# **Event Summary**

[Event]	42nd Annual J.P. Morgan Healthcare Conference	
[Date]	January 9 <sup>th</sup> 2024	
[Time]	8:15-8:55 (PST)	
[Venue]	The Westin St. Francis, San Francisco, California	
[Speakers]	Teiichi Goto	President & CEO, FUJIFILM Holdings Corporation
	Toshihisa lida	Corporate Vice President, General Manager, Life Sciences Strategy Headquarters General Manager, Bio CDMO Div., FUJIFILM Corporation Chairman, FUJIFILM Diosynth Biotechnologies
	Yutaka Yamaguchi	Corporate Vice President, Deputy General Manager, Life Sciences Strategy Headquarters General Manager, Life Science Business Div., FUJIFILM Corporation Chairman & CEO, FUJIFILM Irvine Scientific
	Lars Petersen	President & CEO, FUJIFILM Diosynth Biotechnologies

# **Presentation**



42nd Annual J.P. Morgan Healthcare Conference

### A Better Tomorrow Starts with You

Teiichi Goto President & CEO FUJIFILM Holdings Corporation

#### Toshihisa IIDA

FUJIFILM Corporation, Corporate Vice President General Manager, Life Sciences Strategy Headquarters General Manager, Bio CDMO Div. Chairman, FUJIFILM Diosynth Biotechnologies

January 9, 2024

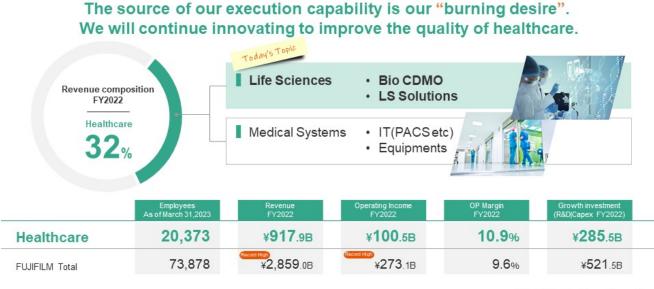
FUJIFILM

#### **Teiichi Goto:**

Good morning, everybody. I'm Teiichi Goto, the President and CEO of FUJIFILM Holdings Corporation. It is a great pleasure to be invited to speak here again this year.

Since our founding in 1934, Fujifilm has continually produced innovation to meet our society's needs. With our origins in photographic film, we now have four areas of focus for pursuing value from innovation, healthcare, materials, business innovation, and imaging.

#### FUJIFILM Snapshot



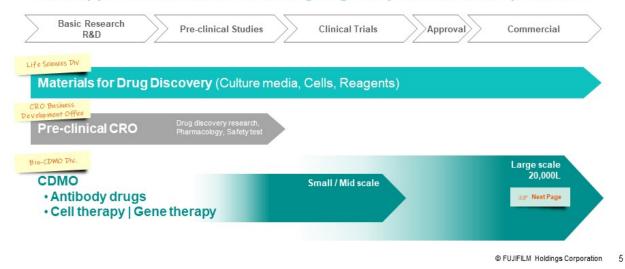
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Despite soaring resource and energy prices, and tight supply-demand conditions for materials, we posted record high figures in fiscal year 2022 for both revenue and income. This has enabled us to meet our medium-term management plan targets one year ahead of schedule.

The healthcare segment consists of medical systems such as IT and equipment, as well as life sciences, including bio, CDMO, and life sciences solutions. Today, I would like to speak specifically about our high-growth life sciences area, which we are continually bolstering through aggressive capital investment.

FUJIFILM Life Sciences Business Area

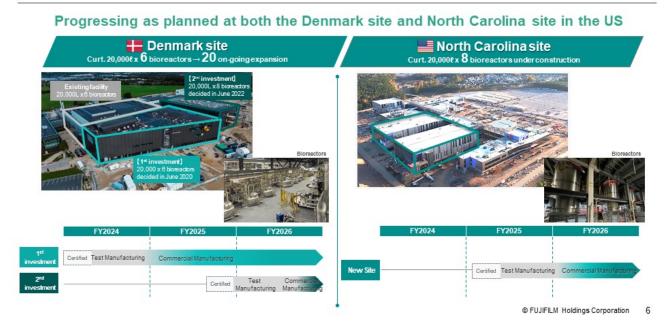
# Aim to expand our business by providing one-stop value as a company that supports the creation of cutting-edge biopharmaceutical products.



Currently, we are providing CDMO services for biopharmaceuticals, having attained 75 percent of global share of iPS cell-related ventures, 20 percent of the global share of cell culture media, and 800,000 variety of reagents.

Additionally, with our drug discovery CRO services, launched at the beginning of this fiscal year, we are making strides in the pharmaceutical industry by establishing a total support system from drug discovery research to process development, clinical drug manufacturing, and commercial production.

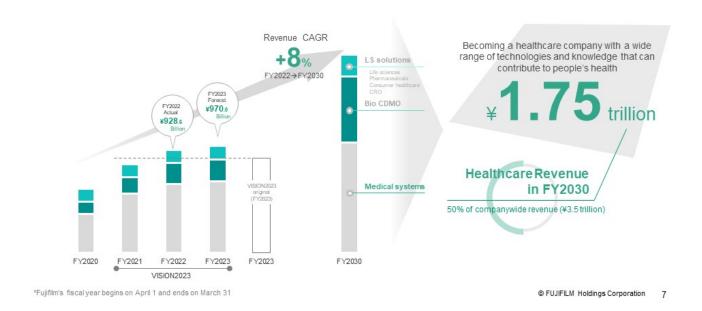
#### Antibody drugs Manufacturing Capacity Expansion in Denmark and US



With an investment of approximately US \$7 billion in bio-CDMO, we are expanding our production capacity. The first phase of our new Denmark site is currently in the step of validation and preparation for starting full operations in fiscal year 2024. Additionally, construction of our North Carolina site, and the second phase of the Denmark site, are progressing smoothly.

We are concurrently setting up business with customers to realize returns from our investment in these new facilities soon after the start of operations.

#### Sustainable Growth Toward 2030



By fiscal year 2030, the Fujifilm Group is aiming for a total revenue of ¥3.5 trillion, of which healthcare accounts for about half of this amount.

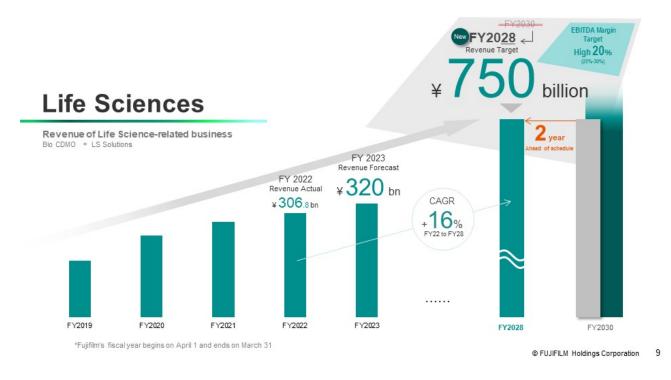
We also aim to raise the healthcare segment operating income ratio up to around 15 to 20 percent. I'm fully committed to this growth.



I'm happy to say that Fujifilm will soon mark 90 years since our establishment. The next medium-term management plan will start in April.

The fundamental strategy of our life sciences remains unchanged from the current medium-term plan. CDMO and drugs discovery are positioned as high priority businesses.

Secondly, we shall complete the ongoing capital investment projects on schedule. Lastly, we want to pursue aggressive capital investment in a timely manner for providing a one-stop body. Now, for detailed information about our businesses, Mr. Iida, General Manager of the Life Sciences Strategy Headquarters and Bio CDMO Division, will make some comments.

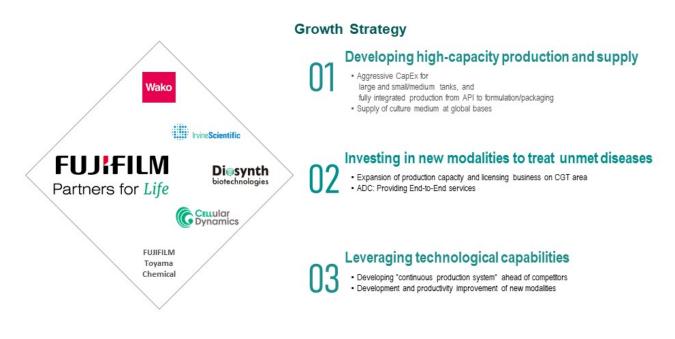


#### Toshihisa lida:

Thank you, Mr. Goto. Thank you, all, for joining us today. I'm Toshi Iida. I'm the Head of the Life Sciences Strategy Headquarters and Bio CDMO Division. I'm also acting as the Chairman for Fujifilm Diosynth Biotechnologies.

Let me start with the financial outlook, which we reviewed recently. We originally set the life sciences revenue target for ¥750 billion, to be achieved in fiscal year 2030. Now, we expect to achieve it in fiscal year 2028, which will be two years ahead of original target, mainly driven by CDMO business. This means the CAGR for coming six years will be 16 percent.

Why we are confident to achieve this area? Two reasons. Number one, we improve our productivity. The second reason is we expect our batch price will be higher than the original plan, partly due to the inflation. We anticipate EBITDA margin will improve accordingly and achieve late 20s.

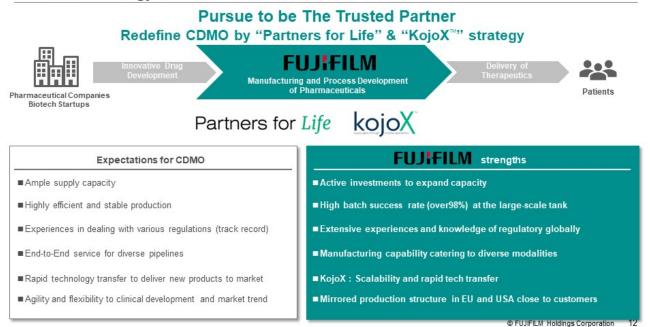


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Today, I can share our core life science business strategy behind this growth by touching on the three points.

The first, our capacity expansion plan to cope with high demand of biopharma, mainly antibody drugs. Second, our investment plan for the new modalities which will treat unmet diseases Third, our technology roadmap, which set us in a different in the competition.

#### **Overall Strategy for Bio CDMO Business**



Let's start. Overall strategy of the Bio CDMO business can be summed up in one word. It is, we will be the trusted partner. We are calling it Partners for Life and KojoX strategy.

We are redefining CDMO business. Pharma companies are concentrating more resources on R&D for their robust pipelines. After clinical test trials, and as soon as they are approved, they are responsible for enough supply for the patients.

In the middle of this journey, this green part, there is our responsibility. On the left, you can see the elements required for the CDMO as a partner. On the right-hand side, you can see our strengths.

The first, capacity. We are committed to achieve active investment to expand capacity rapidly.

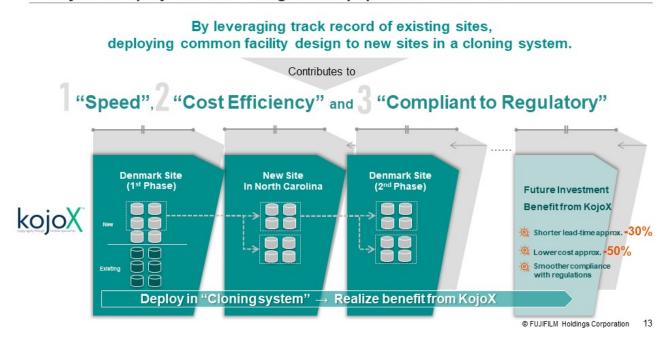
The second, highly efficient and stable production. We have very high batch success rate, for example, at the Denmark side. The latest batch success rate, now, is over 98 percent. The customer can be relieved by these numbers.

Third, track record. We have experience and the knowledge to address regulatory affairs globally.

Fourth, end-to-end service. For diverse pipelines, we can address not only the antibody, but many different modalities. Also, support from early clinical to commercial stage.

Fifth, speed of tech transfer. After they are approved, customers have to deliver the products as quickly as possible. In this part, our KojoX strategy will contribute tremendously. I will explain later about KojoX.

Last but not least, agility and flexibility to respond to the demand which fluctuates from time to time. As required for as a CDMO partner, we are ready for it by having mirrored footprint close to the market in the US and Europe across the Atlantic.



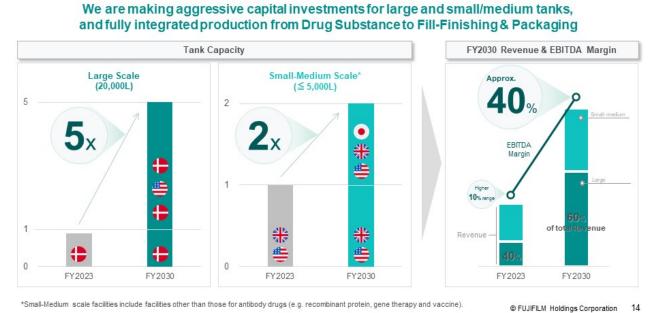
KojoX<sup>™</sup> : Deploy Common Design and Equipment to New Sites

Next, I will explain the KojoX, how it works. If you look at the chart, we are starting. KojoX, it's deployed a common design and equipment and the system from the existing site to the new site. This is a take example of our large-scale expansion plan.

Currently, we have the six bioreactors in the Denmark site. Soon, we will have the 12 bioreactors. We redesign three sets of four bioreactors. We call it four packs. Then we are copying, we are cloning those four packs into the new site in the US, North Carolina. We have the two sets of four packs completed in North Carolina. Then it will go back to the Denmark site. Again, two sets of four packs.

The benefit of this KojoX strategy is three. The first is we can shorten the lead time for the construction period, about 30 percent. The second is we can significantly reduce the cost for the designing part. Designing workload effort can be reduced almost by half. Because our existing site has a fantastic track record, that will help tremendously to get the compliance, the regulatory compliance smoothly. This is the benefit of the KojoX.

By the way, the Kojo has a double meaning in Japanese. One is factory and the other is improvement. Factory improvement. This is the concept of the KojoX.



\*Based on publicly available information as of December 2023

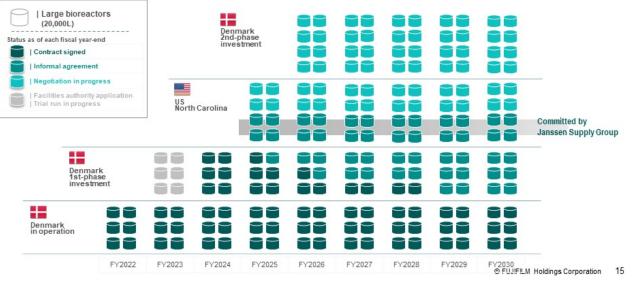
#### Reinforcing End-to-End Service to Address Customer Needs

As already announced, we are increasing the capacity both large-scale and small to medium scale. The KojoX concept will be adapted to the small to medium scale as well. By having both together, we can strengthen end-to-end service to address customer needs.

As a result, we improve productivity and the efficiency so that our revenue growth and our EBITDA margin will improve towards 40 percent mark accordingly.

#### New Large-Scale Facilities : Commercial Activity

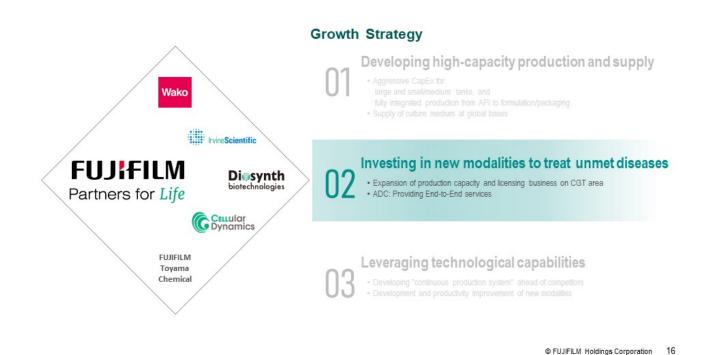




Here you see how our capacity will increase and how our commercial prospects are filling those capacities.

As for the update this time around in Denmark, there have been very active negotiations taking place. Our capacity in 2025 and in 2026 are nearly full already, as you see.

If you look at the US North Carolina site, which are expected to be operational in the second half of 2025, it has been announced that the Janssen becomes first tenant committing to the suite 1 out of 2. They committed to nearly two years ahead of site is ready. They did that because they trust us with a track record at the Denmark site in the past. This is an amazing story. This proves how our KojoX strategy works.



Let's move on to the next agenda. I'm touching on the new modalities, our investment plan, especially

for the cell therapy site.

Cell therapy, the market is expected to grow rapidly in coming two to three years' time. The main driver is expected to be allogenic or iPS cell instead of autologous.

The problem of the autologous is this is a one-to-one tailor-made and time-consuming treatment. Allogenic and iPS cell can remove those barriers and reach to many more patients quickly. Fujifilm is a lucky company because we have two facilities already with talented people and fantastic track record already.

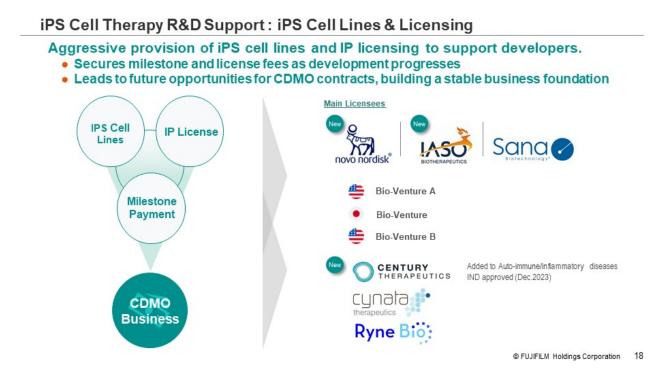
#### Investing in New Modality

#### Doubling the capacity for the future growth of Cell Therapy



Here are the two sites.

You see the left-hand side is FUJIFILM Cellular Dynamics. The right-hand side is FUJIFILM Diosynth Biotechnologies of the California site. In line with the expected market growth, we decided to invest \$200 million investment for doubling the capacity for both sites.



Looking at the iPS cell therapy strategy, not only the CDMO, we are a major player for the R&D support site. All the three, the revenue streams, one is by selling, providing iPS cell itself. Second, we are licensing our intellectual property to the partners and we will get the revenue based on the milestone.

You will see the latest update for our licensees on the right-hand side. All those licensees are the customers we navigate to our CDMO business. We complete end-to-end iPS cell drug journey.



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Last but not least, let me touch on the technology roadmap.

Among many projects I pick up today the two topics. All about the improvement of our productivity.



## The Continuous Production System : MCC Anti Body

40 days continuous test run successfully completed. Technology to apply to Large Scale manufacturing to increase further productivity

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In the past, we have explained several times our continuous manufacturing initiatives.

Here today, I have a major update. In our UK site, recently, successfully conducted a test run. As many as 40 days continuously manufactured. We also achieved the targeted cell density and the titer here.

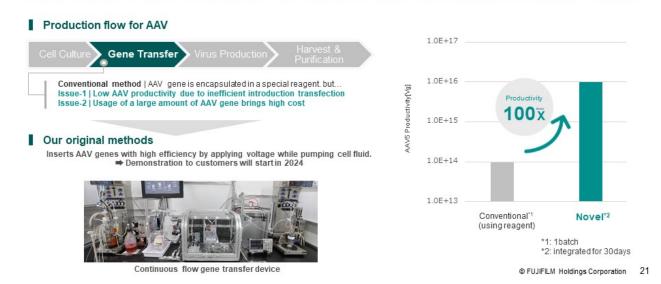
This is fantastic news for us. This perfusion technology is not limited to the small scale. So we are now applying this technology to the part of our large scale tank operations. We call it N-1 perfusions. With this technology, we can improve our productivity 30 percent up.

Because we can increase the titer significantly or we can reduce the tap time significantly. That means we can increase our revenue even from the same number of bioreactor tanks.

#### The Continuous Production System : Gene Therapy

#### "Game Change" for AAV production

100x more productivity than conventional methods by efficiently introducing genes into high-density cells



We also see the great potential with the continuous manufacturing for gene therapy field as well. Many unmet diseases can be treated by gene therapy, but the problem is that the number of drugs reaching to the patients are still limited due to low productivity of adeno-associated virus.

We have a solution. We are developing the new production system calling flow electroporation, which dramatically improves the productivity. You see how the early prototype look like in this image. This inserts AAV genes by applying high voltage for pumping the cell fluid. We estimate it can produce as many as a hundred times more vectors.

It enables the medicines to be delivered to many more patients much more quickly and at much more affordable cost. This can be the game changer for AAV production.





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This is the end of our presentation.

Thank you very much for listening, and I look forward to your continuous support. Thank you very much.

# **Q&A** Session

**Moderator [Q]:** Thank you Goto-san and Iida-san. I will start the Q&A session from here. I'm curious to speak to Goto-san and Iida-san from here. Lars Petersen, President and CEO of Diosynth Biotechnologies and Yutaka Yamaguchi, Corporate Vice President, General Manager, Life Science Business Division will join.

I'll kick off with my question. I'd like to ask Goto-san. I understand from presentations that your country is developing a new three-year mid-term management plan for fiscal year 2024. What's your thoughts on the direction on the new mid-term plan? Particularly how you intend to grow the healthcare sector from the CEO's perspective?

**Teiichi Goto [A]:** OK. In the healthcare segment, we are engaged in businesses such as medical systems, bio CDMO and life sciences. The bio CDMO and life sciences sectors as explained today as main drivers for this future growth. As for the CDMO business, we predict that the biopharmaceutical CDMO market will grow at a rate of 15 percent per year. This exceeds the overall market growth of biopharmaceuticals eight percent per year.

Currently, the EBITDA margin for our CDMO business is in the upper 10 percent range. We aim to achieve a margin in the upper 20 percent range by fiscal year 2026. By fiscal year 2030, we expect 40 percent EBITDA margin for our CDMO business.

As for the cell gene therapy and cell therapy, recently we have seen a funding stagnation in the biotech sector. The growth of gene therapy and cell therapy drugs has experienced a temporary slowdown. However, the market size of cell therapy drugs is expected to grow at a rate of over 30 percent annually hereafter.

This paves the way for next generation cutting edge pharmaceuticals. To meet the growing demands in the development and manufacturing of cell therapy drugs, we are investing approximately \$200 million in both of our California and Wisconsin facilities.

These investments will enable production capacity enhancements for process development laboratories and GMP manufacturing for cell therapy drugs at both locations. The culture media. The culture media market is also a growth area. It is expected to grow at a rate of 10 percent annually.

Through our global supply system with facilities in the US, Europe, and Japan, we will support customers from research and development to commercial production, aiming to capture top share in the market by fiscal year 2030.

Anyway, we will support drug discovery, agile and abundant production and supply end to end to deliver innovative drugs to move to more patients quickly. We will continue to be a trust partner for pharmaceutical companies, biotech, and academia. Thank you.

Moderator: Thank you, Goto-san. Please raise your hand if you have a question.

**Audience Member [Q]:** Thank you for the great presentation. You mentioned that in the bio CDMO business you will achieve your midterm plan two years in advance, 2028 versus 2030. You mentioned one of the reasons for this was because of the inflation and you are able to achieve higher prices.

Obviously, inflation has also problems to your supply chain and your cost of goods and your profitability. What has been the impact on your supply chain and your profitability because of this inflation?

**Toshihisa lida [A]:** Yes, thank you for asking. It's a very good question. Inflation is affecting all of us, all of our business, including all the supply chain, as you mentioned. Yes, we are now carefully contracting with our customers to passing through all the impact of the inflation to adjusting our price to the customers.

It will be impact on our cost side, but we manage to pass through those customers. This is how we operate. We grow our revenue and we maintain our profitability. So that is where we are at.

**Audience Member [Q]:** Thank you for the presentation. I've got two questions. Firstly, Novo and Lilly's clearly investing by themselves on the GLP-1 manufacturing facilities. Novartis is putting a lot of money on the radiopharmaceutical production by themselves.

What do you see these kind of trends that the pharma companies are putting money into productions? The second question is, is there any customer behavior change because of the IRA in terms of negotiations? Thank you.

**Lars Petersen [A]:** The GLP-1, of course, is totally changing the market shape and we all know that it creates a need that really never has been seen. What we see mostly because GLP-1 is a very typical manufacturing process for insulin and diabetics companies. It's actually very few companies who's ready to make high volume drug substance delivery in this market.

That's also why you see these two companies investing so heavily because they can't find this capacity anywhere. For us, we just see a tremendous pressure from all kinds of adjacent businesses like drug products, like finished goods. Of course, when everybody around the business focuses so much on GLP-1, it pushes a number of other things to CDMO.

We see actually an increased pressure from all kinds of other customers who is now under pressure for buying a filling machine or buying a packaging machine or getting engineering companies ready. It put a tremendous pressure in an already extremely heated market, as we all know both US and Europe is.

It's actually, of course, we get the question always, how can we contribute in this? The other thing is we would see that the market is changing because so many other companies are now trying to utilize this market. How can we make even better GLP-1s? What will happen? Will we see antibody production helping?

Because some of these first generation GLP-1s are not perfect. We see this discussion and I'm pretty sure it will change the entire market share. For us, as a CDMO, it's just about how do we create the agility, the flexibility?

You saw the cloning code directs the strategy and how we actually can utilize this across makes it just much more easy for us when the market is shifting. Because even though GLP-1 is on everybody's word right now, there's so many other things coming out there.

I'm sure you guys are watching the Alzheimer's market, the other types of markets coming. It may not be there right now, but we see all these trends are just pushing in one direction. We're building for flexibility and agility to be able to capture that. That's how we see GLP-1 as one of these big trends as many others. You could mention ADCs as well. **Toshihisa lida [A]:** To answer to your second question, your second question is about customer behavior. Is it changing? I think the one other thing I can comment here is that some of the customers really trying to squeeze the number of CDMO partners.

They are now partnering using many, many different CDMO players, but they really like to be squeezed and consolidate the number of the partners. That's why our partner for life strategies will really pursue that to be real trusted partners to provide end-to-end, very diversified service. I think that's the trend we began to see.

**Lars Petersen [A]:** If I can just add three things we clearly hear from all our partners basically right now. They all want strategic partnerships. They all want reduced number of CDMOs. They all want to share their entire pipeline so they can much more be a partner throughout the entire journey.

Not just look at this as one transactional contractual service. They're much more interested in much longer term deals. That's also why you see what we're investing and how we're investing across regions to be able to capture all that dialogue with very large customers. You've seen one name that we presented today, but they all basically are asking the same questions.

That's also why you see very few of them are actually investing in production facilities like they did 10 years ago. Most of them are relying more and more on us coming up to deal with this. It could look like a lot of capacity, but you've got to remember many, many of the large pharma companies have stopped investing in their own capacities.

Moderator: Thank you. Next question please.

**Audience Member [Q]:** Thank you for the presentation. My question was around how you're approaching automation for your iPSC technologies.

**Yutaka Yamaguchi [A]:** Yes, we are expecting the higher volume of the production. We are trying to match with that technology. So far still in the middle of the capacity, but we are expanding towards the higher, much higher volume.

Toshihisa lida [A]: If I add one thing, it's things like visual inspections. This is what Fujifilm is quite

specialized and good at because we are imaging companies. We have very much broadened the track record from all the diagnostics imaging, all the imaging, and image analyzing. This is AI. So that's part I think that we are fully utilizing as an internal asset.

Moderator: Other questions?

**Audience Member [Q]:** Hello, thank you for the presentation. I've been following your company for decades. I've even visited your disposable camera facility in Greenwood, South Carolina years ago. The transformation is remarkable and very few companies can pull this off.

For your CDMO business, are you specifically targeting innovator companies, but are you also targeting the biosimilars market, and then as many other CDMO companies that are your peers are also looking to develop their own biosimilars? Have you put thought into this, or are you mostly targeting...I feel like you're mostly targeting the innovator space?

**Toshihisa lida [A]:** Our prime target is innovators. We really like to help the innovating medicines. FUJIFILM Diosynth Biotechnologies, the company's mission is advancing tomorrow's medicine. We really like to help the innovators to deliver the innovative medicines to as many patients as quickly as possible.

We don't close our eyes on the biosimilars because more and more biosimilars will be approved and the market will be increasing. We will look at the both, but if we prioritize, the innovator is our first priority.

**Lars Petersen [A]:** Maybe if I can add to that question. If you look at and have a sneaky eye on looking at these four packs that we are building, they are actually built for much higher yields, much higher production efficiency, and most of the capacity you need for biosimilar is still because it's based on technologies that from the innovator was 10 years old. They are very low-tighter, very many of them.

This is also why you see a shift where many internal innovators cannot manufacture their own drugs for the new pipeline unless they rebuild their facilities. Ours are ready for this new generation of drugs with N-1 or the very high-yield facilities. That's also why it's very suited for new innovative drugs.

Moderator [Q]: Thank you. Are there any other questions? Could you comment on competitive

landscape environment, especially about antibodies regarding CDMO? Probably there are CDMO modes. And why pharmaceutical companies select your company?

**Toshihisa lida[A]:** First, I think that we see a very strong demand, very strong pipelines. Currently, it's said that the global needs, including the in-house and the CDMO, in total 8 million liters, that is the capacity for antibodies. It's the market will be grown by eight percent every year, it's set. By 2030, six million liters extra capacity is necessary.

Of course, we are expanding rapidly, but our capacity will be less than half a million. Some of our competitors are also heavily investing, but it's not as much as one million. Who can fulfill that six million gap? That is the question.

We see that the demand will be strong, and I think our clients, our customers, more and more are asking us to help them for their new pipelines. Plus, as the last explained, some of their facilities are quite old, retiring, the low titers, so they are really looking for the new facilities. So that's why our KojoX strategies work, and we are very active in the negotiations.

**Moderator [Q]:** Any other questions? OK, three minutes left. Final question about capital investment and cash flow regarding CDMO. We directly know the outlook for the capital investment and cash flow. Should we assume that capital investment for the 20-kilometer tank expansion will continue over the next three years?

We'd like to know when the cash flow of the CDO business will become profitable.

**Toshihisa lida [A]:** Currently, we are heavily investing, investing stage, FY2023 and FY2024, probably with the peak year in terms of the CapEx investment. We will see the standalone years we expect will be the cash flow positive from the CDMO business FY2027 or FY2028. It depends on how we can quickly ramp up the new facilities business.

Moderator [Q]: Final question. Could you comment on the continuous culture production system?

**Toshihisa lida:** As I explained, we hit some of the quite important milestones, 40 days continuously. That technology is still needed sometime to be commercialized. In the meantime, we see the still no current single-use system as well as a large-scale tank is existing. Probably at the early stage, maybe

co-exist with existing manufacturing system. That is our view.

**Moderator:** Thank you. It's time to close. Thank you very much for your time. Thank you for joining us.