



SHIONOGI & CO., LTD.

Briefing Session on the Business of the Joint Venture with Ping An Group

October 13, 2020

Changes in External Environment



Evolution of Cutting-edge Technologies

- **Innovations in IT/AI technologies**
 - Digital transformation
 - An era in which five senses can be reproduced with 5G⇒6G
- **Collection and analysis of personal health information as big data**
- **Entry of non-pharma companies into the healthcare industry**
 - Business opportunities through the fusion of healthcare and IT

Society and Customers

- **Disruptions in social system and change in values**
 - Coronavirus and post-coronavirus as an exemplar
- **Narrowing of medical information gap**
 - Easier for patients to access medical information
 - An era in which patients themselves select medical care

Diversification of Healthcare Needs

There is a needs to provide individually optimized total healthcare solutions



Teshirogi: Thank you very much for participating. This is Teshirogi, and I would like to share with you the establishment of the joint venture between SHIONOGI and Ping An Group, Ping An-SHIONOGI, and business plan of Ping An-SHIONOGI, on behalf of both companies. Then from SHIONOGI's viewpoint, what we expect from this alliance and what we aim to achieve from this partnership is going to be covered

Regarding the change of the surrounding environment, because of COVID-19, the world is changing drastically. However, we started a discussion around July 2019. So, at that time, it was a very peaceful normal days, and there was no COVID-19, that was the time we started to discuss what we're going to be doing in the changing environment. First of all, we considered evolution of cutting-edge technologies. And we have 5G, but then the world is now heading for 6G and technological issues currently thought impossible could be solved, and that affect our lifestyle, especially in the healthcare industry. It is going to be a big impact..

And by countries, there are various rules, local rules how to handle private information. Therefore, it is now difficult to utilize and share the private information across the border, and this will also be difficult in the future, probably. But if we are to find opportunity to utilize them to provide new effective drugs and healthcare services globally, where it would be has been a big theme. And additionally, at the same time, we were discussing partnering with a lot of IT-related companies that were trying to be committed to healthcare

The discontinuing societal change, now is the time it comes to realization, we don't think COVID-19 caused to change the trend. Maybe it triggered or accelerated the changes, in a way that something that would take

three years or five years take just one year. But we consider that these changes would have probably happened without COVID-19 anyway.

And we assume that we'll see a world where people have more healthcare information including private and medical one. A world where my healthcare data should basically belong to myself, it won't be the country or healthcare institutes. The trend will be accelerated by 5G, 6G technology, and the question is whether providing drugs would be enough for pharmaceutical companies to survive in the future 10 to 20 years from now?

Then we need to identify what role a drug should play and what we should merge with other services from the global health viewpoint. Not a single drug can do everything, but we can do more when we work on the healthcare platform with partners. That's why Ping An was a particularly appealing partner as they have very strong healthcare database and the future vision of healthcare.

Ping An-Shionogi -Collaboration of Different Strengths-



中国平安 PING AN
金融 · 科技

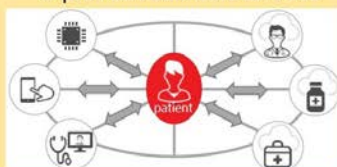


SHIONOGI

- **Largest insurance/financial service provider in China**
 - Public and private insurance network
- **Established healthcare ecosystem**
 - AI technology, Big data
- **Strong Brand**

- **Highly efficient research and development capability to create self-originated pipelines**
- **Disease insights to infectious diseases/CNS* area**

Building a platform
to provide healthcare services



Ping An-Shionogi

Solving social issues
related to healthcare



Building a total healthcare platform to meet healthcare needs



* CNS: central nervous system

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As you know, I think Ms. Jessica will explain later, Ping An is China's largest life insurance, and of course they have a very large amount of non-life insurance, and they are managing financial services and really big financial services.

And as a future theme, the Ping An Group as a whole, the healthcare ecosystem is next theme. This is said by the founder Ma Mingzhe, and Jessica Tan CO-CEO has always said this. The next theme for Ping An is how to run the healthcare ecosystem.

China, in fact, last year and two years ago, we licensed the medicines we made to our Chinese partners and made three deals. But when we think about how to do business in China as we extend these disjointed

partnerships, it was very natural for us to find a very strong partner, a premier partner. This overwhelming brand power of Ping An, there will be no one who does not know this brand in China, and our medicine, as shown on the right side, I was wondering if we could somehow combine the brand power of Ping An with our capability of creating drugs.

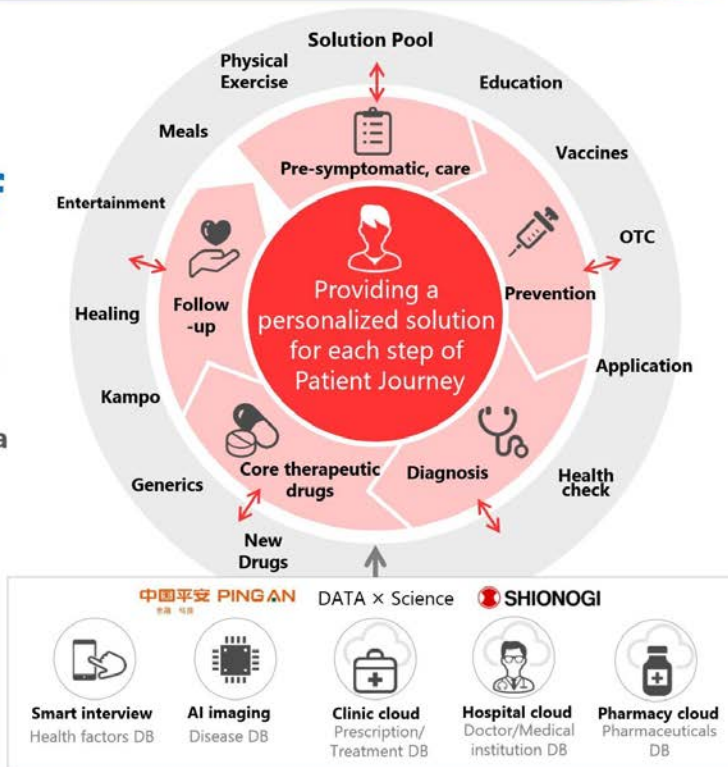
The combination of the two is the essence of this partnership. It might sounds strange to say, but I think there will happen more combinations like this from other companies. We would like to be a first example of this kind, and hope it will be some first-mover advantage, we want to make it successful as a first runner. In that sense, I think we found a very good partner, we will surely succeed.

Aim of Ping An-Shionogi - For the Future of Healthcare -



Shaping the Future of Healthcare

- Providing healthcare solutions to patients and society, contributing to the everyone's health
- Taking on the challenge of building a platform for total healthcare



From the center of the circle, the so-called Patient Centricity, to the pink area, I think we could somehow reach with our capability. Of course, taking care of everything from prevention to diagnosis to follow-up at a pharmaceutical company is quite a stretch. But if we want to reach various patients needs from patient centricity, it would be necessary for us to deliver services beyond that, to reach the center, pink and the red part in the middle

Especially in China, Southeast Asia, where the population is very large and expanding, and they are about to develop even more. In this time of era, we pharmaceutical company, could be a very important element of a healthcare platform, Shionogi is that, and Ping An is creating the healthcare platform itself within the framework of an ecosystem.

We believe, at least in Asia, that it is good for patients that we work together, and that it will lead to the development of both of us.

2030 Vision - What we want to achieve by 2030 -



Vision 2030

Building Innovation Platforms to Shape the Future of Healthcare

As Shionogi family we promise to:

- Imagine new ways to deliver innovation, and catalyze the formation of new healthcare platforms
- Create innovative products and deliver them worldwide compliantly with high quality at a fair price
- Embrace social responsibility and contribute to longer, healthier lives everywhere



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Now, I would like to add a little more about from the perspective of Shionogi. We recently issued this medium-term business plan in June, but of course we started to make this about a year ago, that was coincidence with when we started talks with Ping An.

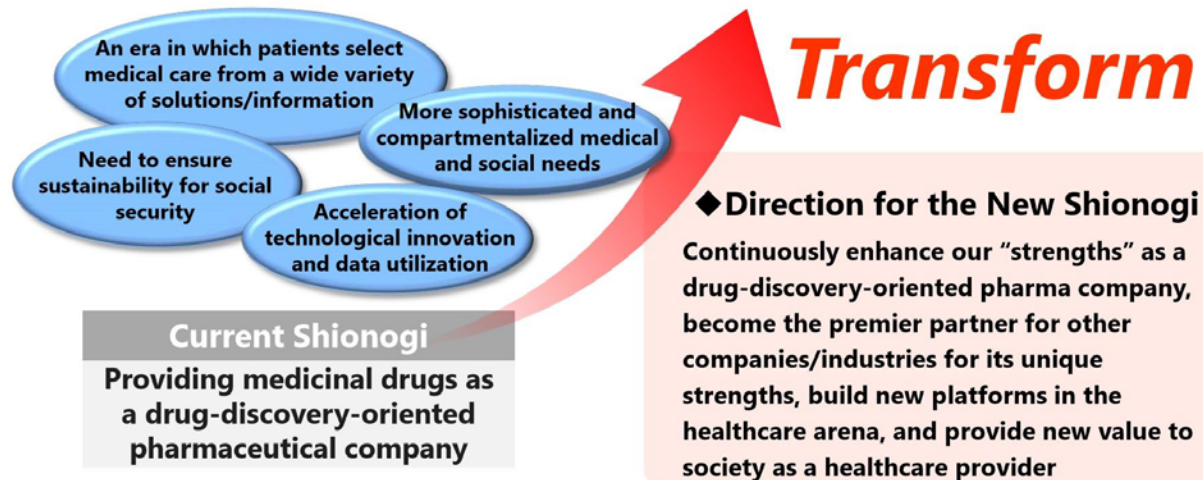
As I will explain later, pharmaceutical companies are facing a big challenge now. We are dependent on patent and get revenue during that period, and then after their expiration, generic or biosimilars are coming out with tremendous momentum. When I wondered how this model could be sustainable, it would be really difficult to live with drug business only. So, after all, combined with patient-centricity, the healthcare platform would be needed.

I think this is a more complex platform that is a bit different from platforms like Amazon and Google. However, instead of doing that all by ourselves, we will utilize our strengths to collaborate with preferred partners and premier partners, and we will become a player on that. This could be a only way to survive, and this is our awareness of the problem.

Delivering value by providing healthcare as a service

(Healthcare as a Service : HaaS)

- Generate new value and solve problems faced by patients and society through collaborative invention with a diverse range of partners
- Augment the strengths we have acquired through the discovery and development of “medicinal drugs,” and leverage those strengths



So, for the time being, we will continue to sharpen our strengths as a drug discovery and pharmaceutical company. Otherwise, on the contrary, it will be unattractive for those who build and play on platforms. A powerful tag can only be achieved when we can make up each other for what we are not good at by strengths. I think we need to have strengths to continue to be respected or selected as a partner by others.

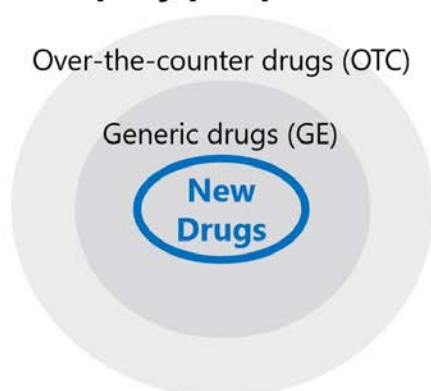
On the other hand, we are thinking that we will have to continue to be a part of the medical care that provides services, not just medicine. In that sense, I think this is an important point while refining our strengths as a drug discovery and pharmaceutical company, it would be our strength to improve our understanding of other industries. As for alliance, we have intended to work with various partners, but we are rewriting the strength of alliance as a capability to team up with other partners of the platform.

Concept of HaaS



Conventional business positioning
- As a drug discovery-based pharmaceutical company-

Product category from a company perspective



Business positioning after 2020
- As a HaaS Company-

Providing solutions from the customer (patient) perspective

⇒ **Difficult to build by one company alone**



Providing solutions that patients need, not an extension of the existing business that only provides “medicines”

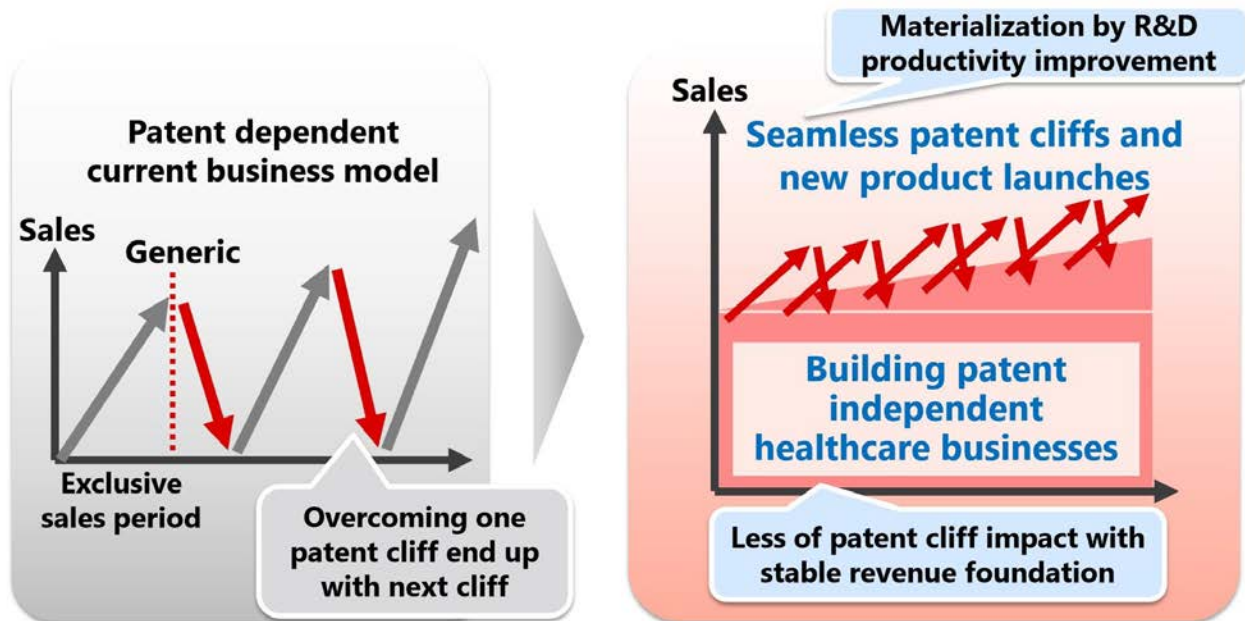
Internally, we have keep saying that medicine is part of the service, but we are aiming for a HaaS company, not a pharmaceutical company.

The left side is where we have been thinking. Actually, as I wrote in the materials of the medium-term business plan, we had thought that an infectious diseases drug maker equals to antiviral drugs, antibacterial drugs, and antifungal drugs. However, what I really noticed in this corona pandemic is that we cannot fully contribute to the patients with those drugs only. An infectious diseases company should address all the aspect of those diseases across diagnosis, prevention, and prevention of aggravation. When we think about patient centric care, not by the business framework such as new drugs, generics and OTCs, a company should save patient's life. To realize this, we need to concentrate and improve our capabilities.

As we can't get there with drugs alone, of course we strive to provide prevention, like vaccine, diagnostics, or even aggravation prevention by ourselves, it will be difficult for us to create a platform, so we will partner with Ping An to realize it in China and Southeast Asia. And we just thought that we would like to develop it elsewhere with other partner.

This might sound famlier for you as I've talked about two or three years, perhaps partly. I realize that the sustainability of the model on the left is becoming more and more difficult.

Challenge the Pharma Business Model



Transform the pharma business model by building the healthcare solution providing platform with Ping An Group

We at Shionogi are currently replacing Crestor royalties with HIV family royalties, but as it's revenue gets higher, the cliffs get bigger. No matter how you make up for this, for example, an acquisition, the same problem comes up in 10 years. It's a pharmaceutical company, so you might say that you should do your best as long as you can continue, but I've always wondered if I could at least buffer it.

As you can see in the table on the right, this is ideal, so you might say this is impossible, but since we have drugs, we also have patents. It is unavoidable that cliff comes, to some extent. But, the sustainability of a company is not very stable due to the cliffs, like falling into the red or not being able to invest sufficient R&D resources. I think it's a huge challenge, but if you don't aim for a new type of company, it's becoming more difficult for blockbusters to come out.

In other words, say cancer area, the number of patients will be narrowed down as cancer genomic therapy progresses. Then, is the unit price can be tripled or quintupled? It may be not. so how do you create a sustainable company? At least I'm obliged to create a sustainable business model as a current CEO. I'd like to make a business model that Shionogi is recognized with respect and appreciation in 10 to 20 years. When I wanted to do something about it, I thought that in collaboration with the Ping An Group, we could start to realize a large portion of this in this way. That is the biggest motivation.

Significance of the Alliance to Shionogi



To achieve 2030 Vision and achieve sustainable growth,

1. Partner for collaborative innovation for the future of healthcare



2. Realization of business development in China and Asia



3. Transformation from the traditional pharmaceutical business model that continues to overcome patent cliffs

Ping An Group is the best partner that has strengths which Shionogi does not have and can generate synergistic effects

- Merging the healthcare big data and science, accelerating Asian expansion centered on China
- Leveraging the strengths of the alliance that we have cultivated, we will realize value creation of 1+1 above 3

So, for us, when we configure the platform I mentioned earlier, we partner with someone who is big, even not all, who can take care of big part of that. I think that it will be a great advantage for us when trying to make a new business model that we are trying to challenge.

And, as I said earlier, this may be a bit of an urgent issue for Shionogi, something new is starting to emerge from us, for example Cefiderocol or Naldemedine, and we have to find a new partner. Fortunately, many companies have asked us for selling rights in China, but I wondered if we would really make deals with 4, 5, and 6 partners disjointly, it would be difficult for Shionogi to reach the goal of creating a franchise in China or Southeast Asia. We needed to have an anchor partner that provide a big platform, Ping An was really good for us when we look at China and Asia as a whole.

Thirdly, you may continue to ask if we can really do that, but as a pharmaceutical company, I would like you to take a look at the history of the past. There are few companies that have continued to grow as a pharmaceutical company as an one company. Even if you do M & A and get a remedy in a sense for a while, you still have to overcome the same or higher mountains. As for how to overcome this, for example, in the case of overseas companies, after studying various case studies such as GSK and Novartis, we will choose to do what we can do toward realization in collaboration with Ping An.

I'm pretty tight with John or Yoshida, and I'm definitely saying that not selling or making a profit isn't a business because it's a business, not an alliance. I am, Of course, Ping An is a company that has continued to grow in that sense, so if partnering with us does not increase sales or profits, naturally we will be questioned if utilizing Shionogi as a partner is a good deal. In that sense, I am very particular about how the actual sales and profits come out, and I would like to expand this joint venture first in China and then in Southeast Asia.

Transform to New Pharma Business Model



Merging different
strength



Beyond Pharma

- ✓ Achieve the discontinuous evolution to the new pharma business model that provide comprehensive healthcare solutions

New businesses
Pharma re-engineering businesses

Current pharma businesses



Smart pharma businesses



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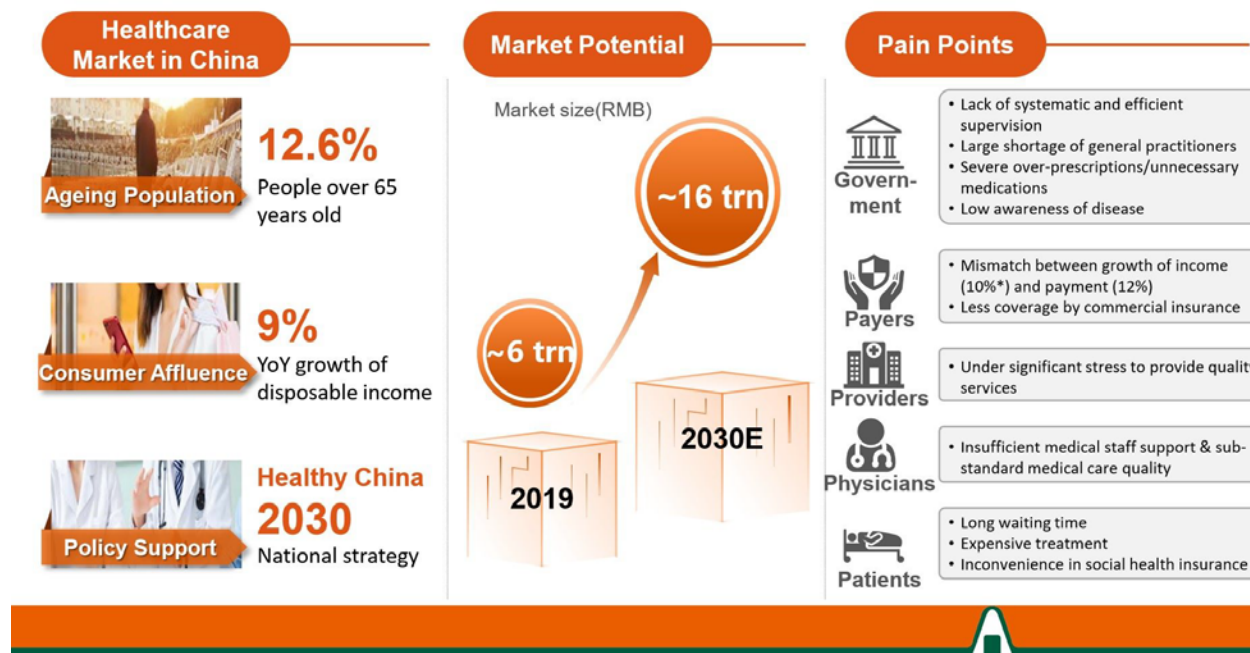
With that in mind, we will do our own pharma business first, but after that, we create businesses that does not depend only on the patents of the pharma, as I mentioned earlier, vaccines are actually such a thing. By realizing this, we would like to create a business that is the basis of the entire Shionogi family from this Ping An Shionogi.

That's all from me.

Kyokawa: Now that we have successfully connected with Jessica, I would like you to move on to the presentation, please.

Healthcare Environment in China

- Healthcare market in China is expanding driven by aging population, consumer affluence and policy support
- Chinese healthcare market size is expected to grow from RMB 6trn in 2019 to RMB 16trn in 2030
- Healthcare ecosystem stakeholders face significant pain points






Jessica Tan: Yes, thank you, everyone. We have a very solid base to collaborate strategically to renew their vision of providing healthcare service and we see this as a long-term strategic partnership. I want to use the opportunity to share with you about our views on China and also our aspirations for the alliance. On the next page, we find the healthcare market in China is a very big one. We [inaudible] prospectus that we know the Asian population is increasing significantly there are already 12.6% of people who are 65 years old. The number of old people now is more than that of Japan. With increasing consumer affluence, we find the actual medical costs decrease significantly more than the average cost of living or disposable income. So, it's going to be an area where people want to spend more. And then thirdly, the government is actually very supportive of Healthy China 2030 and they understand particularly. I think, in light of the COVID-19 situation right now this is an area they have taken this a lot more to fundamentally the whole market. So, by some, this means that the market right now at least 10 years to become at least CNY16 trillion market. However, there's a lot of structural problems within the market, which you know, we think that there's a lot of opportunities to work well in China. And I think some of these issues are also relevant in Asia while we see our partnership with SHIONOGI, not just in China but for all across Asia. I think on the government's side there's been a lack of efficiency or supervision, a lack of good doctors, particularly general practitioners in China. There are only 3.6 million doctors for all of the population of 1.4 billion people.

At least therapy over prescription and necessary preventative medication as means of investments no way of judging that. For the payers and this current structure will not work here largest insurer in China we cover about over 100 million customers with some form of health insurance. Our health insurance, primary health insurance at least 10% of the market, half of the healthcare expenditure is born by the government in your social insurance. But this is something that has to change. That bulkhead expenses are not sustainable. We believe that more and more corporate and private health insurance will take you know, do the opportunity.

But this is where I think we see our partnership requires that we deliver better healthcare service, for it to be [inaudible]. And then I think providers, physicians from a significant stress, not just lack of capacity but the quality [inaudible].

Challenges and Opportunities in Chinese Pharmaceutical Market

- Chinese Pharmaceutical Market will grow to **1,474 billion** RMB in 2025, the proportion of Chinese, Innovative and Generic medicine are respectively **32%, 14%** and **54%**.
- Three market segments are facing challenges like 'few standard', 'high R&D cost' and 'low margin'.
- Partnered with Shionogi, Ping An aims to seize the giant promising value by becoming the 'rule maker', 'Digital enabler' and 'value integrator'.

	Market Size (2025, billion RMB)	Challenges	Ping An Opportunities
 Chinese Medicine	477	<ul style="list-style-type: none"> • Dispersion of varieties, the lack of standard • Dispersion of channels, the commotion in price 	<ul style="list-style-type: none"> • Establish and control more than 500 end-to-end standards of trace-to-the-source Chinese Medicine
 Innovative Medicine	201	<ul style="list-style-type: none"> • Fast rising cost of R&D • Long cycle of R&D 	<ul style="list-style-type: none"> • Digitalize 300 of the pharmaceutical companies with advantages like RWS and digital marketing
 Generic Medicine	796	<ul style="list-style-type: none"> • Low margin of similar competitive medicine • Growing scale of centralized procurement 	<ul style="list-style-type: none"> • Develop new applications of generic medicine, and create new values over 10 billion

So, on the next page in particular on the pharmaceutical side CNY1.4 trillion is actually on the Chinese pharmaceutical market. You see that 54% is actually generic medication which is quite unusual. The structure of the pharmaceutical market we believe will change dramatically. China needs a lot more enterprises like SHIONOGI which has a fantastic R&D pipeline. Over 60% of original candidates on R&D pipeline, we're very impressed. We believe that a lot more kind of innovative medicines and the way that we [inaudible] how the whole drug development and research cycle should be changed. And we are very excited to be able to work on that. Also, Chinese medicine is also an improving area. So, we hope that with SHIONOGI we are able not just the use of distribution in China, but also use of technology and access to ecosystem what Teshirogi-san was describing earlier about changing the way that pharma works in [inaudible] healthcare service.

Significance and Advantages of Alliance with Shionogi

- Alliance of Ping An and Shionogi is enabled by **3 key strengths**: professional pharmaceutical capability, world-leading Big Data and health-tech and online, offline distribution channels

Alliance of Ping An and Shionogi

Professional capability as pharma



- R&D experience for more than **60** years
- Professional pharmaceutical research, development, manufacturing, etc
- Original pipeline ratio of **69%**, development success rate of **35%**

Largest Big Data and health-tech platform



- World **2nd** most health-tech patent applications
- Strong healthcare big data (including RWD) and AI analytics for maximizing values of data and new business development
- Developing AI-based new production & quality management system(QMS)

Strong distribution platform

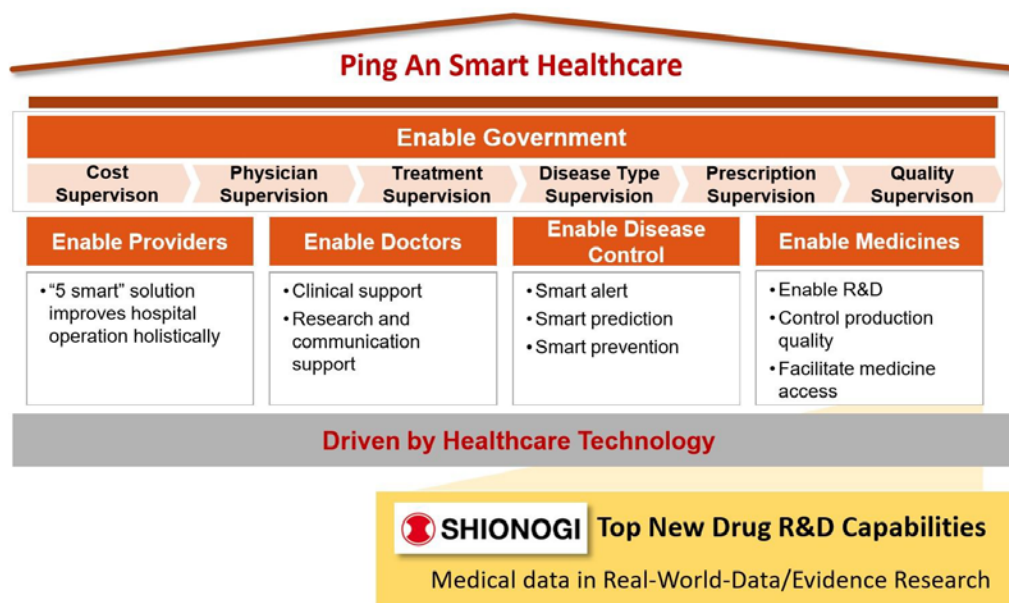


- Close collaboration with China's largest online healthcare platform, enabling an efficient sales model without broker
- Extensive Partnership with **110,000** pharmacies and over **100,000** in-house medical team(1# in China)

So, on the next page, you heard already. We believe this aligns very strong alliance that leverages our strengths. We actually use in Ping An. We have a local healthcare ecosystem that we have been working on for the past 20 years. You know, we started 346 million users on our healthcare portal mobile app with the launch that through Good Doctor. Our live clinical decision support system helps tech serve 20,000 doctors and 20,000 hospitals and medical institutions. And then besides being the largest health insurance, we also work in 200 cities on their social healthcare insurance. So, you can see that we actually have a very large presence in the healthcare ecosystem for China. So, what do we hope in the alliances leveraging to professional capability as a very strong army of pharmaceutical companies? And then we bring to the table, we have a one of the largest health-tech and big data platforms. Right now, we are actually, for the past two years, ranked number two in terms of the growth number of health-tech patent applications globally. And we have now a deep research into 30,000 diseases, particularly chronic diseases, that covers about 400 million patients in China. And then finally very strong distribution platform with Good Doctor where we serve over 300 million consumers. We also have an extensive partnership with 110,000 retail pharmacies across chain. We believe that this could also merge with healthcare service, with insurance, with actually delivery of drugs to the consumer so virtual distribution platform as well.

Ping An Smart Healthcare Overview

- Ping An focuses on “Smart Healthcare”, healthcare system based on digital technology such as AI and IT
- 4 pillars for Solution: Providers, Doctors, Disease control, Medicines.
- Shionogi will be the best partner to work on “Medicines”.



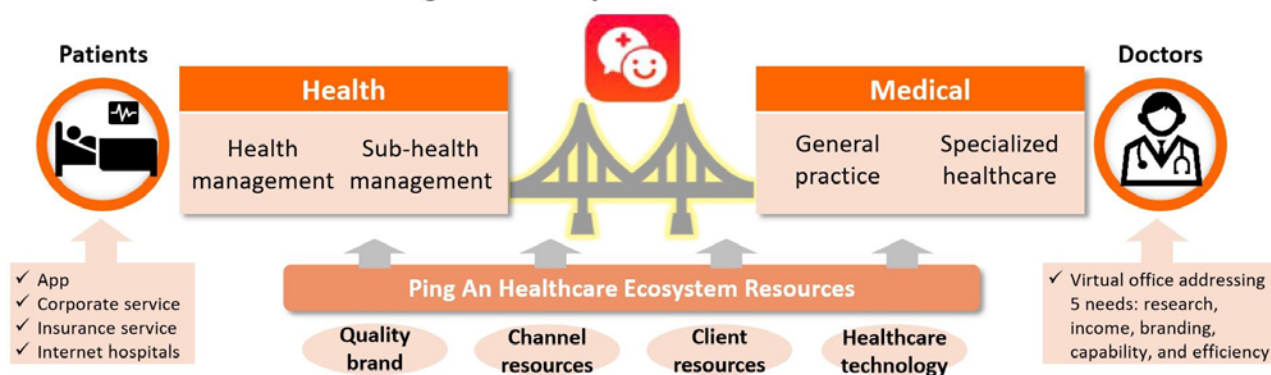
On the next page, I have taken two examples of some of the persistence in our healthcare ecosystem. The first one is Smart Healthcare. This is one of our companies which serves basically working telemetry of health in national health commission in China. We are now covering about 100 cities. And as I mentioned before 500,000 doctors in China and 20,000 hospitals and medical institutions. Right now, we are providing clinical decision support system, AI medical imaging for them. Over time we hope that we are able to expand this also in getting them into our drug trials and drug development and usage as well.

Ping An Good Doctor Overview

- Leading internet healthcare service provider in China
 - ✓ Portal: 346mn registered users, 830k daily queries, 67mn MAU
 - ✓ 1.8k+ In-house medical staff & 10k+ External medical experts
 - ✓ Offline partners: 110k+ pharmacies, 49k+ clinics, 2k+ health check-up centers
- Bridge between patients and doctors



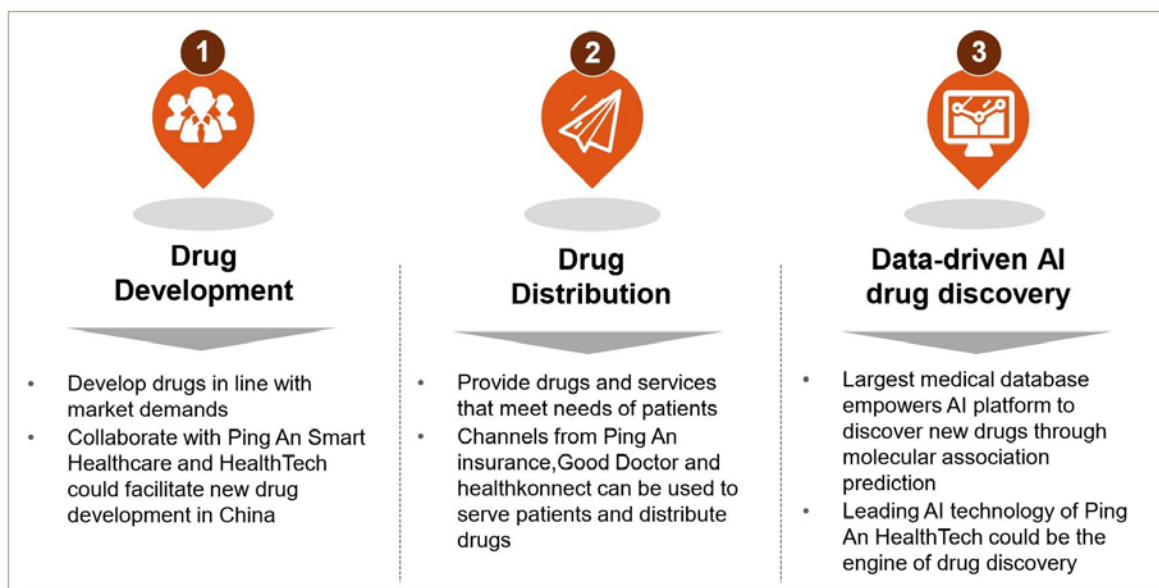
Bridge between patients and doctors



On the next business is Good Doctor. This is where I mention about our distribution platform. Besides our insurance, we also have the largest mobile healthcare app, over 246 million users. Every day, we have 830,000 daily consultations online. And with, we have about 2000 in-house medical staff and over 10,000 external specialists. And that, I think will be very strong distribution platform because we've developed a behavior, particularly during COVID where we've seen our traffic increase by eight times that consumers come to for the first part of call and discuss their health management issues and also simple queries. We think this is beginning, because a lot of the diseases that we'll talk about are chronic lifestyle diseases. You really need a very strong involvement of consumers to get together and then manage them on the way of daily basis. So, we think this will be a very good distribution platform on top of what I mentioned about smart healthcare recently to all the online networks of the doctors and hospitals.

Three Focus Areas of Collaboration with Shionogi

- Leveraging its strength and assets, together with Shionogi, Ping An will address data-driven new drug development & drug repositioning, development of AI-based new production & quality management system, and sales & distribution of Shionogi's drugs in China.



Therefore, on the last page, our aspiration for this alliance, we are very excited about this. There are three focus areas, which Teshirogi-san has mentioned. Drug development, drug distribution, and also more importantly data-driven AI drug discovery. There's a lot of things happening, combining both the wet and dry science of drug development. Particularly, in this COVID-19 situation we see that this could actually dramatically shorten the drug discovery time. Our healthcare team, last week, just won a competition organized by MIT, whereby they are supposed to locate using our deep learning techniques looking at 280 different compounds and predict what would be the properties of infections in addressing some of the symptoms of the COVID-19 virus. And the conclusion of actually of our team won number one in the competition beating a lot of foreign teams. I think that has a lot of applications. We're very excited working with SHIONOGI to combine that and celebrate, I think, making much more tailored, specific drugs for different types of not just diseases but also much more confront different types of segments.

So, these are the three areas we hope that this partnership will bring. Not just in China, but also Asia. We talked about health that is something that is a very important for all of us. And this is an evergreen topic that will ever be more important particularly in light of situations like this while we have the COVID-19 virus, and we're very excited that this is a long-term development for both our organizations. We are not as old as SHIONOGI, over 180 years of research history. We are only 32 years old. But for us in the business of insurance, we sell 20, 30-year policies. We are in the healthcare system for the long term. We believe in investing together, so that we can actually review, change, and improve how we deliver our healthcare services to the consumers. Working along, not just between the two of us, but more importantly, how we use our ecosystem to work better with the doctors, hospitals, and the government. So, with that, I will turn it over back now to the MC, to talk more about specifically how this is planned.

Kyokawa: Thank you very much for your presentation, Ms. Jessica.

This is going to be our first Q&A session. First of all, we would like to solicit questions from the floor and then solicit any question from the online personnel. So, when you are posing your question, please name yourself and where you belong. As we already mentioned, Ms. Jessica is traveling, so she is going to be around until 4:00. So, at this point, we would like to limit your questions to just questions to Ms. Jessica and Mr. Teshirogi.

From the media, are there any questions from the floor, please? Person in the very first row, please.

Question & Answer

Shimono: Thank you very much for your presentation. I have two questions. One is referred to Ms. Jessica. You mentioned that the health care market in China is great and gigantic, and you do have any challenges within the Chinese industry. But then how is this partnership going to contribute to solving or resolving the problem and challenge?

The second question goes to Dr. Teshirogi. You just mentioned about Good Doctor. And this distribution platform when you first ever knew this, what kind of an impression did you have? Did you find any potentiality? That are my two questions, please.

Tan: I think that clearly the whole healthcare ecosystem challenges are quite extensive. We currently, within our entirety, have twelve entities that work on the healthcare side. Not just our insurance companies, but we have Good Doctor for health care, we have health connected services, social insurance, it's quite comprehensive. But what we're missing is on the pharmaceutical front. Clearly, we are not a pharmaceutical company. So, something that's very professional to do that. In the past, I think we worked mainly on the distribution front. But we were very impressed when we met science Shionogi all their R&D research capabilities. I think it's quite impressive to find 69% of your originating from your own R&D. I think this is an area that is missing in entire ecosystem as well as missing in China market overall. As you see from the JPY1.4 trillion, pharmaceutical market in China are shown generic drugs. New drug developments actually not a big case that was yet market. And therefore, when we spoke, we hope that that piece used to address this gap within the Chinese market as well as within our ecosystem.

Teshirogi: Thank you very much. So, the question from my side was when I first knew about Good Doctor, what was the impression? So, the biggest impression for me was the ideation. The power of ideation was awesome.

What I learned was, well, in some doctor, the doctor carried a lot of patients, and people had to line a long queue, but then for other doctors, there was not many patients coming. So, in order to fill the gap and balance out the patients' number, the doctors had to share the number of patients. So, during the doctors, the standardization of the number of patients, how they treat was alright, and now the disadvantage coming from the patient side was also resolved. So, I thought the idea was great. And I was very much surprised that because the Chinese people already had that great system, in some of the cases, patients can go see a doctor, and then the doctor will find out that through the doctor's diagnoses and interviews and through AI, the doctors will find out that patients may have some sickness or illness, and that could be leading to a next level service provider. But then that level of service was left for the pharmaceutical company to handle, so that was surprising for me.

So, within the guideline, the Chinese side always already had a system in order to share the doctors and then the time reduced from the patient side. But then in order to combine our side, we can stick into the next level in order to provide a pharmaceutical treatment in a very strong confidence, so we found that we could play a role, too, within the Ping An system.

Later on, Mr. Yoshida is going to be talking. So, how we have been running the C&O in the past and today. But then all the expertise used at C&O, the Good Doctor's system has a great big potentiality is what I concern.

Kyokawa: Thank you very much. So, we're going to the second questioner.

Idaka: This is Idaka from the medical journalists, and I would like to question first of all to Ms. Jessica. So, in Ping An Insurance, you're always working on distribution already. But then with the alliance with SHIONOGI,

you're going to be starting from research and development, and manufacturing, and distribution. So, you're going to be working on the whole supply chain. So, what are you going to be doing with this? Are you considering taking part in all these processes, was the first question to Ms. Jessica?

Tan: Regarding the current scope of this JV, we are in the final stages of finalizing it, but we would like to cover part of drug development, drug discovery, and distribution. Through this joint venture, we would like to utilize this Good Doctor and our government network as a distribution network, but the final one is still in the final stages. There is.

Teshirogi: Well, what I'm thinking is to utilize AI. In what manner we can use the AI so that we can make the platform more user-friendly. And one of the examples is for clinical study to be conducted in China, establishing the platform, and maybe we can invite other pharmaceutical companies to work on the platform, and maybe we can create something like smart factory, and we can sell that as Ping An's product. So, we are discussing on these ideas. And if we can reap the product success, maybe we can also bring this idea to Japan through JV. And Ping An has wonderful technology in the areas of AI, so we have a lot the know-how through our drug discovery. And maybe we can apply to certain therapeutic areas such as CNS. So, how to treat patient with CNS diseases? Maybe we can use the VR to treat those patients or to create the apps for treatment. And if we can offer benefit to patients but we can offer this benefit in different forms as the conventional means of drugs, and we believe we can materialize these initiatives.

Kyokawa: Thank you very much. Well, because of the interest of the time, we like to also entertain questions from analysts. Yamaguchi-san.

Yamaguchi: Can I ask the question in English? Hi, this is Yamaguchi from Citigroup. I have two quick questions for discussion. The first one is you have a lot of alliances already not only for SHIONOGI you have some alliances in the past. Can you tell me if this alliance is really completely different from alliances in the past? For example, you do have alliances. Can you tell me that the scope of this alliance is very different from other or it could be? When you talk about private sector in China's healthcare which is dominated by the public sector as well, are you always involved in the private sector or are you trying to tie with the public sector you do both at the same time or not?

Tan: Yes, thank you very much. On the first question, this is the first time that we have partnered with a pharmaceutical company at this deep partnership. Particularly, we have a lot of distribution partnerships. I think on the drug development and AI driven research discovered processes the first of its kind. And as I mentioned, we were particularly impressed because of all of your strong R&D capability. Our partnership with Zamo is on the Chinese medicine front, and we do have a joint venture in China. And that's only specific to Chinese medicine in terms of the production as well as certification of process and the distribution. So very different nature.

And to your second question, we are looking at this for both private and public sector was in point. This is why I mentioned eight years ago we started working with the social health insurance side with government fund. Because we realized that we don't have the largest private health insurer, it doesn't really mean much when you have less than 10% of the market. So, over the years, we have built now initially we have about over 100 million insurance customers, and 346 million of doctors' consumers. These recover their healthcare service, not just paid for by the private health insurance but actually in overall pay. So, we work with the social health insurance side. And there's a lot of opportunity here, as I mentioned, there's a lot of particularly lower-tier cities, and lower-tier hospitals over prescription of all the best medication. The adherence to standards is quite poor. We have already a platform I mentioned. We have something called the ASKBOB it's an AI critical decision support system in our smart healthcare company that 500,000 doctors use across 20,000 medical institutions. That helped to guide them to be much more specific about how to do the diagnostics and the prescribing. Now if we could also in the future bring in the drug aspect as well, I think we'll have better control over the way the healthcare service is being delivered. To these public institutions, regardless, they are being

paid for. There are also now pilots in certain cities where we are working on the social health insurance in some of the cities in partner with private insurance like ourselves and to bring in basically pharmaceutical companies whereby for certain types of diseases, we bring in basically group procurements or tailored type of things so it's at the same quality as cost to the consumers. This is very much I think in line with what the government is trying to push for. There will be much more of such government and private partnerships. And we hope to bring in groups like SHIONOGI together.

Kyokawa: And Ueda. Mr. Ueda.

Ueda: With Tokyo, and I also have two questions to discuss. Personally, are more reasons of choosing SHIONOGI as an alliance partner. You explain that SHIONOGI R&D particularly attractive for the company in our healthcare platform through the joint venture of SHIONOGI. We think that there are there are many R&D pharmaceuticals in the work. So, what are the main reasons to choose SHIONOGI? That is first question. And secondly, question is longer-term view for the healthcare another Ping-An's functioning.

So, what do you think about the 5 or 10-year outlook for the improvement of healthcare market? And what will be the positioning of Ping-An? And also, I'm worried about law of this joint venture having to, you know, in the market?

Tan: On the first one, I think in our view actually very few has such a high percentage of R&D ratio. I mean, 69% is a very high number. But I think beyond that our strong R&D capabilities have been pointed out. I think this all comes down to the aspiration and also the people's culture. The firms that we've seen we are now purchasing it remotely. I think our vision for the healthcare and also bringing together healthcare service bringing across different partners is quite aligned. And I think thirdly, in terms of if you want to make a partnership work, we've gone through many different types of partnership not just in healthcare, but in other areas. I think it requires a long-term commitment and a trust-based relationship that we are both willing to put our resources together to do that. Some of the other partners we've gone through, not in this area, but when we talk about the joint venture, a common mistake people make is always the two parents. They have rich parents, but then all trying to get their own interests, so end up actually the poor joint venture actually never get to grow. They are burdened with a lot of different costs and allocations and different interests amongst the parents. I was very impressed when we first talked to the Chinese. You know, SHIONOGI, when we talked about many of these, we were both of the views that let's not try to do all these complicated accounting. You know, let's try to get this joint venture going well. And then if it starts making money, we can split the pie. So, thinking about all these Westerners like, pre-nup kind of agreement, you know, they are so complicated. And I think it's a very small example. I think it indicates that the type of partnership relationship and we find that working very well. So that's why I think we're very confident because to us this is something very long-term. To make this work we're talking about a decades-old relationship, not the kind of two-year and then we're done.

And your second point about how the market, was it about the Chinese market or how overall is that?

Ueda: Global market including China so what will be the future outlook for the healthcare market and what will be the positioning of Ping-An and also this joint venture in that market?

Tan: I think where you see our strengths, I talk about China and then for us, outside China, particularly in Asia. I think in China where our core business is, and we have all the distribution and technological strengths. We are basically seeing ourselves as one of the largest healthcare players. Right, it's very unusual for a company, an insurance company like ourselves to have 12 entities in the business working across all parts of the insurance all of the healthcare market from payer to provider to patient to government aspect. So, I think that would be quite unique and here we see as an integrator of all the services, both online and offline, both our own and partners, to deliver to consumers for the Chinese market, right. So, I think that's our aspiration for that. Outside of China, I think we have a very different account, we clearly don't have the distribution or

consumer advantage outside of China, but we believe that many of the health-tech expertise we've built are replicable outside. Challenges faced are very similar. So, even prior to the joint venture with SHIONOGI, we are starting to take our health-tech outside of China. We are now in four or five countries in Asia. Our clinical physician support system I mentioned AskBob, we are actually working with Singapore hospitals and Singapore Ministry of Health for diabetes patient control. We're move here with AI medical imaging. We just started two projects in Philippines and Indonesia this year actually, despite the COVID, about how to help their public hospitals and doctors using knowledge to improve their quality of service. So, I think this is very synergistic, but we don't do anything on the pharmaceutical side. So, I think as we develop this on the joint venture, this could be part of the capability and services that both of us can deliver outside of our home markets so that we can reach a broader group of people. Thank you.

Kyokawa: Ms. Jessica is now going to the airport. So, if you do have a very short question, maybe I might accept one from the online listeners. So, if you do have a question please press the hand icon that is on your display. Maybe Hashiguchi-san, please.

Hashiguchi: This is Daiwa Securities' Hashiguchi. This is a question to Ms. Jessica. So, this is a short question to Jessica, the question was to realize what Ping An would like to achieve in the future. From the pharmaceutical perspective is SHIONOGI enough for you to fulfill your goals. Would you like to ask for participation from the bigger pharmaceutical company? Or are you asking SHIONOGI to be bigger? What's your view on that?

Tan: I think pharmaceutical is a very loose word to use. I think we know, like I mentioned before we will always have a lot of distribution partnerships with many other pharmaceutical companies. We also have some promises with other pharmaceutical companies specific like diabetes of areas in clinical trial or you know, delivery of specific treatment and medicine will be some of our continuing services. I think for the time being to do on what I talked about earlier out of the three things we have distribution, we have drug development, we have AI drug discovery. It's much more difficult to have a long-term partnership on the other two, because if you know the drug development and process they're involved on. Which is why I think it will be quite hard to have such deep relationship with, et cetera. I think we both agree that we need to make the first step. So, we have talked about basically for some of the drugs that we are recently involved, and we are working on, these areas will be exclusive to both of us so that because this requires investment on both our parts over multi years to make that work. Now hopefully, these areas will be expanded more across as this approach becomes successful and hopefully it will be very excited about that.

Thank you very much, thank you.

Now, Yoshida will explain the business plan. Thank you.

Yoshida: Once again, I'm Yoshida from Ping An-Shionogi. From here, I would like to explain the business plan.

Overview of Ping An-Shionogi (Shanghai, Hong Kong)

	Shanghai	Hong Kong
Company	平安塩野義有限公司* Ping An-Shionogi Co., Ltd.	平安塩野義（香港）有限公司 Ping An-Shionogi (Hong Kong) Limited
Chairman & CEO	Tatsumori Yoshida	Tatsumori Yoshida
Capital	45 billion yen	5 billion yen
Head Quarter	Shanghai, China	Tsim Sha Tsui, Hong Kong, China
Business description	<ul style="list-style-type: none">• Research, development and sales of pharmaceutical and clinical testing reagents• IT technology development and services• Business investment	<ul style="list-style-type: none">• IP license management• Import and export of goods for Asian countries• Business investment• Stock holdings• Financial services
Fiscal year end	December, 31	March, 31

* company name is subject to approval 25

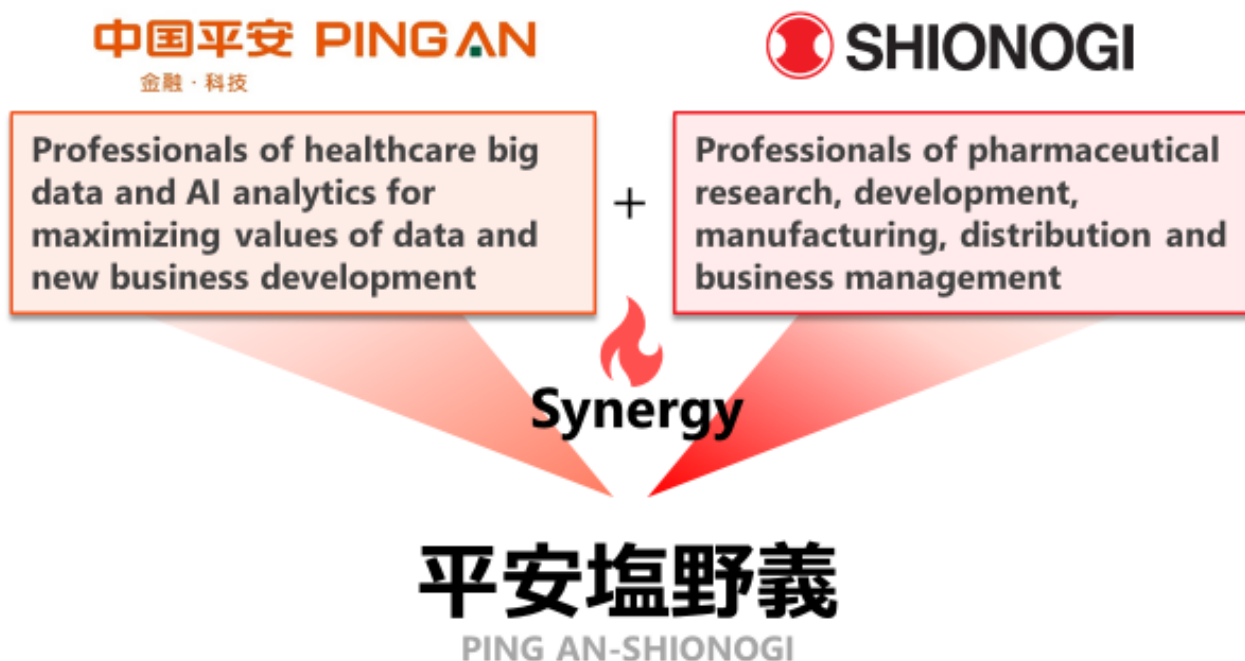
First, I would like to explain the outline of the joint venture with the Ping An Group, then the business strategy and business plan, and finally the sales vision.

First, I would like to explain the outline of the company.

This time, we will establish two companies in Shanghai and Hong Kong with a 51% stake in Shionogi and a 49% stake in the Ping An Group.

Shanghai is positioned as a base for R&D, sales and all activities in China. Regarding Hong Kong, we will expand to other Asian companies and position it as a base for licensing products and other technologies managed by Shionogi, and these two companies will operate this joint business.

Synergistic Divergence of Professionals

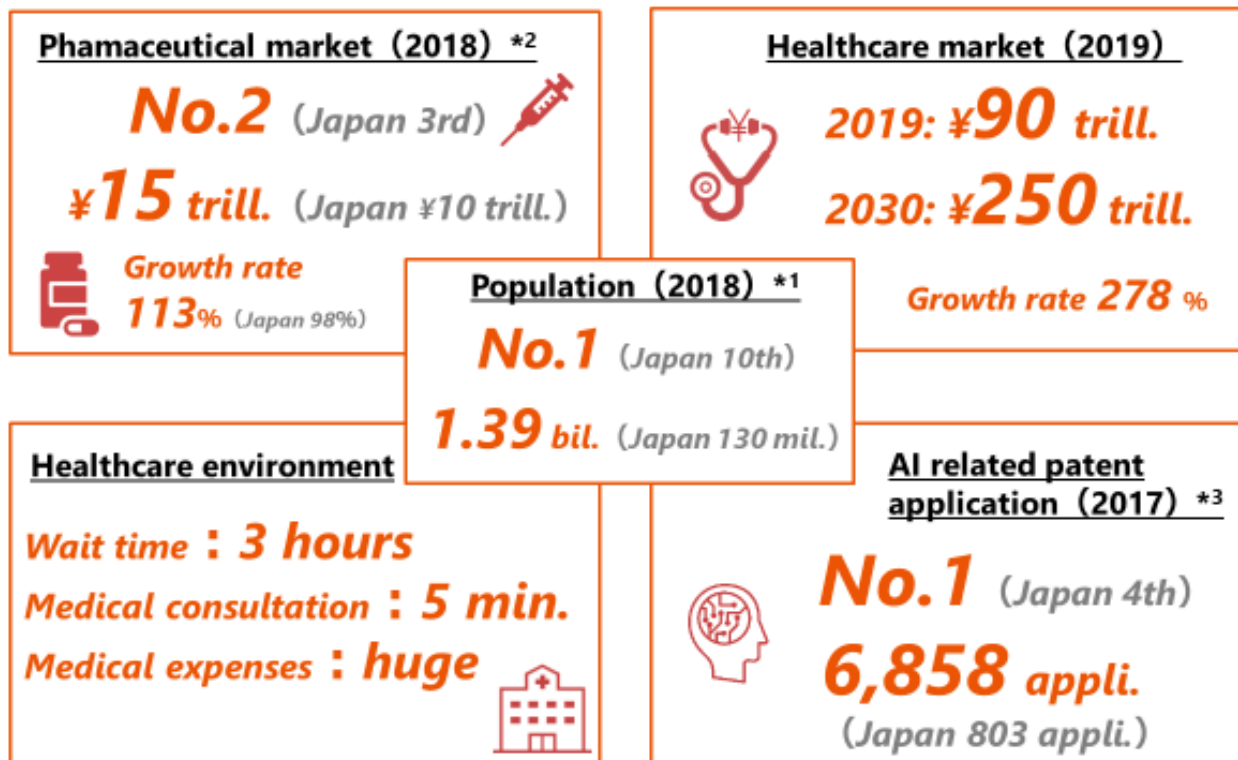


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In establishing these companies, what we consider most important is the fusion of different strengths, and we believe that the source of these different strengths is human resources.

Earlier, I was asked if I would do everything with this JV, but of course there are various human resources from the Ping An Group, such as AI engineers or data scientists who handle real-world data. On the other hand, from the Shionogi Group, ace-class human resources at each headquarters are put into this JV from all value chains from drug discovery research, which is the know-how of so-called pharmaceutical companies, to new drug development, manufacturing, and sales. We are planning to dispatch the site one by one in November.

External Environment of Healthcare Business in China



*1 The World Bank - World Development Indicators - Population, total (2018)

*2 IQVIA World Review Analyst 2008,2013, 2018年はGlobal Use of Medicine in 2019 and Outlook to 2023 ,IQVIA, Market Prognosis,Sep 2018 28

*3 https://www.jpco.go.jp/e/system/patent/gaiyo/ai/ai_shutsugan_chosa.html

From here, I would like to explain the business strategy and plans of the joint venture.

First of all, regarding the healthcare environment in China, although Jessica-san explained earlier, I would like to briefly explain it.

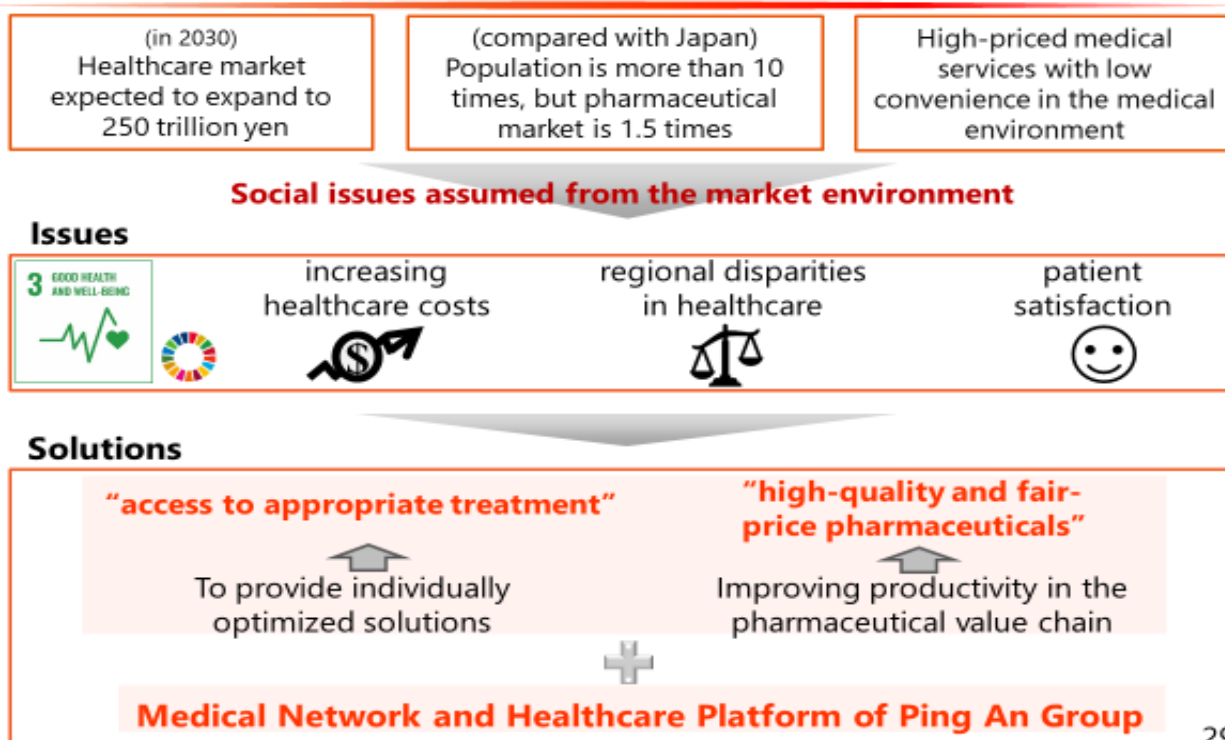
First of all, the population is more than 10 times that of Japan. The pharmaceutical market, which is our field, is 1.5 times that of Japan, and is the second largest market in the world. Regarding the size of the healthcare market, Jessica's data released is converted into Japanese yen, but the current 90 trillion yen market is expected to grow to 250 trillion yen in 2030. I will also talk about current medical issues. The Ping An Group is working to solve this problem with Good Doctor, etc., but Chinese patients are pushing to a large hospital with more than 500 beds, which is said to be a third-class hospital in China, relying on a reliable doctor. As a result, there will be businesses that distribute numbered tickets there.

There is a current problem that although the waiting time is 3 hours, the medical examination is 5 minutes, and the burden of medical expenses is large. The current Ping An Group is working with Good Doctor and other services to solve the above-mentioned problems. Also, with this alliance, AI technology is still related to this healthcare. China has a very large number of patents on AI technology by the Ping An Group, which contributes to this result, but in 2017 it was ranked number one in the world.

The current issues, the size of the Chinese market, and the growth rate, of course, the size of the market as a business and its growth are also very important, but the issues that can be seen from these figures will be

addressed in the future. We would like to work together to solve the social issues of China.

Efforts to Solve Medical Problems in China



Regarding the healthcare market, it is expected to expand to 250 trillion yen in the future. This increase in medical costs has become a huge issue in properly controlling social security costs. Also, the pharmaceutical market is now only 1.5 times larger, but the population 10 times. What does that mean? There is a huge medical gap between the coastal areas of China and rural areas. And the patient's satisfaction with the current medical care is very low.

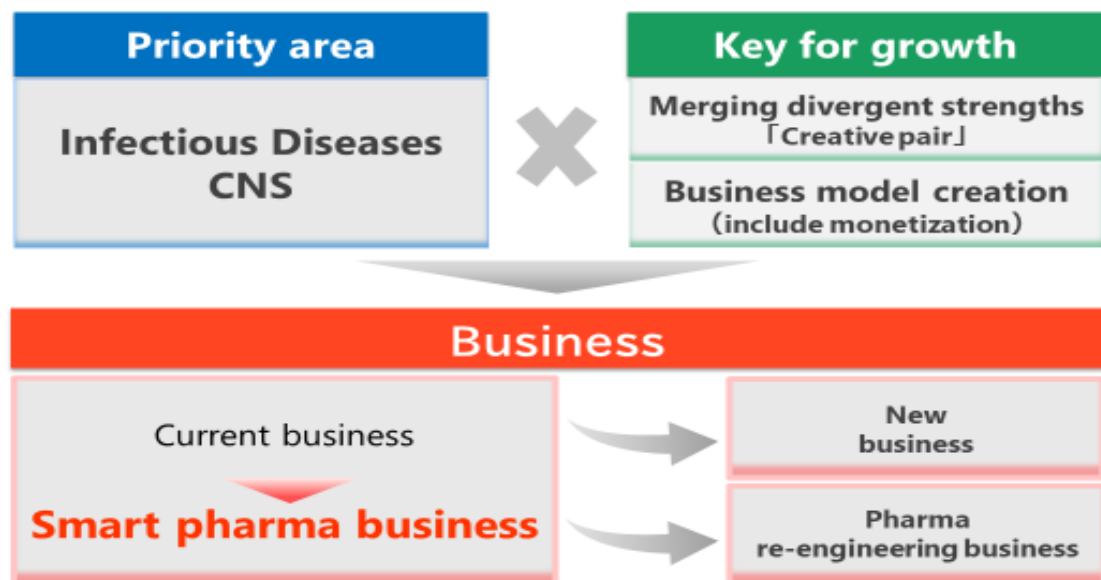
In response to these challenges, the new joint venture will be individualized to patients while leveraging our existing knowledge of science in addition to the Ping An Group's healthcare platform and medical network. We will create a mechanism that can provide a solution optimized for the purpose, so-called appropriate treatment, and a mechanism that can access the correct treatment.

It is also very costly in this value chain of pharmaceuticals, creating, building and selling, from R&D to manufacturing and sales. As a result, that is reflected in the price of the drug.

Therefore, we are working together with Ping An Group's technology to reform this value chain and dramatically improve productivity, and this time we are also working on places where we can provide high-quality and appropriate-quality pharmaceutical products.

Business Strategy

Steady business management by utilizing assets of both companies
+『Shaping the future of healthcare』



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This time, the businesses of both companies are focused on infectious diseases, which is still an issue in China. And, Ping An Group's current patient data or technology has a very high affinity, and it may be possible to provide a new solution to the current unmet needs, so CNS We are thinking about the area.

Again, this partnership has a different culture between the two companies. A typical pharmaceutical business is the so-called pipeline business of creating, building, and selling things. The Ping An Group is a so-called platformer, and the culture is completely different.

Of course, it was difficult to come this far due to this cultural difference, but there are still many interesting areas, and new ideas are born one after another. The fusion of these different strengths is the key to the success of this new company.

The other is that various ideas come up, but how can we make them into a business with this technology so that we can contribute the most to society? And How do we make the most profit? Every time I visit Ping An, I see new things and come up with a lot of new ideas, but how to make them into a business is very important for this new company. I think it's the key.

On the business side, on the other hand, we are not going to pursue this dream and invest forever. I am thinking of doing it as a business company. We will steadily sell and make profits. Therefore, we will first steadily launch a business by combining the existing assets of both companies, and then invest for the future at the same time.

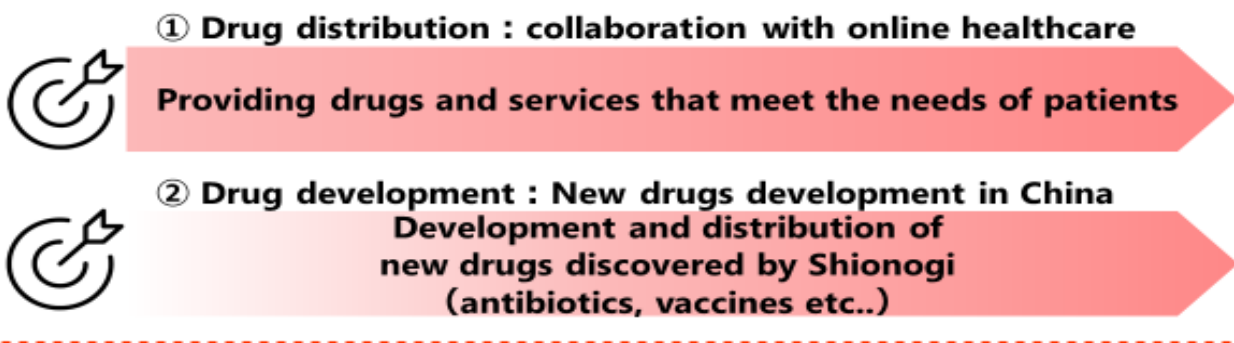
As a conventional pharma, we will first start a partnership with the current Ping An Group's sales platform, in which we will work on the issues, research, development, and sales improvement of this conventional business model. For example, in China, when selling an agency sales company intervenes. As a result, there is a huge

gap between factory shipments and terminal prices.

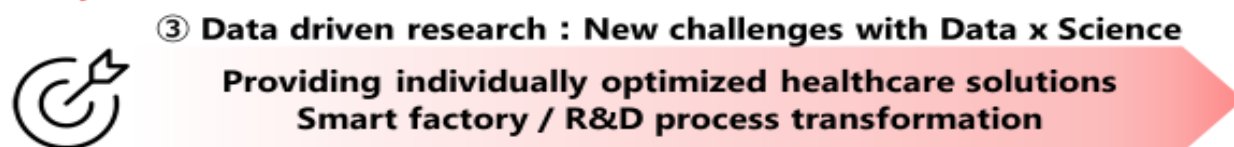
It is difficult to make a profit by such a mechanism. We have this in the past, and we will radically change it. Not only will we change it ourselves, but we will also improve the productivity of the industry. If we would like to contribute in such a way, we will show it in the form of Pharma Reengineering this time, but we would like to tackle such activities in this JV as well. ..

Direction of business activities

Steady business management by utilizing assets of both companies



Shape the future of healthcare



Realize innovation and creation by steady business management

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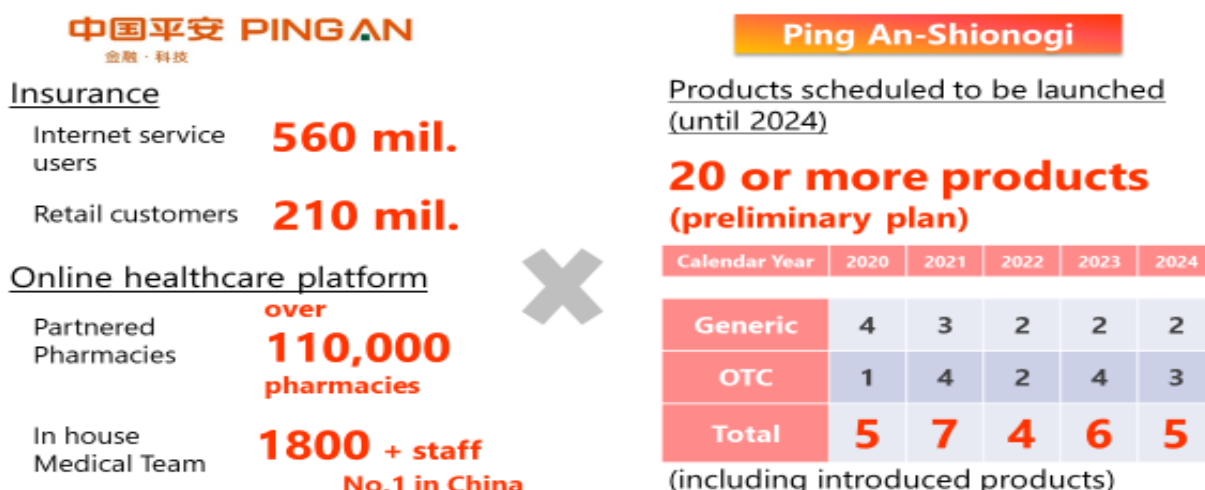
Regarding the direction of business activities this time, I have just explained a little, but first of all, let's make a steady business utilizing the assets of both companies, and now we will utilize the Ping An Group's online. In collaboration with this company, we will first sell generics, OTC products, and other products that are already sold locally, or products that meet the needs of China from Japan. We will start from such a business.

At the same time, we have products that have been approved in Japan or Europe and the United States, there was a story about Jessica's Healthy China earlier but I think we can contribute in the direction we are aiming for. These products are available. We will develop these products in China at an early stage, and also launch a new drug business. First of all, in the short to medium term, we will properly launch a business with this existing asset. In addition, we will work to significantly change the conventional business model in China and improve its efficiency and profitability.

On the other hand, what we want to achieve with this alliance is to create the future of healthcare. All drugs don't work for all patients. Patient data and AI technology. By combining these technologies of the Ping An Group, our drug discovery, and our experience in developing new drugs, the patients can be stratified and the appropriate medicines can be provided properly. We will create such a system so that patients can receive the correct treatment.

We will also drastically improve this efficiency of drug research and development and manufacturing. Ultimately, we will realize such efforts. At the same time as the business that utilizes existing assets steadily, the direction of the business that this JV is thinking about is to work toward this realization.

Distribution Channels and Planned Numbers of Products for Launch



Contribute to revenue from early stage (steady management foundation building) by continuing launch of products into Ping An Group sales channels

Then, I will briefly explain each of them.

First of all, regarding online medical care, Mr. Ping An Group has about 110,000 alliances with this online medical care platform. It is often said in Japan that there are 50,000 dispensing pharmacies, dentists and convenience stores, but in general, there are 20,000 drug stores in Japan, which are mostly chain drug stores. As I mentioned earlier in Japan, the number of dispensing pharmacies is 70,000, but this alliance alone is more than 100,000.

Currently, it is said that there are 500,000 pharmacies in China as a whole, so we cover more than one-fifth of them.

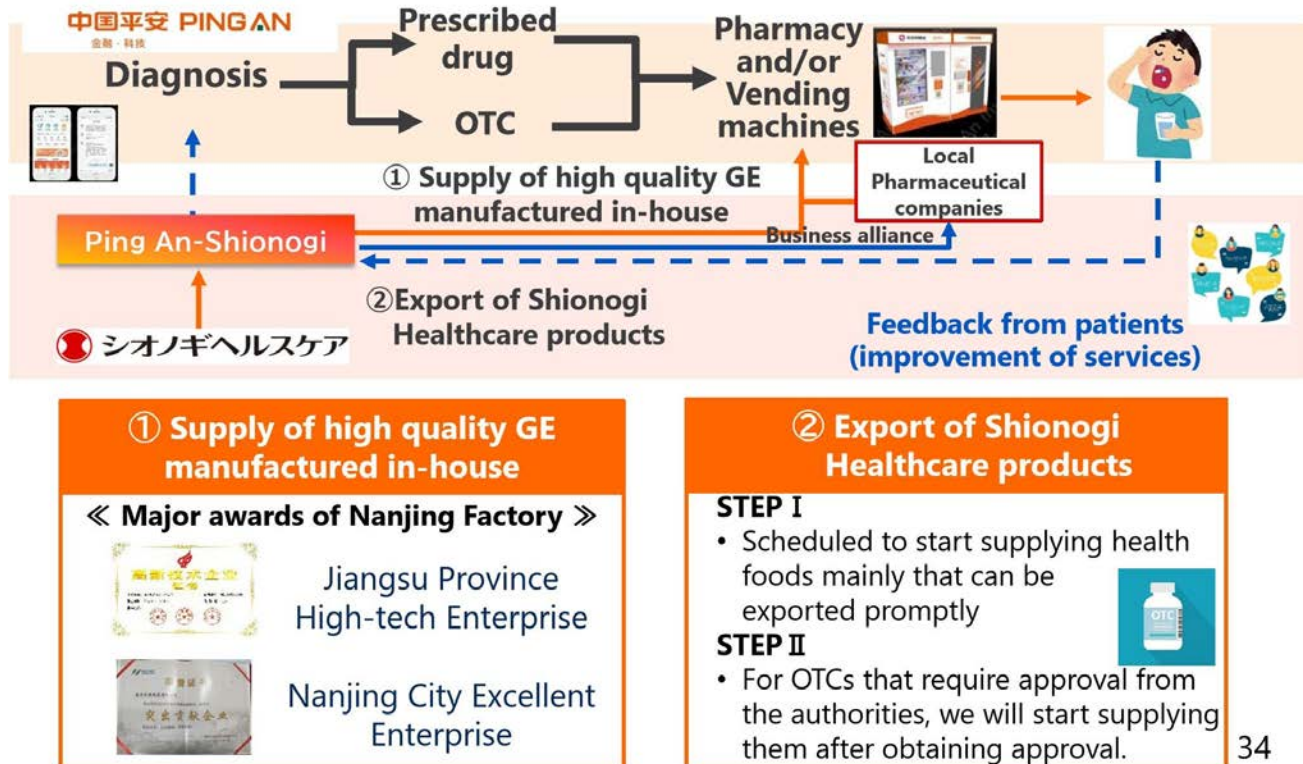
There was also talk of vending machines, but when we first heard about it a year ago, Ping An said that it was 1,000 units, but when we talked about it at the meeting last week and last week, it is now 3,000 units. I said 3,000 units, but the size of the stores of major Japanese drug stores is about the size of two chains combined, so it is expanding very large and accelerating.

We are currently in discussions with such a sales channel, but we will continue to release products. There are some waves, but it will start right now, so we will concentrate on what we can put out soon in 2021.

First of all, we need to get approval. With that in mind, we will start from now, and from 2023 onward, we will gradually supply new products for the Chinese market. With this in mind, we will start with such efforts in order to steadily start this company by combining the existing assets of the Ping An Group's sales channel assets and these.

An Example of Flow of Products and Services

Highly efficient sales model without a broker



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And this is a flow chart of how we're going to be working. First of all, AI makes a diagnosis using a smartphone etc., and finally the doctor make a definitive diagnosis Patients can get a prescription and receive a medicine at a pharmacy, or if it is an OTC, patients can walk and buy it at a vending machine. Utilizing this platform system, we will sell existing assets such as generic products which have been evaluated as equivalent to the original products in terms of quality in China and OTC. In addition, we will continue to develop generic medicine that meet the needs of patients who use the Ping An Group platform include Good Doctor.

In such places, we will start with the ones that do not require approval of so-called pharmaceuticals, such as health foods, as the ones that may be deployed immediately, and will continue to work on acquiring OTC certification in parallel. In addition, we will export pharmaceutical products from Japan in earnest. In this way, we would like to gradually add existing assets to our business.

(Reference) Societal Issues of Cancer and Infectious Diseases in China



Healthy China 2030*

Actions to prevent from

- cardiac/cerebrovascular diseases
- **Cancer**
- chronic respiratory diseases
- diabetes
- **Infectious diseases**

Carbapenem-resistant rate of *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae* bacillus, *Escherichia coli***

Carbapenem-resistant <i>Acinetobacter baumannii</i>	56.1%
(resistant rate in ICU) Carbapenem-resistant <i>Acinetobacter baumannii</i>	81.2%
Carbapenem-resistant <i>Pseudomonas aeruginosa</i>	19.3%
Carbapenem-resistant <i>Klebsiella pneumoniae</i> bacillus,	10.1%
Carbapenem-resistant <i>Escherichia coli</i>	1.5%

Issues of cancer pain relief

- the amount of opioid prescriptions is expected to increase with the promotion of palliative care, but on the other hand, low awareness of opioid side effects

Issues of infectious diseases treatment

- Increasing antimicrobial resistance (AMR)
- Inappropriate use of antimicrobial drugs

Issues of infectious disease prevention by vaccines

- More convenient administration routes other than injection
- Varieties of COVID-19 vaccines

* http://www.gov.cn/zhengce/content/2019-07/15/content_5409492.htm

** NCCPAA & CARSS 2019

Next, I would like to talk about new drugs. Now, "Healthy China 2030" is listed in these five items in China. Among these, Shionogi has new drugs that have already been approved in Europe, the United States, or Japan. If they can contribute to the social issues of China, we will start development at an early stage and aim to obtain approval in the shortest time.

One is an infectious disease. There is also the issue of antimicrobial resistance in China. This shows the carbapenem-resistant rate of bacteria. For example, in China, *Acinetobacter*'s resistance to ICU is over 80%. Although it cannot be simply compared with Japan, there is a figure of 2% in Japan regarding the resistance rate of imipenem, which is a carbapenem antibacterial agent. After all, antimicrobial resistance has become a major issue in China.

In addition, opioids are prescribed as analgesics in the medical field for the pain of cancer patients. In China, compared to Japan and overseas, guidelines for the use of opioids for the care of this pain are still inadequate. In addition, there is a low awareness of the need for treatment for pain. This time, in the areas of infectious diseases and pain, we believe that existing assets can immediately contribute to medical care in China.

Providing Solutions to the Societal Issues in China by Drug and Vaccine Development

Antimicrobials 「Cefiderocol」

- Providing new options to multi-drug resistant gram-negative bacteria infection treatment
- Effective to WHO's all three top priority carbapenem resistant bacteria



Launched in
U.S.A, EU

Opioid-induced constipation treatment 「Naldemedine」

- Effective pain control
- Appropriate use of opioids
- Improving QOL of cancer patients



Launched in
U.S.A, EU,
Japan

Providing to patients as soon as possible by taking advantage of the clinical data used for approval in US, EU and Japan

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Shionogi has Cefiderocol, which has been approved in Europe and the United States as a new option for multidrug resistant gram-negative bacteria, and Naldemedine, a treatment for opioid-induced constipation. Both are now in line with China's health policy, and we believe that we can fully contribute. We would like to make the best use of each approval data and existing data, and aim to obtain approval as soon as possible, with the smallest possible clinical trials.

Solving Societal Issues in China by Novel Vaccines

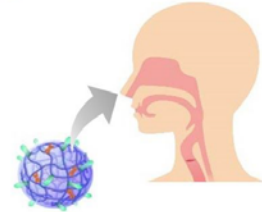
umc Addressing Unmet Medical Needs
株式会社UMCファーマ



Vaccine

- New manufacturing technology
- New administration route technology

HanaVax



cationic nanogel delivery formulation *

New manufacturing technology

- BEVS** technology can save time for production, which allows faster and timely vaccine supply
- Stable vaccine production in terms of product efficacy and yield compared to inactivated vaccine

New administration route technology

- Simple nasal administration by cationic nanogel delivery formulation
- Prevent from infection itself
- Likely to work by cross-protection even if the epidemic pathogen are different from prediction

Contribute to the prevention of infectious diseases by utilizing nasal administration and recombinant protein vaccine

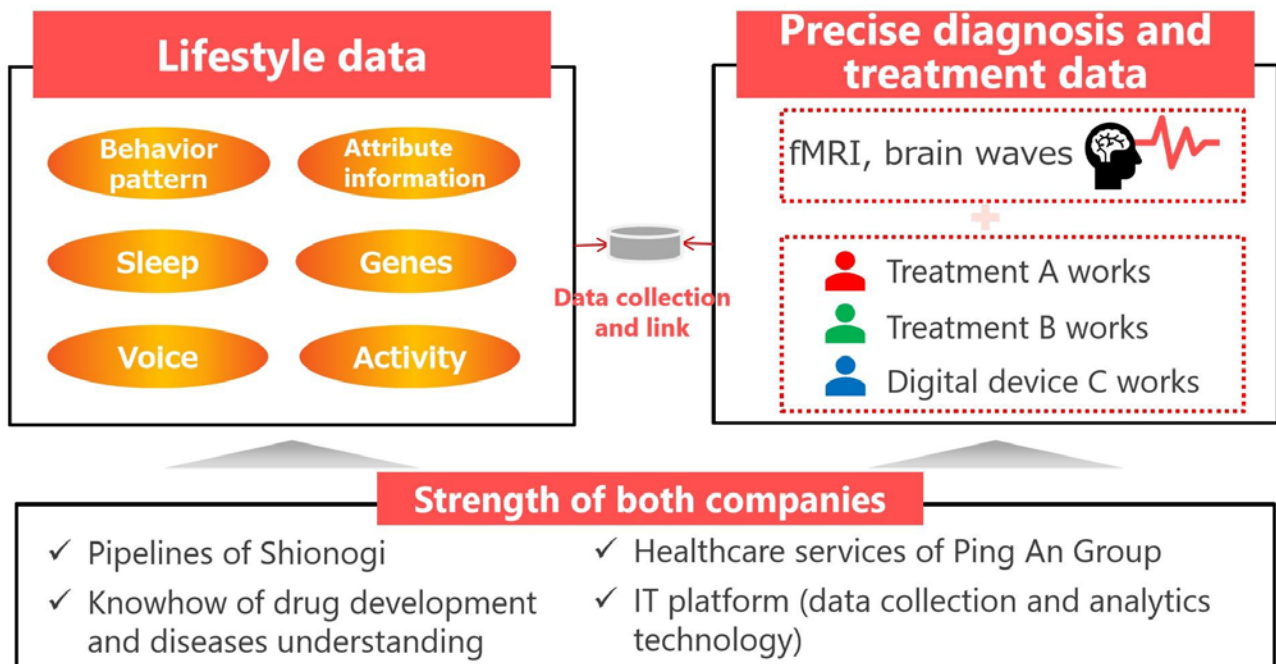
* HanaVax's cationic nanogel delivery formulation provides a protective carrier for antigens and consists of a polysaccharide pullulan molecule modified with cholesterol and cationic amines. The nanogel helps antigens increase their retention on the mucosal surface and their gradual uptake by the immune cells. This effectively initiates the induction of both mucosal and systemic immunity. Figure: [Nature](#). 2010 Jun; 9: 572-578

** Baculovirus Expression Vector System

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As for infectious diseases, we are also considering utilizing the vaccine manufacturing technology currently possessed by the Shionogi group as a preventive measure. For example, inactivated vaccines have been developed for COVID-19 in China. In the development of such vaccines, we will consider utilizing new technologies as a technology lineup. In addition, there is an opportunity to contribute to the prevention of infectious diseases by using new technology for the administration route of vaccines. At PING AN- SHIONOGI, we would like to develop our business not only for therapeutic drugs but also for vaccines in this way..

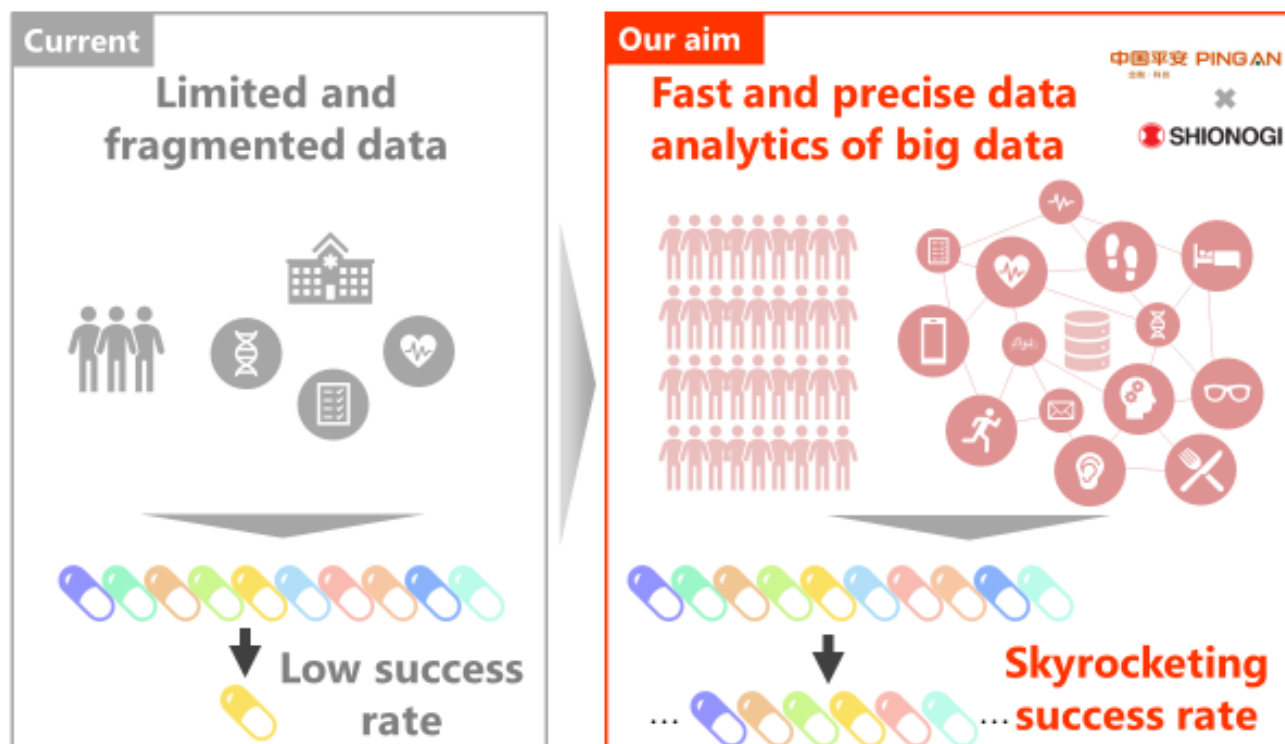
R&D Concept - Data driven research -



Building a patient stratifying platform by linking lifestyle and diagnosis data to treatment responses 40

Finally, the challenge is to combine data and science. We would like to utilize the strengths of the Ping An Group in this joint venture (JV) to achieve this. There are various new ideas this time. Regarding this new idea, we would like to accelerate the activities at this JV so that we can have an opportunity to announce it to everyone as a result. The basic idea is to use lifestyle data. For example, the Ping An Group is widely working on things like smart cities. By associating so-called lifestyle data with treatment data, it becomes possible to stratify patients with a certain disease and properly provide treatment that suits each patient. Create exactly that mechanism. This is one of the major research goals.

R&D Concept - accelerating data driven drug discovery -



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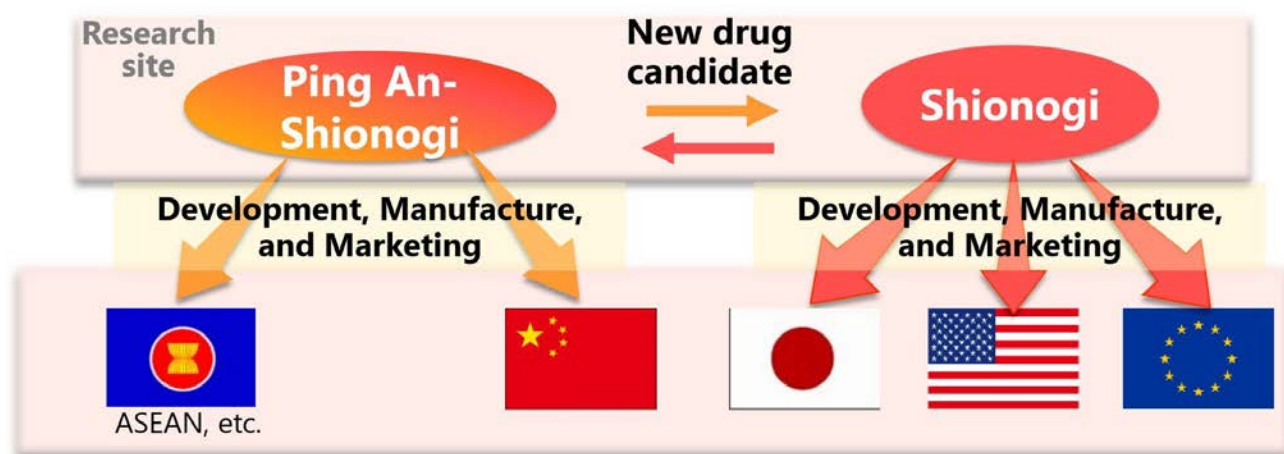
The other is to improve drug discovery productivity. We still use a variety of data, but it can be limited or fragmented. In the future, we believe that we can dramatically improve the success rate of this drug discovery by associating a large amount of data and analyzing it with high speed and high accuracy. In this way, it is conceivable in the field of research and development that the conventional research and development process of Pharma will be dramatically improved and made more efficient.

Continuous New Drug Discovery by Two Drug Discovery Engines

- **At the beginning of its establishment, Shionogi drug candidates are introduced and developed in China.**

In the medium to long term

- **Discover drug candidates at two strong and independent research sites**
- **Mutually license those candidates for global development**

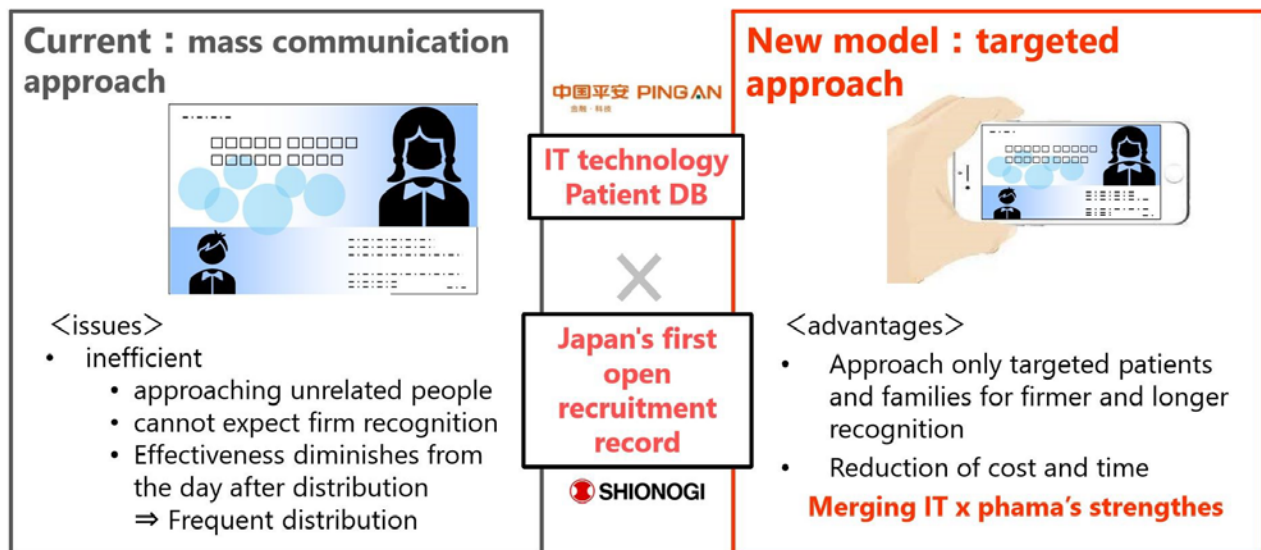


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At first, we will utilize existing assets, that is, introduce Shionogi compounds and develop them in China. These activities will be the main focus for the first year and two years. On the other hand, what we want to achieve at this JV is to properly establish this JV as a research site. We aim to create new drug candidate from this JV.

We will not only introduce new drug candidate from Shionogi and develop them in China, but also aim to create new drug candidate as an independent research site. In addition to developing business with compounds created from JV, we will introduce a pipeline from Shionogi. This will ensure a continuous pipeline. Establish such a mechanism. To that extent, we would like to strengthen the research function of this JV.

Realizing Efficient Drug Development Processes



Reduction of clinical trial period by taking advantage of an efficient patient recruiting model

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Regarding Pharma Re-engineering, we are now discussing how to utilize Ping An Group's various technologies in Pharma's conventional process. First, we will work on improving the traditional process. And if this initiative really leads to the improvement of productivity of the entire pharmaceutical industry and the contribution to patients, we would like to provide it as a service.

This is just one example, the development of new drugs. In the past, Shionogi has also recruited subjects in clinical trials. After all, it is very difficult to recruit patients depending on the disease due to the development of new drugs, and it may take time. At that time, we believe that it will be possible to utilize the IT technology of the Ping An Group to directly recruit subjects to the target patients.

I think we can make such new efforts, and if we establish this system, we will improve the productivity when we proceed with development in-house. Furthermore, since this is an issue for clinical development in the industry, if it is a solution to the cost, we would like to consider providing it as a service in order to increase the productivity and efficiency of the industry.

Smart Factory

Digital management processes of pharmaceutical manufacturing originated from China



- **Realizing both improving GMP control and low cost**
- **Quality assurance technology for new manufacturing processes like continuous productions**

* GMP (Good Manufacturing Practice) : practices and guidelines of drug manufacturing control and quality assurances 45

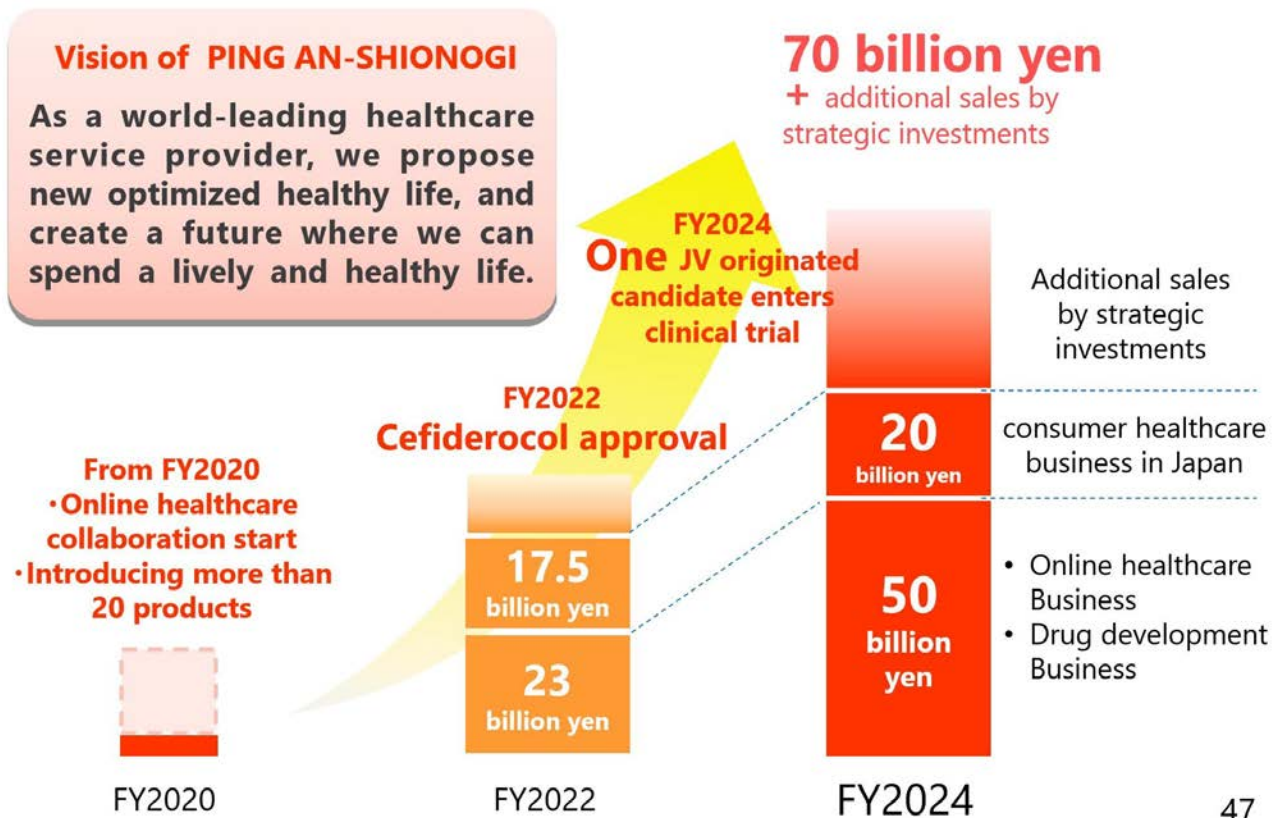
Next, I would like to talk about manufacturing. The manufacturing industry is generally said to improve productivity on a daily. This concept is called the learning curve. For example, it is generally said that the capacity of memory, etc., increases year by year. On the other hand, the concept of learning curve does not easily apply to pharmaceutical manufacturing.

GMP is a rule that must be created by really doing the prescribed work, validating that the prescribed quality is obtained, and monitoring it all the time. It's a very nice rule. However, unfortunately, there are some aspects that make it difficult to change on the learning curve like in the general manufacturing industry.

Even in this situation, the Ping An Group has very good monitoring technology. If we can use that technology to ensure that the prescribed work is done properly, we can improve the procedure every day, and if we can create a system that guarantees quality, we can change the concept of GMP. I think I can do it. By doing so, we believe that it is possible to improve production costs as well.

Ping An Group's has a technology that can really be used for it, and this time, we will work on creating such a system at our own factory. If it is useful, we are thinking of providing it as a system that can be utilized throughout the industry.

Sales Vision



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As mentioned above, we will steadily develop our business using existing assets. In addition, we will promote research and development that integrates AI technology, which is Ping An Group's strength, patient real-world data, and such things. We will also improve the efficiency of this process in the pharmaceutical industry. I have explained about these plans, and finally I would like to explain our sales vision.

This time, from fiscal 2020, we are proceeding with the alliance of existing products and sales platforms of both companies, and we are going to start this immediately.

However, as I will explain later, the calendar year in China is until December, so the recording of sales revenue in FY2020 will be limited as a JV.

This time, by first selling Shionogi's existing generics, OTC, on the Ping An Group's sales platform, it will be 23 billion yen in China in FY2022. Japan's OTC sales target of 17.5 billion yen will be added to the umbrella of JV in Hong Kong this time, so the total JV family will be 40.5 billion yen. And in FY2024, it will be 50 billion yen in China and Asia, and 20 billion yen in Japan's OTC.

Furthermore, we will actively invest in what we may sell on this platform. Whether it's a technology or a product, this involves a variety of possibilities. This time, we will aggressively invest in assets that will contribute to sales by FY2024 or long-term sales by FY2030. As a result, we would like to aim for a further increase of more than 70 billion yen as this JV family in FY2024.

Guidance of FY2020

- **Fiscal year end of JV**

- Ping An-Shionogi (Shanghai): Jan. to Dec.
- Ping An-Shionogi (Hong Kong): Apr. to Mar.

- **Sales of FY2020**

- Ping An-Shionogi (Shanghai)
 - > Only December sales of Shenzhen sales company and Nanjing factory will be counted
- Ping An-Shionogi (Hong Kong)
 - > OTC sales of Jan. to Mar. of 2021 in Japan will be counted

- 
- **No guidance change will happen in FY2020 from above reasons**
 - **Full yearly revenues will be generated from FY2021**

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JV's financial results are the sum of Ping An-Shionogi (Shanghai) and Ping An-Shionogi (Hong Kong), Ping An-Shionogi (Shanghai) is the calendar year (Jan. to Dec.), and Ping An-Shionogi (Hong Kong) is the fiscal year (Apr. to Mar.).

Therefore, for FY2020 sales, Ping An-Shionogi (Shanghai) will record only December sales of Shenzhen sales company and Nanjing factory.

On the other hand, Ping An-Shionogi (Hong Kong) is counted as OTC sales in Japan from Jan. to Mar. 2021. Guidance changes will not occur in 2020 from such a place.

We plan to record this sales and revenue for the full year from 2021.

that's all. thank you for your attention. **Kyokawa:** Thank you very much, Mr. Yoshida. Once again, we would like to open the floor for question and answers. First of all, I would like to entertain any questions from the floor and then solicit questions from online. Maybe we might start from the analysts first of all.

Question & Answer

Sakai: Credit Suisse, Sakai. I couldn't ask a question in the previous part, so I'll ask you a few questions. I wanted to ask Ms. Jessica whether the Good Doctor can be monetized in peace. In other words, it seems that the matching between the doctor and the patient has ended, and the fee has not come in. I don't know what's going on with online medical care in China, but in that sense, Heian itself has left this system behind, and when I thought about something to monetize, a partnership with your company did not emerge. I wonder if. How important did your company occupy as an agenda in this alliance? First, on this point.**Teshirogi:** Thank you. Good Doctor is a listed company, so you can see PL etc. there. We are aware that we are not in a state of making such a big profit. Of course, how to utilize the life science database is the basis of the healthcare ecosystem that Jessica Tan is talking about. In terms of how to utilize it, selling new drugs or generics like ours would be of great significance, at least in terms of using their platform, in a dialogue with us. It is coming out inside. We don't know how important it was to them in deciding on the partnership itself. I think they think it's important to create new drugs at least in the future, but if you think about it in a nutshell, how to use Good Doctor was on one of the agenda..

Sakai: Thank you. Then I would like to ask Mr. Yoshida, which means that sales will be 50 billion yen by FY2024, but as this business grows in the future, the impact on the overall profit margin of Shionogi will be roughly me. Seen from the outside, it probably goes down considerably. On the other hand, I think the main point of the explanation is that by minimizing the patent cliff, there will be some offset. I would like to ask you what kind of outlook you have.

Yoshida: I haven't included profits this time, but the current our business in China until last year is not really big profitable. However, this time I am thinking about the sales model in China, and since there are so many middlemen that I explained earlier, it is a new sales platform, and this is a dramatic improvement in profits. We are planning to make a big and dramatic improvement with such a system that both companies, Good Doctor, who was asked in the previous question, and this JV will share profits. And since there is aggressive investment in the future this time, we will refrain from disclosing the profit margin this time in balance with that, but this is to make sure that the profit margin of so-called conventional Pharma can be obtained. By improving the generic sales model, we are planning to make a big change in FY2024..

Sakai: I understand. Finally, I don't think anyone knows what the business environment in China will be like in the long run. At the moment, Japanese companies that are successful in China are also quite active in managing cash, bringing money out, and utilizing assets in China abroad. Please tell us how you thought about the risks in this area and how you formulated this business model.

Yoshida: As a result of a great deal of consideration on that part, we are also a JV in Shanghai with the intention of doing business in China together with the Ping An Group. And one more thing, regarding various things to take out, for example, there was talk of cash now, but in addition to that, when doing various licenses etc., Hong Kong is of course better for doing business flexibly. I think you have pointed out that. At the moment, we are considering balancing the two options, Hong Kong and JV. Of course, both companies will continue to watch the situation so that they will not hinder the expansion of this business. If we need more options from there, we would like to consider it, but at the moment, Hong Kong and Shanghai are thinking in that position.**Sakai:** As a confirmation, is it okay to understand that intellectual property rights belong to Hong Kong when a new drug comes out?

Yoshida: At the moment, we think that the rights to the new company will come from Hong Kong when it is finally developed.

Sakai: Okay, thank you.

Hashiguchi: Hashiguchi from Daiwa Securities. Looking at the drug discovery, what is the expectation on the drug discovery positive impact? I'd like to know your commitment. Page 44, two companies will be generating new drugs, Yoshida-san mentioned that you will be transferring highly capable professionals to JV. I feel you may be compromising the R&D capability of SHIONOGI. Of course, R&D capability of JV improves and if you have a lot of success, you can also enjoy the profit sharing. However, what is the expectation on the improvement in the drug discovery through this data-driven approach? What is your expectation and commitment? And as SHIONOGI's R&D capability are being split into a new joint venture, I'd like to know your commitment.

Teshirogi: At the moment, it may be called the ideal theory, but I think that we will create two R&D centers, Japan and China. On the system, at the moment, these two centers not to be connected. So, the young researchers may have SHIONOGI's knowhow, but the database itself will not be exchanged. So, CNS and infectious diseases will be priority areas, but I hope that the two centers will compete for what we have made there. I'd like to ask you to forgive me for the details today, but in what Jessica said, our hint of this JV is a little hidden.

So, when we are sharing our assets to JV, this structure does not necessitate other of the resources. So, SHIONOGI will have the development rights for Japan, US, and Europe, but the down payment and royalty is very low. So, we will make JV the most profitable. So, two parent companies are not going to achieve a lot of money from JV, so I mentioned that there will be JVs in Shanghai and Hong Kong, but our commitment is to come up with a business model to make these local JVs a success.

For example, Pin An also sends out a very good person of AI or data scientist, but even if there is a story that the salary is very high, it does not mean that he will pay a huge amount of money there. Instead, after working as an employee of JV, the structure is to think about how JV is most profitable. For example, how big down payment does Shionogi take when issuing Cefiderocol in JV? Or, when Pin An lets JV use a very interesting AI app for virtually free, how much do you pay for that AI app? In this regard, we will make this JV the easiest to use for both companies.

As Jessica-san said earlier, when talking to other companies, the discussions are very long because of various prices and schemes, but Shionogi and Pin An are focused on how to maximize this JV and that's why this discussion is extremely smooth and our commitment is clear. AI, especially personal data, is quite sensitive, but at the moment, if we are supposed to work in China, we will not be able to use personal information at least more than in Japan, the United States and Europe. We think that the degree of freedom is quite high. For example, when discovering drugs for CNS-related diseases, it would be a great advantage to be free to use them. Therefore, we can do things in China that we cannot do in Japan, and it is very big that we can get licenses in Japan, the United States and Europe for the deliverables that come out there without big royalties or down payments.

Hashiguchi: Thank you very much.

Kyokawa: Maybe we can entertain questions from analysts if they have any questions.

Sanpei: My name is Sanpei from Fidelity Investments. At the beginning, President Teshirogi said that there may be other talks about such partnerships as JV and the creation of new platforms. When such a thing comes out in the competition, I think that this JV wants to collect big data in the end, so I think it would be a problem if too many similar models come out. Do you ever buy a competitor at that time? If you make it profitable, this JV itself will have that kind of physical strength, and you may be able to do it with your own funds, but if a big competition appears before that, you may have to make an additional investment in the parent company. At that time, will you continue to maintain the investment ratio of 51:49? Does that mean that no additional investment will be made at that stage? Can you tell us what kind of response is expected in such a case?

Teshirogi: As Mr. Sanpei said, at this point in time, we cannot see what kind of business we will actively invest in. We are discussing with Pin An that we will increase capital by observing Principle 51:49. Even in China, as is clear from this corona vaccine, it is certain that some interesting companies were appearing, state-owned or private-sector. If a JV buys a company in China, the amount of money is almost the same whether it is a business investment in the main body or a business investment in this JV. After discussing with Pin An, we will consider whether it would be beneficial for this JV to buy it in the future.

From the perspective of creating a business model that can grow and is not a pharmaceutical business that relies solely on patent cliffs, as I mentioned earlier, if we can judge that it is interesting for our future, I'm thinking of dealing with it. Pin An has established JV with various companies so far, doing quite a lot to go public while maintaining the percentage of investment. They have much more know-how in that area than us. I would like to maintain the 51:49 concept, but of course we will consider it if listing the stock has significant benefits for the future of the JV. They are very capable of such financing, so I would like to continue discussions on how to make the most profit.

Sanpei: Thank you.

Kyokawa: Thank you very much. So, any questions from the floor, from the media, please?

Ishi: This is Ishi from Iyaku-Tsuhshin. It's about vaccine. Which kind of vaccine are you going to be focusing on? And within the vision, how much is vaccine going to be contributing to your sales?

Teshirogi: We are preparing to start clinical trials of this recombinant protein vaccine in Japan from the end of the year. But looking at the world, vector and inactivated vaccines are the main types, and mRNA/DNA or recombinant protein types are not so large in clinical trials.

However, when considering the technology portfolio, I think that the benefits of recombinant protein vaccines are enormous. First of all, we will discuss bringing a coronavirus vaccine. We are actually developing an influenza vaccine before world becomes a pandemic, so it is quite possible that we will bring it in some cases. In fact, I've always thought that nasal administration is more beneficial than injection, and that it has a huge advantage for emerging countries. I would like to proceed while talking with Pin An. After all, if you don't make things locally, it's hard to import all vaccines. At some stage, I think we should consider building a vaccine production factory under the name of Pin An-Shionogi.

Hashimoto: This is Hashimoto from Nikkei BP. So how many people are you going to be starting with? And in FY2024, how much sales are you going to be having? And how are you going to be growing as JV at scale in that point in time, please?

Yoshida: For this fiscal year, right now, we're scheduling nine people to work. We're starting with nine and actually, we have to start our activity or else we are not quite sure how much resource is needed. Therefore, we will start the team by nine and gradually grow. But then the scale is that by 2024, it really depends on how the sales goes.

Infectious disease is something that we're going to be doing in-house and including the local staff for FY2024, we consider about 50 people. And after that, it really depends on how much sales system we're going to be having in another Disease area. So, we would like to create a sales team without following the prior business model that we have. Of course, it differs by much how sales amount we're going to be having. However, basically for R&D, utilizing CRO outside or else maybe SHIONOGI R&D center could be working on some consignment work. Therefore, external entity is going to be helping out the JV. So, with the brain part, the core personnel, we're thinking about 50 people working there.

Hashimoto: Thank you. Another question. A product may create sales at once is what you have mentioned, such as functional food and generic drugs could be. So, how much are you going to be creating for a year, please?

Yoshida: In China, there are generic medicines we have already sold. It's called brand generic and there's some medical drugs that are already guaranteed to have a same kind of effect compared to the new drugs. There are 3 items now. For that, the OTC products will be sold and within the sales channel, we are trying to proactively make sales. Therefore, the sales right is something that we are working on to secure simultaneously at the same time. And by gradually owning such rights, every year, we're going to be adding five items or more. And this should be based on concrete, solid needs of the market. And it could be the case that maybe the number of items could be even more than five launched per year.

Hashimoto: Thank you. Another question. The slide page47 says "consumer healthcare business in Japan". Can you tell me what it means?

Yoshida: In the appendix, we have company structural chart included. The JV Hong Kong, underneath that umbrella, we have SHIONOGI Healthcare, the OTC company. So, the OTC is going to be working in China and Asia, Southeast Asia is what we aim. But then, the traditional business is going to be JPY12 billion and in FY2024 in Japan, it's going to be JPY20 billion as we scheduled. Since this business is under the umbrella of JV Hong , that is what we describe.

Hashimoto: The OTC business done in Shionogi Japan is going to be transferred to the JV in Hong Kong?

Yoshida: Yes. So, what has worked in Shionogi Japan currently is going to be transferred to a joint venture Hong Kong.

Nakano: Nikkan-Kogyo, Nakano. In some of your presentation, you mentioned manufactured in China could be imported back to Japan. So, what will be the product? And can you tell us if there is such a view that China has a higher degree of development accuracy than Japan, the United States and Europe?

Yoshida: Especially for CNS and infectious disease, with the new joint venture, those are the issues that we would like to focus on. And in one method, starting from the traditional product, try to make repositioning and re-indication, utilizing and leveraging the Ping An data analysis, maybe that could be a new way of drug discovery. But, at this point in time, we would like to focus on the CNS-related product.

Nakano: I have a question to President Teshirogi. In the new Midterm Management Plan, you have an investment of JPY500 billion. And now, we are under COVID-19 circumstances and many are working on developing the vaccines or new infectious disease treatment, and you are also aiming to step up your business in China. So, what are your thoughts on asset allocation, resources allocation?

Teshirogi: Well, thank you for your question. That's a very challenging question. In the US, it's in the run-up to presidential election, and things are very much heated. I think it's time for us to look a little further away as to whether the US pharma market can continue to be as strong as it is now.

Outside of Japan, we have been focusing on investing in US, but US, Europe and China and Asia, maybe we should be having a better balance in our investment. So, we should be thinking about triple regions. Just depending on US market alone, we may have substantial risks. So, if we see the America is the strongest market and we should be mainly investing in US, there may be a lot of different ideas, but if you look at the pharmaceutical market, this is likely to undergo some transformation. Until now, we have focused on the United States, but in addition to that, we are focusing on investment destinations in Europe and Asia such as China.

Wada: Monthly Mix, Wada. This is a question to President Teshirogi. In the process of becoming a platformer and aiming for new business transformation, Shionogi is targeting China and Asia locally, so it is understandable that you will partner with Ping An. But In terms of business, when it comes to this field, there are already things that are quite dominating in European and American markets such as GAFA. Please tell us how you feel the difference between GAFA and Ping An.

The other question is that when you go to the Asian market from now on, I think you will work with Ping An. Will this change the way of business, such as the European and American pharmaceutical businesses, and the so-called China, Asia, the Middle East, and Africa that we are going to pursue? Could you tell us the outlook?

Teshirogi: Yes, the picture is very complex, but partnering with Ping An to be provided as a platform, this is also one of the important elements for our partnership with Ping An.

But also how to create new drugs and how to offer those new drugs and how to use the personal information and as a provider, as the new drug developer, when it comes to privacy information, this is one of the big hurdles. The database on the side of healthy people, including the life insurance data and non-life insurance data that Pin An has, is very attractive. I think that is where the gap is, compared to drug discovery in Japan, the United States and Europe. There is also a social problem in China, where the population is aging, so I am wondering if we can create a model that can somehow provide a solution.

We do talk with players like [GFR] and Amazon also engaged with our distribution territory, so we do talk to them, but for the time being, the existing health care system to be offered has an already-established model. So, it is not easy for us to enter that established model, so we can't achieve businesses that can be monetized in only four to five years. And if you look at the US and Europe, they are also having fiscal stimulus at the moment, so their financial capability on health care may be good for a short time, but all of the country will suffer on a long-term basis. So, the situation may change over time, but I don't think that the method of providing healthcare will change in such a short period of time. In that sense, I think the new market is actually easier to build in terms of incorporating IT systems and providing services efficiently. While looking at the existing market, we would like to aim to export the new model to other countries if it succeeds.

Wada: Thank you very much for your answer.