 1

To realize transformation to a new growth as a total healthcare company under the basic policy of Phase 1, we have formulated three strategies: an R&D strategy, a top-line strategy, and a management foundation strategy. We will expedite our business transformation by concentrating on strengthening our R&D geared to the next growth drivers and our domestic and overseas businesses and building an infrastructure for new value creation.



### ■ Financial policy

Our financial policy in STS Phase 1 calls for making business investments of ¥500 billion by the end of fiscal 2024, the plan's final year, in order to acquire new growth drivers by building our overseas business and launching new businesses, and we are researching and analyzing various investment candidates. It is also important that we make investments that will augment the earnings of our existing businesses. We are being more proactive about investing in R&D, as we are going to increase R&D expenditures by at least 20% over what we spent in the past five years, and we are also making investments to bolster our domestic product portfolio, which is based on our disease strategy, and are proactively investing in IT in

accordance with our criteria and building a digital infrastructure for achieving growth as a HaaS company. We have tightened our financial decision making for investments that will play a major role in achieving our future Vision by establishing hurdle rates (between 5% and 11%) for growth, different country risks, and each business line.

These business investments and company initiatives will bring revenues to ¥500 billion by fiscal 2024, with overseas revenue ratio increasing by over 50% from strengthening our in-house sales organization overseas, thus bringing sustainable growth to Shionogi. We will implement a shareholder return policy that steadily increases the dividend in line with the Company's growth so that our shareholders can get a sense of how Shionogi is growing. To this end, we will have a flexible capital policy that, besides dividends, also includes share buybacks, cancellation of treasury shares, and elimination of cross-shareholdings, and we will work on increasing our basic earnings per share (EPS), dividend on equity (DOE) attributable to owners of the parent, and return on equity (ROE) attributable to owners of the parent, which are KPIs for our shareholder return.



### ■ Financial KPIs (for FY2024, IFRS)

Growth indicators	Revenues	¥500 billion
	Core operating profit	¥150 billion
	Core operating profit margin	Over 30%
	Overseas revenue ratio (excluding royalties)	Over 50%
	Original pipeline ratio	Over 60%
Shareholder return indicators	EPS	Over ¥480
	DOE	Over 4%
	ROE	Over 15%

## STS Phase 1 Progress in Fiscal 2020

The business environment in which Shionogi operates changed drastically and rapidly in fiscal 2020 due to the COVID-19 pandemic. In addition to the contraction of the market for prescription drugs due to changes in how people receive medical care, the spread of influenza and other infections decreased significantly due to encouragement of infection control, and it was a year in which the sustainability risk of the infectious disease business became apparent, while society became keenly aware of the importance of preparing for possible new future pandemics in normal times. As a leading company in infectious diseases, Shionogi is pouring its management resources into providing society with various prevention, diagnosis, and treatment solutions, and we are also holding meetings with governments and public administrations on building a sustainable infectious disease business model so that we will be prepared to take action when the next pandemic arrives. Also, the COVID-19 crisis forced countries to make huge fiscal expenditures and equity markets rose throughout the world, increasing the prices of investment candidates, so we were unable to make the major business investment needed for acquiring our next growth drivers, as set forth in our financial policy. The initial year of STS2030 was harsh but driven by the social significance of achieving our 2030 Vision, we will complete our transformation into a healthcare platform that is not afraid of change so that we will bring about a sustainable society.

### ■ Progress on the Areas to Be Strengthened

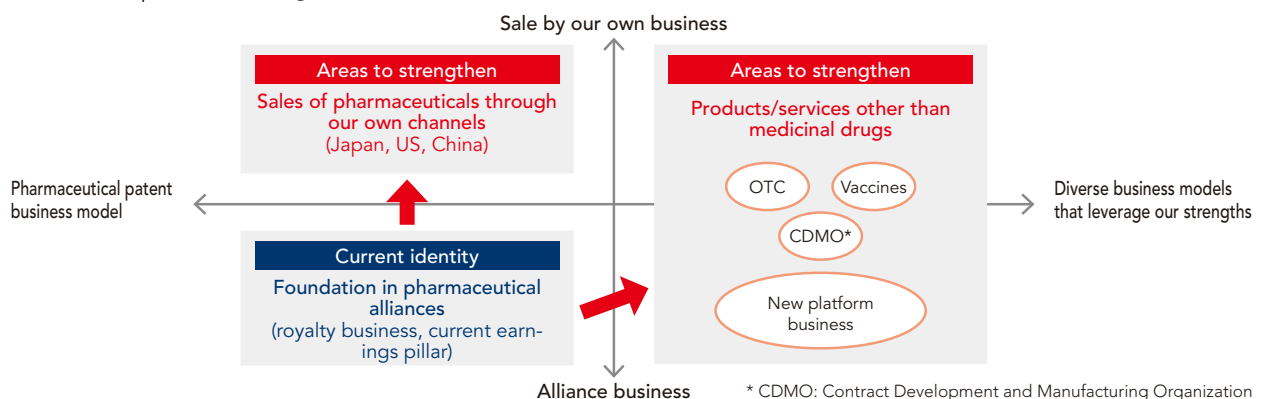
To bring an early end to COVID-19, we are developing a wider range of initiatives from the standpoint of total care, from detection and prevention to diagnosis, treatment and suppression of exacerbation. Besides the development of therapeutic medicines, these include developing a vaccine, furnishing test kits, additional indications for severity prediction markers, and building an automated system for analysis of COVID-19 in wastewa-

ter. Considering the social situation, while we continue to focus on initiatives that provide value to society mainly in the infectious disease area, we are also moving forward in our efforts to provide society with other products and services besides prescription drugs, and we are making steady progress in laying the groundwork for expanding business throughout the entire Group. One initiative is Shionogi Healthcare’s launch of two products developed from turning the prescription drug Rinderon-V Ointment/Cream 0.12% into an OTC product and encouraging the proper use of topical medications. We are also working on the initiatives to strengthen our growth foundation as a CDMO\* and stepped up the pace of our growth. These initiatives include the acquisition of Nagase Medicals, which engages in the manufacture of anticancer drugs and other products for Shionogi Pharma and specializes in production technology for highly pharmacologically active agents. In addition, we started discussions to establish a joint venture between Shionogi Pharma and Chiyoda Corporation for the collaborative development of continuous production technology.

In our overseas business, we launched sales of Ping An-Shionogi products on Good Doctor, China’s largest online drug and health management platform. We are also in the process of quickly expanding our China business as we prepare to launch cefiderocol in China. To expand sales of cefiderocol and promote the proper use in Europe and the US, we are strengthening our sales organization in the hospital market. Also, with a view to expanding countries that use a subscription-style repayment model, such as the UK and Sweden, we are holding active discussions with authorities in various countries.

We will ensure a stable and growing management foundation for 2030 by pursuing higher profitability through striking a balance between our own sales and our alliances and, even if the patent on a particular product expires, building a durable business model where earnings can remain stable.

### ■ STS2030 —Expansion Through Transformation of Business Models



## Message from the Head of the Corporate Strategy Division



We will implement the business investment strategy necessary to achieve STS2030.

**John Keller, Ph.D.**

Senior Executive Officer,  
Senior Vice President of Corporate Strategy Division

### ■ Investment strategy to increase corporate value

According to the financial strategy set forth in STS2030, Shionogi will invest ¥500 billion by 2024 to strengthen its commercial portfolio, the pipeline, and technological platforms to add and create new growth drivers. It is extremely important for achieving STS2030 goals to expand our product portfolio for the Japanese market, to add marketed and near-term products to drive the top-line and sustainably grow profitability in the US and Europe, and to leverage the multi-faceted platform we are building with Ping An Insurance Group in China. And, as always, out-licensing and creative partnering will be the optimal mechanism to maximize the global potential of certain of our products.

When acquiring assets for our commercial markets and pharmaceutical development pipeline, we are seeking to optimally leverage our existing capabilities and resources. The assets may be accessed through licensing or M&A, but with the emphasis on acquiring products rather than infrastructure, with limited exceptions for highly-specialized or truly complementary cases. Regarding Japan, our mother market, we are seeking products that can be expected to create synergy with existing franchises and/or with the accumulated expertise of our pharmaceutical business, and which can contribute to productivity and profitability in the near and medium term. For the US and EU, we are similarly seeking assets which can contribute quickly, building on the specialized, hospital-focused capabilities we established for the successful cefiderocol launches, or that create synergies with franchises we expect to arise from our own pipeline in the future. In China, in Ping An-Shionogi, a joint venture which draws upon the DX expertise of Ping An Insurance Group, the owner of China's largest online medical care platform, and the deep pharmaceutical expertise of Shionogi, we are establishing a platform that can handle a wide range of products ranging from innovative pharmaceuticals, to branded generics, to vaccines, to OTC products and supplements, as well

as the creation of technological breakthroughs in the creation of HaaS, and can then successfully deliver those new product categories commercially. To accelerate these efforts, we and the Ping An Insurance Group will be looking for new investment opportunities in China and beyond in the Joint Venture's territory.

For R&D, we would like to acquire technologies and candidates that expand our range of modalities and capabilities, with emphasis on our core franchise areas of infectious diseases and CNS. Looking further ahead, to create new healthcare platforms, we will be seeking to create innovative types of flexible alliance networks that allow the pooling of expertise across fields and industries.

Since investment has a multi-year economic effect, it is important to evaluate it from a medium- to long-term perspective. Last year, Shionogi updated its investment valuation and decision-making approach. We always ensure that the investment target is thoroughly examined from a due diligence perspective – scientifically, commercially, and legally - as well as confirming full alignment with STS2030 and our regional and focus area strategies. Risk/reward balance is critical, with investments that have a large business risk often being those that have the most potential impact on future sales and profits, so our analyses must consider a range of scenarios and outcomes, as well as the specific characteristics of regions and markets. Wherever possible, we will seek assets and technologies that are not "one-off" opportunities but rather have the potential to provide continual strategic and/or technological benefit, and to generate additional new potential opportunities, over the medium to long term.

We are keenly aware of the competition for all of these assets, both from other companies with similar product, pipeline, and technology needs, and from the wide range of funding options available to prospective partners from other sources. While seeking these opportunities, we will not, however, lose sight of the fact that valuations must be reasonable and consistent with our stewardship of all our resources. We must therefore ensure that Shionogi is the most attractive partner from

many perspectives, demonstrating world-class capabilities in every aspect, in expertise and scientific excellence, in operational efficiency, in collaboration and alliance management, and also in our record and commitment to ethics and compliance.

### ■ High capital efficiency management which takes the cost of capital into account

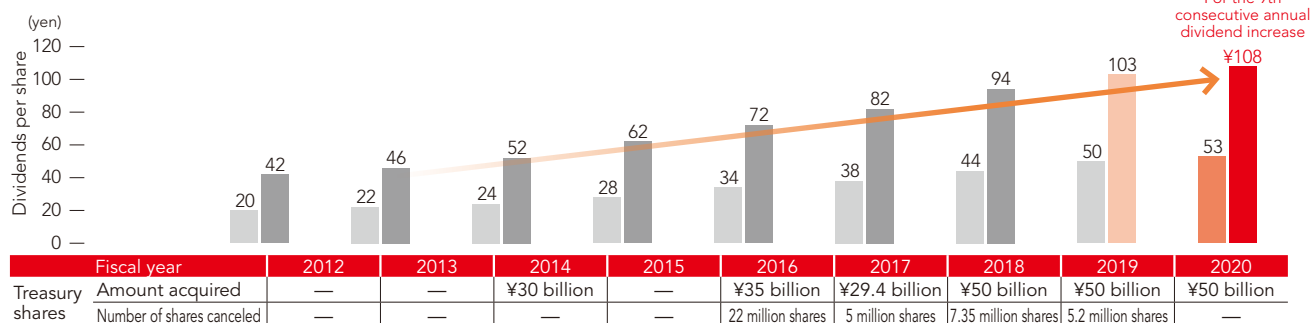
We also incorporate the concept of capital cost into our approach and maintain continual focus on improving the efficiency of our use of capital. Although it is not an external KPI of STS2030, we are assessing our overall goals by using an ROIC tree, based on the concept of return on invested capital (ROIC), and guiding us in improving the efficiency of capital use, the operating profit margin, and the capital turnover ratio. To ensure that projected returns are actually delivered, we have designed a KGI tree that links clearly defined KGIs with specific KPIs, so the steps needed to create value are evident. We monitor the progress of activities against KPIs and, if the expected results are not delivered, we can quickly make the necessary adjustments to our path, correct our course, or refocus to avail ourselves of new opportunities. This allows accurate, targeted and flexi-

ble responses to changing conditions, representing a further evolution of the ROIC management approach under our previous medium-term business plan.

### ■ Shareholder return policy

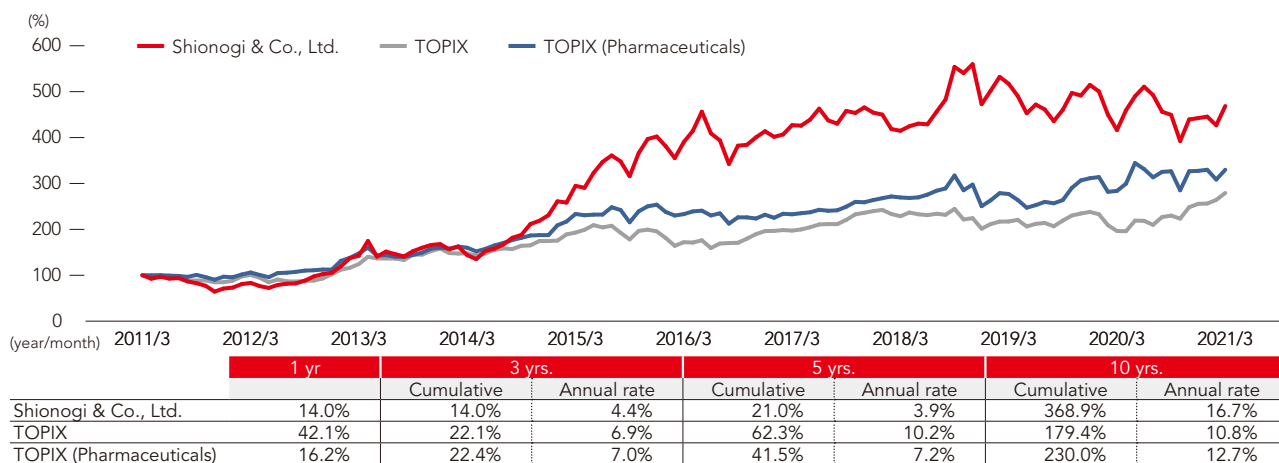
At Shionogi, we are focused on maximizing corporate value while balancing investment in growth and shareholder returns, in order to deliver medium- to long-term profit growth. With respect to dividends, we plan to increase the dividend in a stable manner in line with the growth of corporate value, using a DOE of 4% or more as an index, so that all of our shareholders can consistently get a true feeling for our corporate growth. In fiscal 2020, we paid a dividend of ¥53.00 at the end of the second quarter and ¥55.00 at the end of the fiscal year, resulting in an annual dividend increase of ¥5.00 per share (the 9th consecutive year of dividend increase). Also in fiscal 2020, we acquired treasury stock (8,777,500 shares, a total acquisition amount of approximately ¥50 billion) in order to strengthen shareholder returns and improve capital efficiency. Although it is not a shareholder return index in STS2030, the results of shareholder return measures are reflected in the total shareholder yield (TSR), which has been above the TOPIX average since 2014.

### ■ Dividends



\* Decision made on March 30, 2020, for an April 6 cancellation

### ■ Total shareholder return (TSR)



Notes: 1. Total shareholder return (TSR): The total return to the shareholder, or the total return on investment, including dividends and capital gains  
 2. TSR is calculated as the amount of cumulative dividends plus the change in Shionogi's stock price, while TOPIX is a stock price index that includes dividends (prepared by Shionogi using data from Bloomberg and other sources)  
 3. The values in the graph are TSR-indexed market prices, taking the closing price on March 31, 2011, as 100 (with a holding period until March 31, 2021)  
 4. The return value is expressed as the rate of increase or decrease in the initial investment amount, which is generally used when measuring the return on investment.



## R&D Strategy

### Pioneering the future of healthcare with our accumulated skills in product creation and a system that can flexibly and boldly change priorities

We are working ceaselessly to create results generated by innovation as soon as possible so that we can find optimal solutions to the problems (needs) of patients and society. Using the impact of the COVID-19 pandemic as an opportunity for change, we are implementing various transformation in our R&D.

#### Pursuing product creation and efficiency in COVID-19 drug discovery

The societal changes caused by the spread of COVID-19 have also induced a major transformation in drug discovery R&D. At Shionogi, we have altered the entire way we think about R&D, as our procedure about drug discovery and the limits of its speed actually turned out to be assumptions based on preconceived notions. As an infectious disease company helping to end COVID-19, Shionogi has issued an internal COVID-19 emergency response declaration, and we are doing everything we

can, including revamping facilities and making emergency procurements. Also, about 70% of our researchers are concentrating their resources on discovering drugs for COVID-19, focusing on a COVID-19 vaccine and a small-molecule therapeutic drug. We have seen dramatic changes as a result. It took us only 142 days, faster than other global pharma companies, for our R&D efforts for a small-molecule therapeutic drug to move from synthesis of the first lot to the launch of clinical trials.

#### Transformation in our research laboratories

The role of the Research Division in STS2030 is to polish our product creation skills so that we can create solutions to social issues. Shionogi's strength lies in its high level of drug discovery, and in the past 10 years we have launched six new drugs globally. On the other hand, some of these products have yet to maximize their value, and there are still issues in understanding and grasping the needs of society and customers in drug discovery. In order to provide solutions that are truly appealing to society and customers, researchers need to further hone their scientific skills to accurately grasp increasingly diverse and sophisticated needs and realize solutions. To this end, we are promoting measures to dispatch researchers to medical sites to experience the "problems" through dialogue with doctors and patients, and measures to widen researchers' perspectives by allowing them to accumulate work experience in other divisions and Group companies. Moreover, to create a vibrant research institute where

researchers can collect and disseminate information on their own and gather colleagues to produce results, we have introduced an autonomous research system where researchers are given a certain amount of free discretion to conduct bottom-up research that they want to do, thereby strengthening their science capabilities and encouraging them to exercise their independence. We have also implemented management reforms in the research division, such as bringing in personnel from the sales and development divisions, with the aim of becoming a research institute that can provide solutions to the problems of society and customers at a different level of speed by incorporating the perspectives of development and marketing from the exploratory stage of research and becoming aware of the market from early on. Through these multifaceted efforts, we will transform ourselves into an autonomous group of researchers capable of creating customer happiness through science.

An employee speaks



#### To discover COVID-19 therapeutics

**Yuki Tachibana**  
Director, Medicinal  
Chemistry 1,  
Laboratory for Medicinal  
Chemistry Research

The conventional thinking about drug discovery says that the chance of becoming a medicine is one in tens of thousands and that it takes five years to get from defining a concept to getting a development candidate. We have mobilized all of our human resources and our accumulated research knowhow to discover therapeutic drugs for COVID-19. Working even on weekends and holidays and as fast as possible, we succeeded in creating a development candidate in about nine months from defining the concept and it took only 13 months to launch clinical trials.

As an infectious disease company, Shionogi will never fail to deliver medicine to the world. We are really fighting as hard as we can, as this is our reason for existence, and all of our efforts so far have been to facilitate each person's strong desire to save the world and bring this to fruition.

## Transformation in development

In accordance with the watchwords, “speed” and “creation/maximization of product value,” the Drug Development and Regulatory Science Division has not only worked to make our processes based on conventional methodologies more efficient as possible, but has also changed our approach and overhauled our development process from square one. At the same time, we always place “science” at the top of our decision-making list as we absolutely need to get the science right. Even if we emphasize speed and proceed with testing using different methods from the previous ones, we still need to be strict and objective in considering data and to make sure that what we are doing is scientifically persuasive in terms of efficacy and safety to make a go/no

go determination. We are therefore sparing no effort in our action to voraciously gather and analyze past cases and latest scientific knowledge, think through them thoroughly, and hold extensive discussions before reaching well thought-out decisions. In particular, in developing a vaccine and therapeutic drugs for COVID-19, we are holding daily discussions, including with senior management, about which patients would receive such solutions, how fast we could provide them, and what kind of development plan we should have for accomplishing this. As we proceed, we are communicating with the regulatory authorities more closely than in the past, and we are discussing how to execute our development plan as soon as possible and based on science.

## Eight development pipelines that causes paradigm shifts

While COVID-19 has caused apprehension about clinical trials, in fiscal 2020 we succeeded in staying on schedule with almost all of our programs by acting in response to changes in the external environment, including being flexible in adjusting the number of clinical trials initiated in each region through collaboration among the US,

Europe, and Japan. In fiscal 2021, our top priority remains to deliver a COVID-19 vaccine and therapeutic drugs as soon as possible, and we are working on the development of based on core eight projects so that we can provide innovative value.

### ■ Promoting development of innovative pipelines

	Pipeline	The world we want	Indications	Initial target	Current status
Infectious disease	S-540956	A platform that improves the efficacy of immunotherapy for a wide range of diseases	① Infectious diseases ② Cancer	①② Clinical trials to have started in 4Q of FY2020	①② Changed to 1Q of FY2021
CNS/pain	S-600918 (sivopixant)	Paradigm shift in treatments for many diseases	① Refractory chronic cough ② Sleep apnea syndrome	① Flash report on Phase 2b expected in 1Q of FY2021 ② Flash report on Japan Phase 2a expected in 1Q of FY2021	①② Proceeding on schedule
	S-637880	A new key mechanism for psychoneurological diseases	Neuropathic low back pain	Flash report on Japan Phase 2a expected in 1Q of FY2022	Proceeding on schedule
	S-812217 (zuranolone)	Efficacy that changes existing concepts of depression treatment	Depression/depressed mental state	Flash report on Japan Phase 2 expected in 3Q of FY2021	Three months ahead of schedule. Flash report expected in 2Q of FY2021
	BPN14770 (zatolmilast)	New option for treating Alzheimer's through improving cognitive function	① Alzheimer dementia ② Fragile X syndrome	① Japan Phase 2 to start in 2Q of FY2021 ② Phase 3 to start in 2Q of FY2021	① Phase 2 started three months ahead of time (1Q of FY 2021) ② Proceeding on schedule
	S-874713	Improve a wide range of psychoneurological diseases, such as addictions, with a new mechanism of action	Various psychoneurological diseases	Clinical trials to start in 4Q of FY2020	Changed to 2Q of FY2021
New growth fields	S-531011	Changing the cancer treatment paradigm through synergies with existing products	Solid carcinoma	Clinical trials to start in 2Q of FY2021	Proceeding on schedule
	S-005151 (redasemtide)	Changing the regenerative medicine paradigm	① Dystrophic epidermolysis bullosa ② Acute ischemic stroke ③ Knee osteoarthritis ④ Cirrhosis of the liver	① Preparing application ② Flash report on Japan Phase 2 expected in 3Q of FY2021 ③ Japan Phase 2 in progress (investigator-initiated trials) ④ Japan Phase 2 in progress (investigator-initiated trials)	① Proceeding on schedule ②③④ Proceeding on schedule

## Top-Line Strategy

### Achieving top-line growth through an optimal strategy for each region

Focusing on therapeutic drugs for key diseases, we are building a stable earnings foundation by covering all diseases through varied approaches that encompass everything from prevention to treatment to convalescence and by providing value that responds to stakeholders' needs. We are also working to improve our global presence by expanding our business in the Japanese, U.S., and Chinese markets and strengthening our European business.

#### Japan

##### ■ Promoting domestic business to achieve our Vision for the Japan business

STS2030 sets "Become an indispensable partner in infectious diseases and psychoneurological diseases/pain" as the Vision for our Japan business. The spread of COVID-19 has limited MRs' opportunities to call on healthcare institutions, which has had a major impact on activities to disseminate information about our domestic drug business. However, we have taken this as an opportunity for change, and even with the various changes taking place in the external environment, we are building a framework that will maintain two-way communication with our customers, including physicians and healthcare professionals. By building a strong, resilient framework for disseminating information in both physical and digital terms, we will always be responsive to diverse customers' needs.

##### ■ Building a structure that is responsive to customers' needs

COVID-19 has changed customers' information needs. More than ever, we are being called on to provide high-quality information by every means of communication, as needs are diversifying with respect to consultations, be they face-to-face, online, or via other formats. As a new initiative to provide information digitally, we have located electronic medical representatives (e-MRs) in certain geographical areas, while we also strengthened our existing product and disease education and our training in two-way communications skills and worked on enhancing the skills required in MR activities. E-MRs support MR activities by providing more detailed, wide-ranging information online, thereby helping to improve the quality of our information dissemination activities.

##### ■ Upgrading online content

As the digitization of society progresses, there is also an increasing need for on-demand information through the

media or websites rather than by consulting with an MR. To meet this need, we updated our owned media for healthcare professionals. This entailed upgrading existing web-conferencing audio-visual functions, as well as content and materials for use in routine healthcare and healthcare institution education, such as videos that provide a broad range of product information and patient education, slides for training in infectious diseases, and materials for patient use. Moreover, on our owned media, we have aired some of the lectures held locally throughout the country, thereby enabling people in local areas to access lectures on medical and pharmaceutical topics and on more detailed medical issues. In addition, we strengthened our partnership with Stream-I, our joint venture with M3, Inc., and are taking a new approach to fusing MRs' real and digital data-providing activities and digital content transmission.

##### ■ Plans for executing our disease strategy

To be able to provide products and services for all diseases, as set forth in our disease strategy, it is essential that we obtain our customers' broad understanding of the solutions (products and services) that Shionogi provides by communicating with the relevant academic societies and with professors who are also opinion leaders and by formulating/revising new healthcare guidance and treatment guidelines. To disseminate and execute the disease strategy in STS2030, we established new hospital MRs. The mission of the hospital MR is to disseminate products and information on diseases in general to local areas and nationwide through programs at key hospitals, notably, university hospitals. Our newly reorganized Pharmaceutical Commercial Division and our Integrated Disease Care Division will collaborate closely to achieve our patient-focused disease strategy, which aligns with the needs of healthcare professionals and patients alike.

## Overseas

### ■ Update on changes in our global business to achieve our 2030 Vision

In the year since we set global business expansion as a key strategy in STS2030, we have been accelerating our initiatives aimed at changing our overseas business to focus on three poles: the U.S., Europe, and China.

In the U.S. and Europe, we worked on “strengthening our sales capabilities in the hospital and specialist markets focused on cefiderocol,” proposed last year, while in China, we established Ping An-Shionogi Co., Ltd., and launched its business. These were the first real steps toward achieving our 2030 Vision. Based on these results, we have made fiscal 2021 a year for further leaps forward.

### ■ Business expansion with cefiderocol

With no end in sight to the COVID-19 pandemic, interest in infectious diseases has increased around the world, and cefiderocol has drawn greater attention as well. Because we have continued providing data on how to fight antimicrobial resistance (AMR) and promote proper usage, primarily in the U.S. hospital market, many more patients than we had initially expected have benefited from cefiderocol. In Europe as well, we were able to provide information through Early Access Programs (EAPs) in several countries, including launches in the UK and Germany. In addition, cefiderocol has played a role in individual countries’ AMR countermeasures, one of which is the adoption of a subscription-type reimbursement model in two European countries.

### ■ Expanding our China business

In our China business, we established Ping An-Shionogi Co., Ltd., a joint venture with the Ping An Insurance Group, in November 2020 and started collaborating with the Ping An Insurance Group immediately thereafter. This initiative is a true case of building from the ground up to achieve our 2030 Vision, and it constitutes the first big step in our transformation into a HaaS company. As one of the new business models that combines the strengths of both Shionogi & Co., Ltd. and China’s Ping An Insurance Group, we started to provide existing generic products and over-the-counter drugs through the Ping An Good Doctor (PAGD) platform, which is China’s largest online healthcare platform, thereby we aim to improve our top line. Another initiative that is considered as important as this new platform is the establishment of a new pharmaceutical business in China. Last fiscal year, we started getting ready to develop and launch two products, cefiderocol and naldemedine, and we were able to make steady progress. Going forward, we plan to advance multifaceted initiatives such as expansion of our generic drug business; development and marketing plans for new medicines; new businesses that use the platform; and AI drug development, as well as engage in mutual cooperation with the Ping An Insurance Group so that we can achieve HaaS and push forward to provide the best healthy experiences.

#### An employee speaks



#### Initiatives to Fuse the Real and the Digital

**Tetsuhiro Yamasaki**  
Manager, Promotion Group,  
Sales Dept., Sales Promotion  
Office

We have entered into numerous interdivisional and organizational tie-ups in the awareness that we should not have a structure that relies on either the real or the digital as we move forward with building our structure and with our initiatives vis-à-vis the real and the digital. The important thing is to contribute to both society and healthcare by delivering high-quality information that meets the needs of every patient and healthcare professional in any given situation so that they will have trust in Shionogi’s medicines and use them. I would like to continue building this structure and advancing these initiatives.



#### Using real world data to create new medicines and services

**Hiroyuki Tsubota**  
Vice President and General  
Manager,  
Platform Business Dept,  
Ping An-Shionogi Co., Ltd.

At Ping An-Shionogi, we are trying to create new medicines and services by utilizing real world data from the Ping An Insurance Group and providing the best healthcare solutions to everyone in China through the PAGD. We are already selling three products on PAGD, and are getting ready to add four more. In addition, we have launched initiatives to provide patients who consent with early detection, medical treatment, and the best healthcare services by providing customers with wearable devices and smartphone apps so that we can use the health data we gathered from them. Going forward, I want to be involved in bigger and faster initiatives to create new medicines and services.

Discussion Co-Creation Initiative



Shionogi & Co., Ltd. concluded a contract with China’s Ping An Group in July 2020 establishing a joint venture in order to achieve its 2030 Vision and grow sustainably. It will combine massive amounts of healthcare data and science, and aim for value creation that gets more than 3 when adding 1 + 1, and will accelerate rollout in Asia, centered on China.

**Ping An-Shionogi**

**Tatsumori Yoshida**

Chairman & CEO  
Ping An-Shionogi Co., Ltd.

**Ping An Healthcare and Technology**

**Zhang Jiang**

Senior Vice President  
Ping An Healthcare and Technology Company Limited

Ping An-Shionogi Co., Ltd. has started supplying products over Ping An Good Doctor, a healthcare platform with China’s largest user base. With their eyes fixed on future development, Zhang Jiang, Senior Vice President and Chief Investment Officer of Ping An Healthcare and Technology Company Limited, and Tatsumori Yoshida, Chairman and CEO of Ping An-Shionogi, had a discussion.

■ Responding to the various needs of customers: Ping An Good Doctor

**Yoshida:** We have achieved a good start to this collaboration faster than planned—at the time of establishment of Ping An-Shionogi—provision of our products via the online Ping An Health platform, “Ping An Good Doctor (PAGD)”.

**Zhang:** I believe the efforts of Kui Kaipin—Director of Ping An-Shionogi, who has acted as an intermediary between the two companies—have been crucial to this

success. We are grateful for this partnership with Ping An-Shionogi and have high expectations for the future.

**Y:** We believe PAGD sets itself apart from other online healthcare platforms that have their roots in selling products.

**Z:** Exactly. PAGD is a leading healthcare services platform in China. It has 400 million registered users as of 30 June 2021. It has an in-house medical team of about 2,000 members and over 38,000 external medical professionals that use a proprietary artificial intelligence-based healthcare system, and enables 24/7 online medical

examinations and prescription of medicines. On top of all these, it meets the diverse needs of its customers through its tie-ups with offline medical institutions and by providing a wide range of services such as referrals and delivery of medicines.

**Y:** PAGD is making a significant contribution to solving issues unique to China.

**Z:** Yes, a good example is that it has made a significant improvement on the recurring shortages issue of doctors and the resulting long waits at hospitals. Additionally, PAGD is working aggressively to achieve the same level of healthcare services in inland areas of China that have insufficient healthcare infrastructure in urban areas.

**Y:** That's great. I believe PAGD has potential to significantly grow in value as a healthcare platform through the co-creation of new value—such as proposing ways of improving and maintaining the health of patients, preventing and early detection of their health problems, and creating more effective medical solutions—by utilizing the authorized integrated data of PAGD registered users' medical examinations, prescriptions and various test results.

**Z:** Exactly.

## ■ Expectations for further cooperation to improve sub-optimal health

**Y:** China has the largest population and is the most rapidly changing country in the world. On the other hand, it has various social issues such as an aging population, thus the importance of health management will continue to grow. With this background, PAGD has the potential to become an indispensable total healthcare platform that provides a wide range of solutions useful for people's daily health management, and to go beyond the traditional model of providing online medical care and medicines.

**Z:** In China there is a growing need for healthcare to improve the health of those who are in a state of sub-optimal health—that is, in between healthy and sickness. Thus, we predict over-the-counter (OTC) drugs to play a more significant role. We have high hopes for the business collaboration with Shionogi Healthcare in the OTC sphere because the OTC market is large.

**Y:** We are starting with sales of health foods in online shopping websites however, we aim to develop and sell Shionogi healthcare products that meet the needs of the Chinese market in the future, and develop and sell Ping An-Shionogi proprietary products based on needs assessments using the PAGD platform.

## ■ Aim for sustainable growth by collecting real-world data and analytical research

**Z:** What makes Ping An-Shionogi proposals attractive is they are based on science. I am very excited because even though we have collaborated with various other pharmaceutical companies, this is the first time with the kind of proposals enabled by Ping An-Shionogi that attractively advance the value of PAGD utilizing scientifically-backed data. A new initiative I find particularly interesting is the collection and analytical research of real-world data. We are accumulating a variety of real-world data such as sleep and physical activity volumes collected from wearable devices of users who gave their permission to participate in this research. The research data is authorized by users and linked to medical testing and treatment data. Ping An-Shionogi is making a positive contribution to people's health by using this data to create healthcare solutions and for artificial intelligence (AI)-based drug discovery. It is a meaningful initiative that builds on the strengths of both PAGD and Ping An-Shionogi.

**Y:** This initiative really owes its very existence to PAGD. Ping An-Shionogi, through collaboration with PAGD, wants to play a role in the healthcare platform business industry by creating solutions from prevention and diagnoses of medical conditions, through to treatment and management of the recovery and recuperation phase. We aim to grow sustainably as a total healthcare company by promoting this business model.

**Z:** Collaboration between Ping An-Shionogi and Ping An Healthcare has growing potential by utilizing the various technologies of the Ping An Group starting with PAGD. We look forward to initiatives that will create new value in the medium to long term.

**Y:** Yes, let's work together so we can provide total healthcare services that meet people's health needs!



**Ping An-Shionogi**

**Tatsumori Yoshida**

Chairman & CEO  
Ping An-Shionogi Co., Ltd.

**Ping An Group**

**Xie Guotong**

Chief Healthcare Scientist of Ping An Group  
Deputy General Manager of Ping An Technology  
Director of Ping An Healthcare Technology Research Institute  
Ping An Technology Co., Ltd.

Ping An-Shionogi concluded a joint-research agreement with Ping An Technology Co., Ltd., which has a broad range of AI technologies for drug discovery. Ping An Technology's Xie Guotong and Ping An-Shionogi's Tatsumori Yoshida discussed how both companies could work on solving social issues such as improving social productivity and extending healthy lifespans, which are aims of the Shionogi Group.

■ Promote drug discovery by effectively using Ping An Technology's AI technology

**Yoshida:** We have many targets in establishing Ping An-Shionogi, and have very high expectations around developing total healthcare solutions including drug discovery utilizing Ping An Technology's world leading AI technology.

**Xie:** Ping An Technology is developing AI technology in various domains such as natural language processing and image analysis and have successfully applied these technologies in a wide range of fields, from fintech to healthcare. With such strong technical support, Ping An Smart Healthcare provides end-to-end solutions for regulatory authorities and the healthcare ecosystem by supporting the government with management of institutions, doctors, diseases and drugs to drive efficient operation of China's healthcare system. We are very confident in our ability to develop healthcare solutions in collaboration with Ping An-Shionogi because of the AI technological strengths we have built up in a wide range of fields.

**Y:** We inked agreements for joint drug discovery straight after Ping An-Shionogi was established because of the

appeal of their AI technology at Ping An Technology. After only three months since starting research for specific diseases, we were able to find promising compounds from amongst more than 500,000 compounds. I'm amazed at this speed.

**X:** Our AI for drug discovery achieved a higher level of precision than world-leading teams from Massachusetts Institute of Technology and Stanford University at a MIT competition to predict the efficacy of antibiotics. However, as we do not have the experience or expertise to apply this AI technology to actual drug discovery, we are extremely fortunate for the opportunity to increase the precision of this technology by applying it in joint research with Ping An-Shionogi. Also, I am pleased that our AI technology is growing stronger than when we began this joint research.

**Y:** Generally, if everything goes according to plan, it takes about two to three years from formation of a research concept to discovery of a promising compound. Taking only three months this time is truly an amazing speed.

**X:** I'm glad we have picked off at a good start. Vital to this three-month speed is Shionogi's drug discovery expertise that supports an original pipeline ratio of over

70%. AI technology is not effective unless it is built up together with the people who will utilize it. I believe we will be able to evolve Ping An Technology's AI technology and Ping An Smart Healthcare's end-to-end solutions to be even more applicable to real-world uses and to use it to help develop amazing potential compounds and services by making the most of our AI technology in jointly discovering drugs using Ping An-Shionogi's drug discovery expertise.

### ■ Contribute to people's health by fusing the strengths of both companies

**Y:** Two of the social issues Shionogi Group is tackling are improving social productivity and extending healthy lifespans. Vital to solving these social issues is finding solutions to psychoneurological diseases that significantly reduce people's quality of life. I believe Ping An Technology's capability of data processing and AI technology and Ping An Smart Healthcare's end-to-end

solutions are vital for discovery of drugs for psychoneurological diseases. So I hope we can develop innovative solutions in the psychoneurological disease area by maximizing both our company's strengths.

**X:** I really hope we can create solutions together for this kind of social problem as there are a great number of people who suffer from psychoneurological diseases in China.

**Y:** Because researchers from pharmaceutical and AI companies are from very different backgrounds, I thought the most important thing would be to form common understanding and relationships built on trust. However, by regularly meeting and discussing matters we have been able to build very good relationships. I have heard there are still technologies that haven't been used in the ongoing projects. Let us contribute to people's health by creating innovative healthcare solutions in terms of both quality and speed by breaking down bottlenecks through a multifaceted approach that unleashes the synergistic impact of our combined strengths.

**X:** I am so excited. Let's do it!



#### Ping An-Shionogi Co., Ltd.

- A joint venture between Ping An, China's largest life insurance and financial services company, and Shionogi & Co., Ltd.
- Research, development, and sales using big data and artificial intelligence (AI) in the healthcare field
- Aim to solve social issues by rolling out new drugs in China



#### Ping An Healthcare and Technology Company Limited

- A synergistic entity within Ping An Group healthcare ecosystem
- Aimed at gaining trust, bringing expertise and providing convenience, PAGD strives to bridge the communication gap between doctors and patients, as well as build China's largest online healthcare platform with the best model and the highest threshold.
- Has established several key business segments: online medical services, consumer healthcare, health mall, health management and wellness interaction.



#### Ping An Technology Co., Ltd.

- Supports the technological side of the Ping An Group's insurance, financial, investment, healthcare, and smart city operations
- Specializes in the research and development of biometrics, AI, big data, and cloud technologies
- Cooperates with top universities around the world



#### Ping An Smart Healthcare

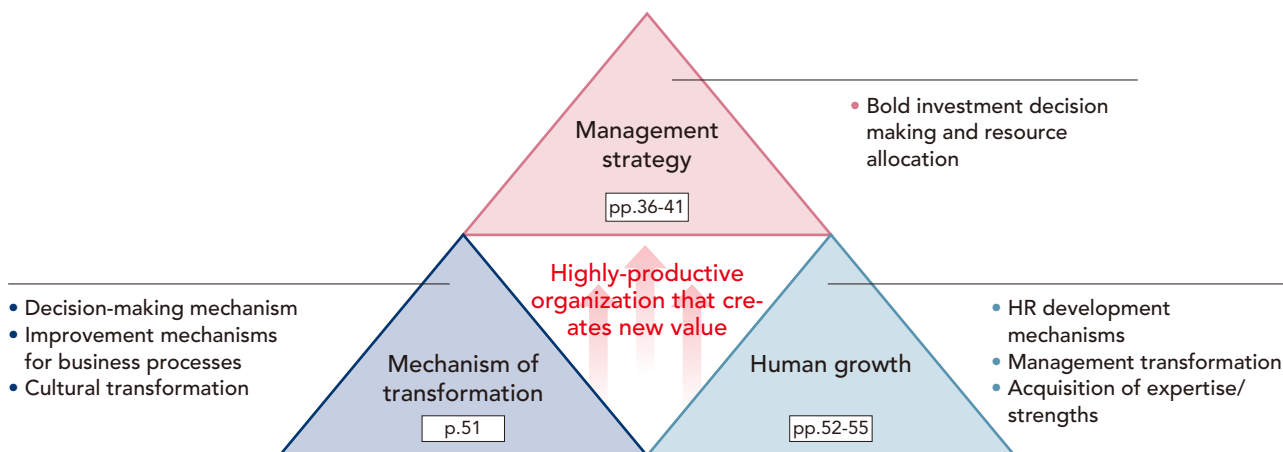
- Ping An Smart Healthcare, affiliated to Group subsidiary Ping An Smart City, focuses on four core areas to support the rapid development of China's healthcare system: improving institutional management by empowering health and medical authorities; assisting doctors in diagnosis and treatment; supporting the public health system to manage epidemics and chronic diseases; and facilitating pharmaceutical research. Currently, Ping An Smart Healthcare services are available in 90 Chinese cities and are expanding in overseas markets, serving a total of 20,000 medical organizations and 800,000 doctors.



## Management Foundation Strategy

### Create value by transforming structure and the processes that shape structure and developing the right human resources to administer processes

To become a HaaS company, we must transform ourselves into a high-productivity organization that can create new value. Therefore, the Corporate Strategy Division, which is responsible for designing and implementing the overall corporate strategy, and the Administration Division, which is responsible for creating mechanisms that enhance effectiveness, have teamed up to build a strong management foundation that can flexibly respond to rapid changes in the environment.



### Infrastructure building for new value creation

To become a HaaS company that creates new value, we need to be in a position where we will be chosen by other companies and industries that have different strengths. This is why Shionogi is speeding up its transformation efforts to become a high-productivity organization that will continue creating new value while honing its strengths as a drug discovery-based pharmaceutical company.

To transform ourselves into an organization that tackles new fields at speeds never before attained and enables bold investment decisions and resource allocation, the Corporate Strategy Division and the Administration Division are spearheading a reorganization of our management foundation. This will center on a transformation mechanism to reform our decision-making and work processes and human resource development. We built and put into operation a system that can make prompt and accurate decisions and monitor and review them. This evaluates the appropriateness of our business risk and increases the transparency and traceability of our decisions in line with the recently established Shionogi Group Decision-Making Policy. As for training human resources responsible for value creation at Shionogi, we are starting educational programs that will upgrade our management ranks, beefing up self-investment assistance, and taking other steps to create an environment in which all employees can continue learning.

### ■ The Decision-making Process (Project K)

To fight with determination against unprecedented events, all of the decision-making processes at Shionogi need to incorporate timely decision making that properly assesses the business risks. Therefore, the Corporate Strategy Division and the Administration Division have teamed up on a transformation project (Project K) that will overhaul our old approval methods and institute a timely and high-quality decision-making process throughout the Group.

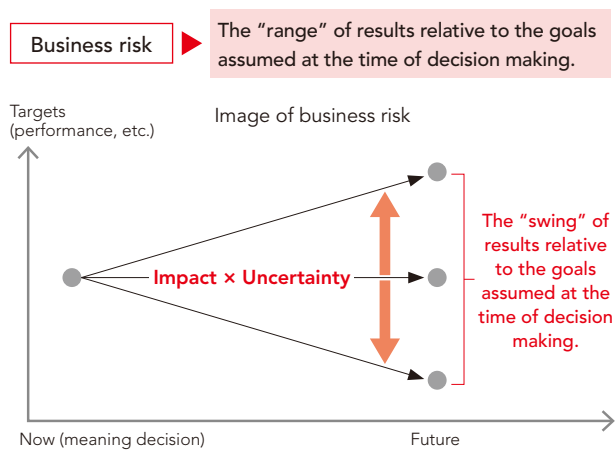
First, the project team formulated the Shionogi Group Decision-Making Policy and organized and revised all rules pertaining to approvals and meetings, then announced them to the entire Company. Next, it installed a Company-wide system for approvals (Shionogi new Approval Management System 2020: SAMS) to centrally manage the necessary information and deliberation processes involved in our decision making and the appropriate reports.

SAMS conducts a multifaceted evaluation of each proposal's business risks and, setting the decision maker according to the level of impact and uncertainty of each proposal, and makes sure that all records of the deliberations and approval can be accessed in the future. Installing this system enables a new dimension of trans-

parency and traceability than previously, which includes reviewing decisions made by specialized departments in the approval process, the post-approval progress, and even the final reports.

In addition, by implementing thorough in-house training on the decision-making process and upgrading every employee's skills in accurate assessment of business risks, planning, and decision making, we are creating a foundation for repeated challenges, even in situations that require that unprecedented decisions be made in an era of drastic change.

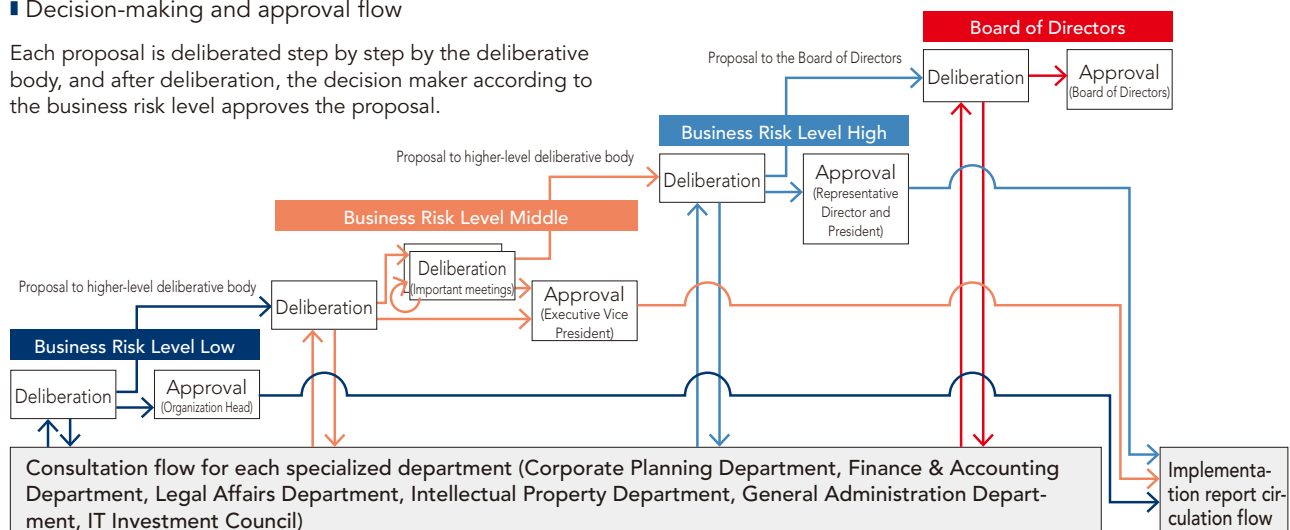
### ■ Definition of business risk



- Decision-making in business involves uncertainty to a greater or lesser extent, and the impact can be large or small.
- Understanding the magnitude of decision-making "range" (i.e., business risk) from the perspective of impact and uncertainty and using this information to improve the quality and speed of decision-making.

### ■ Decision-making and approval flow

Each proposal is deliberated step by step by the deliberative body, and after deliberation, the decision maker according to the business risk level approves the proposal.



### ■ Recruiting Manager

The success of STS2030 hinges on bolstering our managers, as Shionogi's managers are required to support employees' growth, promote transformation of the workplace, and maximize the outputs of the entire organization. With this in mind, in fiscal 2020, we launched PJ-KANAME, a new program for manager development aimed at all domestic managers that stresses managers' personal growth, sophisticated decision-making skills, and a commitment to grow both employees and the organization.

PJ-KANAME offers a wide variety of programs on corporate strategy, organizational behavior, and management of human capital, including such topics as dissemination of the new medium-term business plan, approval processes, goals management and human resources assessments, and labor management. The program is designed to upgrade the level of our management team, as they engage in daily study online, in group training, and self-study. In fiscal 2020, PJ-KANAME held 27 courses that ran for a total of 190 hours, which is equivalent to about 10% of a manager's work hours. By strengthening the qualities that a Shionogi manager should have, we will achieve a higher dimension of sophisticated decision making that incorporates our management and business strategies and our training and management of human resources, which are the fount of competition.

We are solidly behind Project K and PJ-KANAME, which are positioned as the flag bearers for reforming both the hard and soft aspects of the management foundation strategy in STS2030, and these projects will accelerate the pace of Shionogi's transformation as we achieve our Vision of "building innovation platforms to shape the future of healthcare" by 2030.