

A thin yellow vertical line runs down the left side of the slide, with a thicker yellow horizontal bar intersecting it.

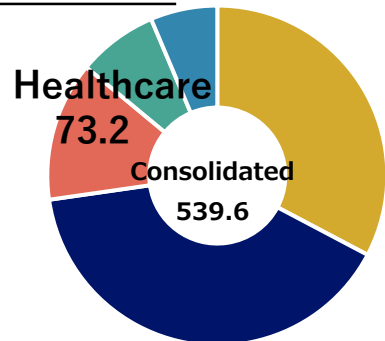
Healthcare Business

Tatsuya Yamaguchi
Corporate Vice President

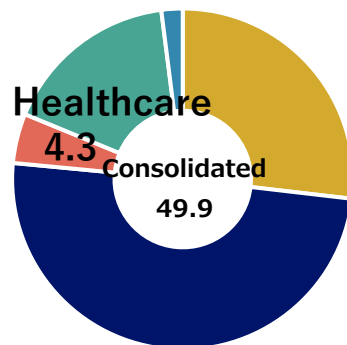
FY2022/3

Billions of yen

Revenue



Operating profit (※)



(※) Operating profit ratio in FY2022/3 is shown before deduction of corporate P/L non-attributable to any reportable segments

Major products & Services

Biological microscopes, Retinal diagnostic imaging system, Contract cell manufacturing(CDMO Business)



Confocal Microscope System
[AX/AX R]



Ultra-Widefield
retinal diagnostic imaging systems with
Integrated UWF-Guided Swept Source OCT
[Silverstone]



Contract Cell Manufacturing

Vision

Support improving quality of life for people through innovation

Financial target

	FY2023/3	FY2026/3
Revenue	¥80.0B	¥90.0B
Operating profit	¥6.0B	¥10.0B
OPM	8%	11%

Vision

Support improving quality of life for people through innovation

Operational direction

Biological microscopes

- Improve profitability via digitalization, stronger application development and lower COGS

Retinal diagnostic imaging systems

- Support more sophisticated diagnosis and from-home and remote diagnosis (Add AI diagnosis and OCT features, etc.)

Contract Cell Manufacturing

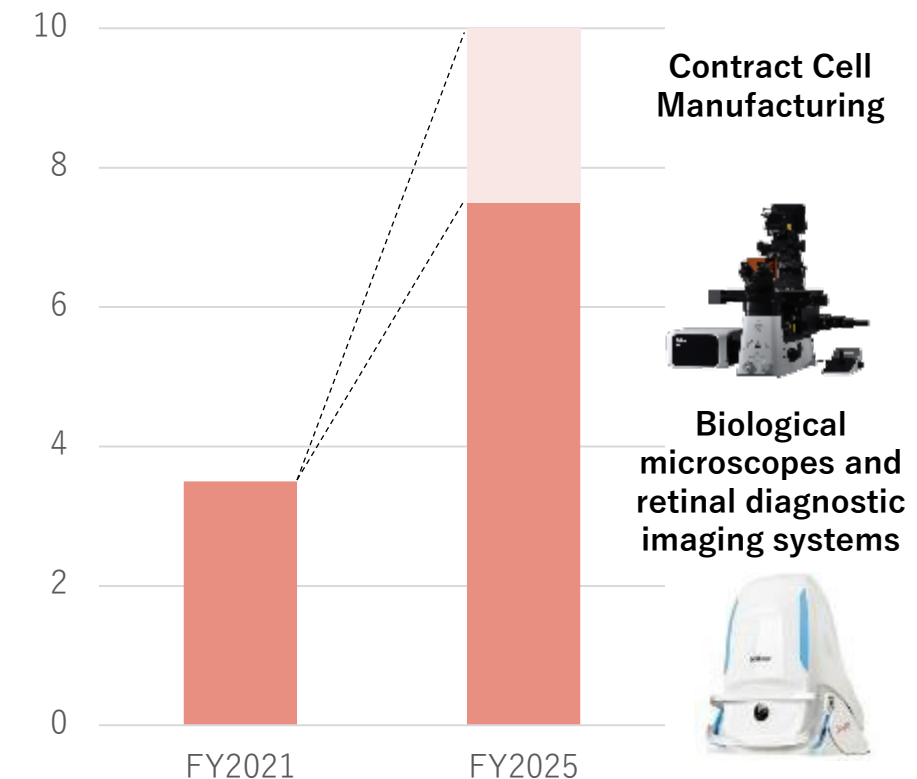
- Leverage Japan's largest production capacity in the field of regenerative medicine
- Advance several projects with major pharmaceutical companies and promising drug discovery ventures and grow operating profit to several billion yen.

Earnings plan

Grow operating profit to ¥10.0B in 2025

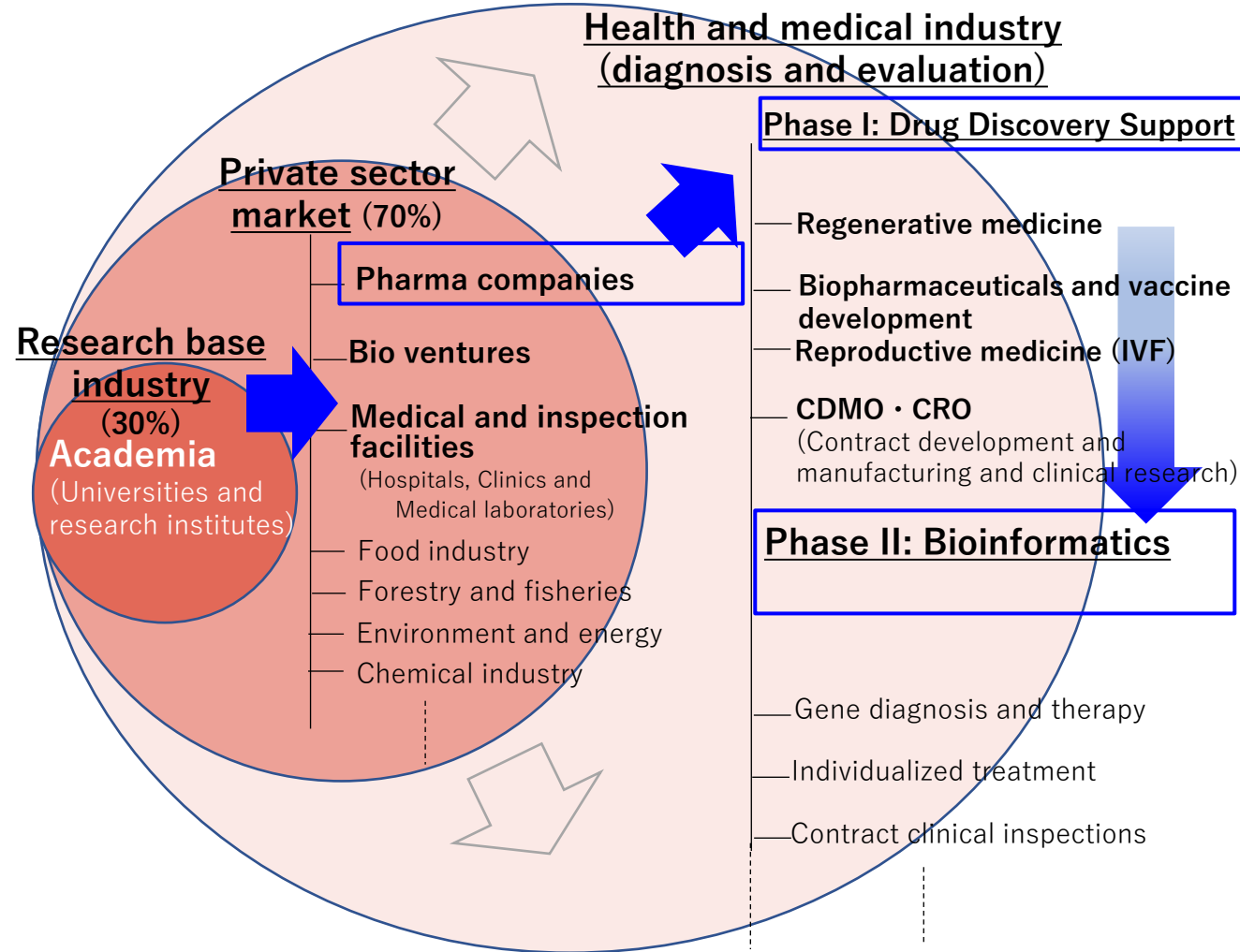
Direction for Healthcare Business

Breakout of operating profit(Billions of yen)



Market scale

Biological microscopes market: ¥400B*
(Biotechnology industry)



Nikon's differentiated technology

Image analysis and evaluation methods developed over many years in microscopes and know-how and knowledge in cell manufacturing

Phase I (out to 2025)..... Build base for growth

- Apply technology acquired with academia to drug discovery support
- Establish presence in Japan, US and Europe for drug discovery support
- Strengthen application development and solutions proposals for pharmaceutical and bio venture companies



Phase II (out to 2030)Support industrialization

- Develop new clinical modalities with clinical image and genetic data analysis and support pathological diagnosis
- Initiatives toward drug efficacy evaluation, automation of regenerative medicine production and flexible manufacturing

Biological Microscopes: Concrete Initiatives toward Drug Discovery Support

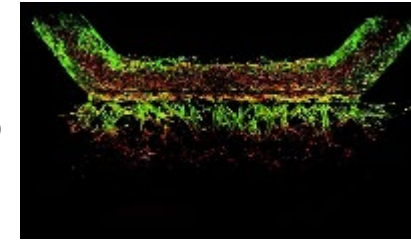
Drug discovery support:
Three market approaches

1
Low molecule drugs

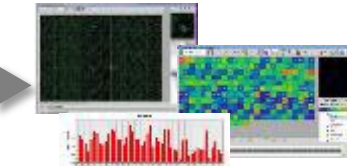
Use cells to evaluate a drug's efficacy

Organ-on-a-chip (OoC)

Efficient chemical efficacy evaluation in cells



Analyze and evaluate drug efficacy in 3D



Quantify drug efficacy



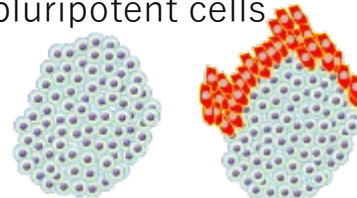
Confocal microscope

2
Regenerative medicines

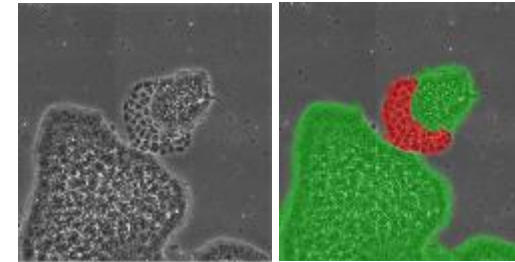
Stable production of cells as a drug product

Human iPS cells

Drug production using pluripotent cells

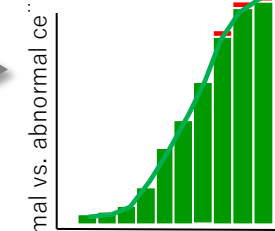


Normal iPS Abnormal iPS



Detect normality/abnormality with image analysis

Determine normal vs. abnormal



Normal vs. abnormal cell
Culturing time (h)



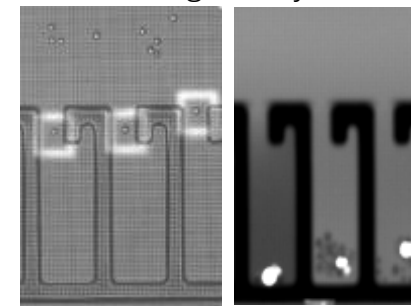
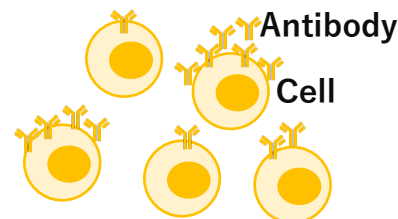
Cell Observation Device

3
Antibody drugs

Select cells with strong antibody production abilities

Antibody-producing cells

Efficient cell selection



Cell manipulation Production capability evaluation



Evaluate cells individually and select and collect target cells



Multipurpose cell research and development platform

* Global market scale (2020) Nikon estimates: 1. Low molecule drugs 873USDbn (CAGR2.9%). 2+3. Regenerative medicines + Antibody drugs: 389USDbn (CAGR7.7%)

Biological Microscopes: Network Supporting Technology Development for Drug Discovery Support

Healthcare Business

R&D sites

Active in joint research, collaboration and research support in the world's leading facilities

Nikon BioImaging Lab

Drug discovery R&D support facility

Europe (17 sites)

Opened September 2021

Netherlands



Asia (5 sites)

Opened July 2021

Japan



The Americas (19 sites)

Opened July 2019

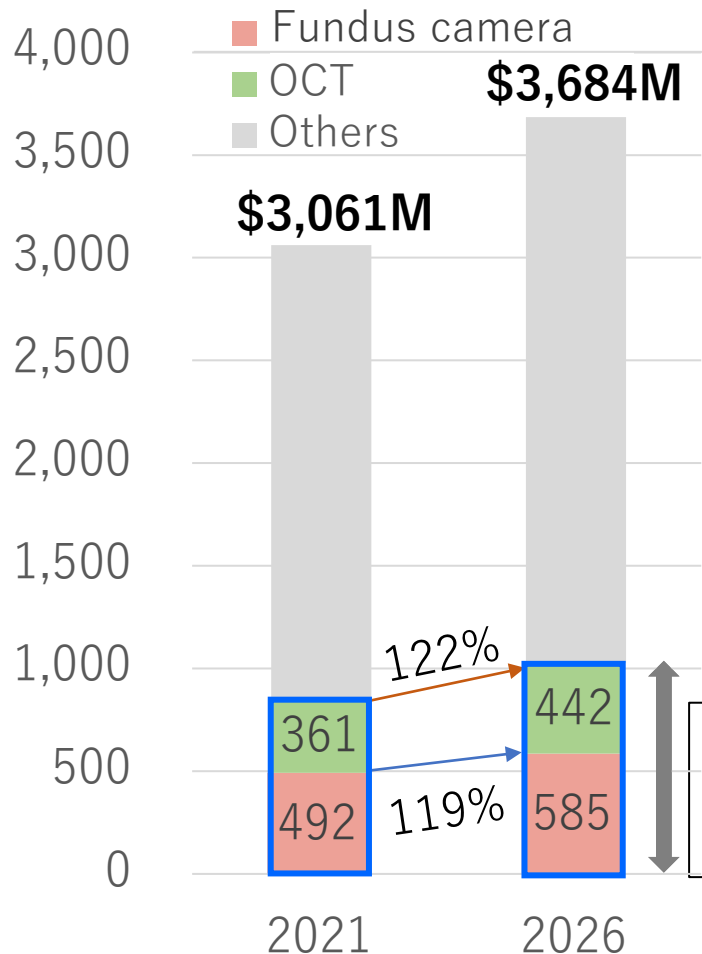
USA



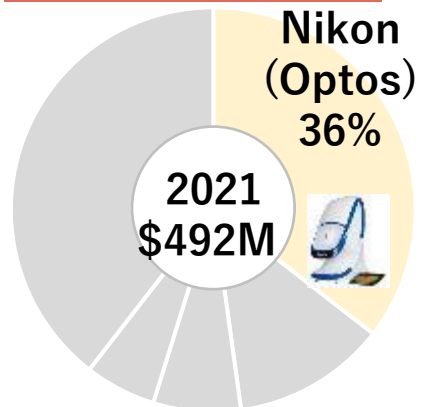
Market scale

Ophthalmic diagnostic equipment market scale* CAGR :3.8%

(Millions of USD)



Market share (by value)

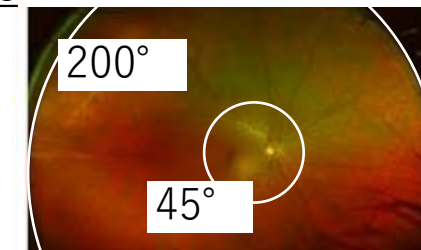


Optos' differentiated technology

Nikon(Optos) General fundus cameras



80%



Capture images of about 80% of the fundus of the eye with ultra wide field, no dilation, at ultra high-speed (0.4s)

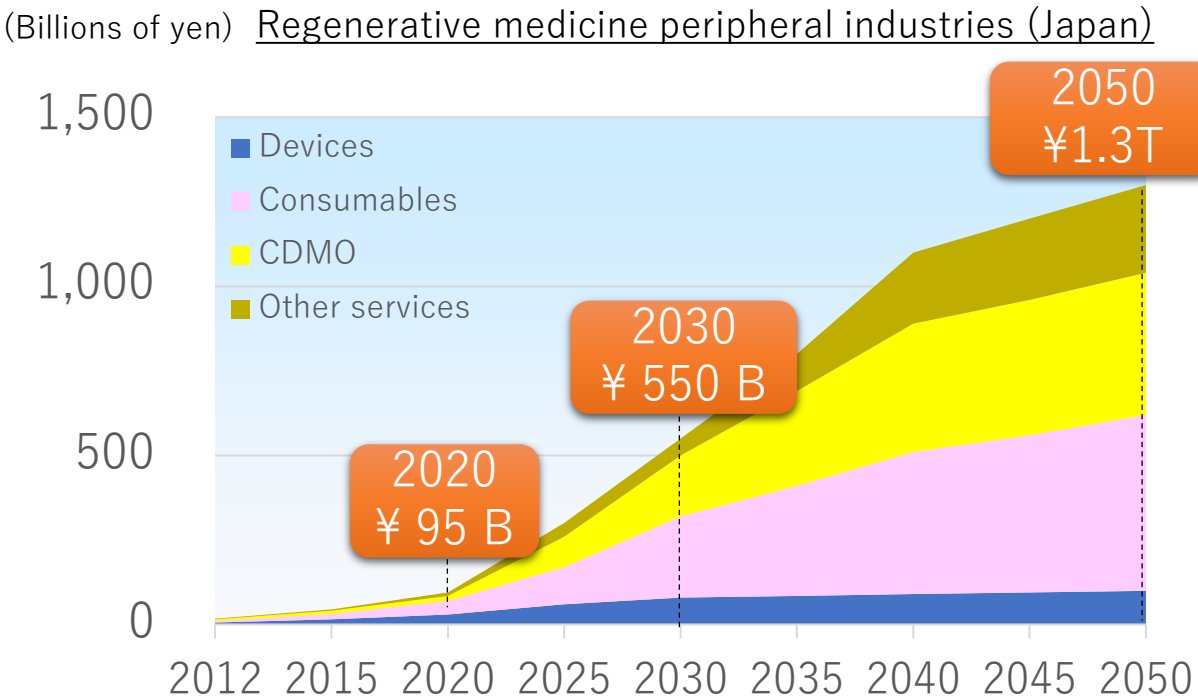
Phase I (out to 2025): Develop the market and new technologies

- Grow volume share (currently 10%) by developing Europe and Asia markets
- Expand into ophthalmologist market (Currently, Optometrist > Ophthalmologist)
- Develop new devices (equipment and software) and acquire diagnostic support technology

Phase II (out to 2030): Develop diagnostic support systems

- More sophisticated diagnosis (combined diagnosis) and at-home assisted diagnosis
- Physician's fixed diagnostic support system. Disease prevention and prognosis management

Market scale*



Nikon initiatives and strengths

- Business alliance with Lonza, the world's largest contract cell maker
- Japan's largest GCTP/GMP* compliant production facility (7,500m²)
- Provide full range of contract services, from process development to commercial production
- Track record of many clinical studies and commercial projects in Japan

Phase I (out to 2025): Build infrastructure for regenerative medicine industry

- Expand existing projects (expand clinical trials and commercial manufacturing)
- Capture promising pipeline and build up track record and know-how
- Strategic investment aimed at facility expansion and stable operations



Phase II (out to 2030): Grow regenerative medicine into a standard treatment

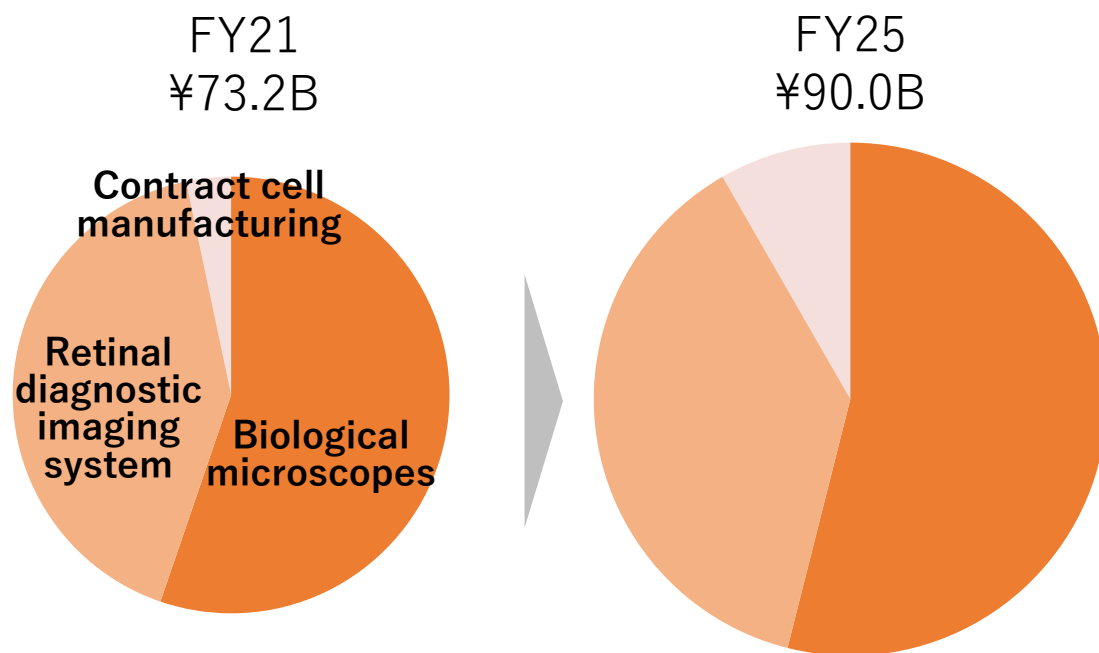
- Support mass production: mass manufacturing at third parties
- Support flexible production: In-house simultaneous manufacture of multiple batches

* Nikon forecasts based on March 2020 Ministry of Economy, Trade and Industry Evaluation Study Group for Industrialization of Regenerative Medicine and Gene Therapy

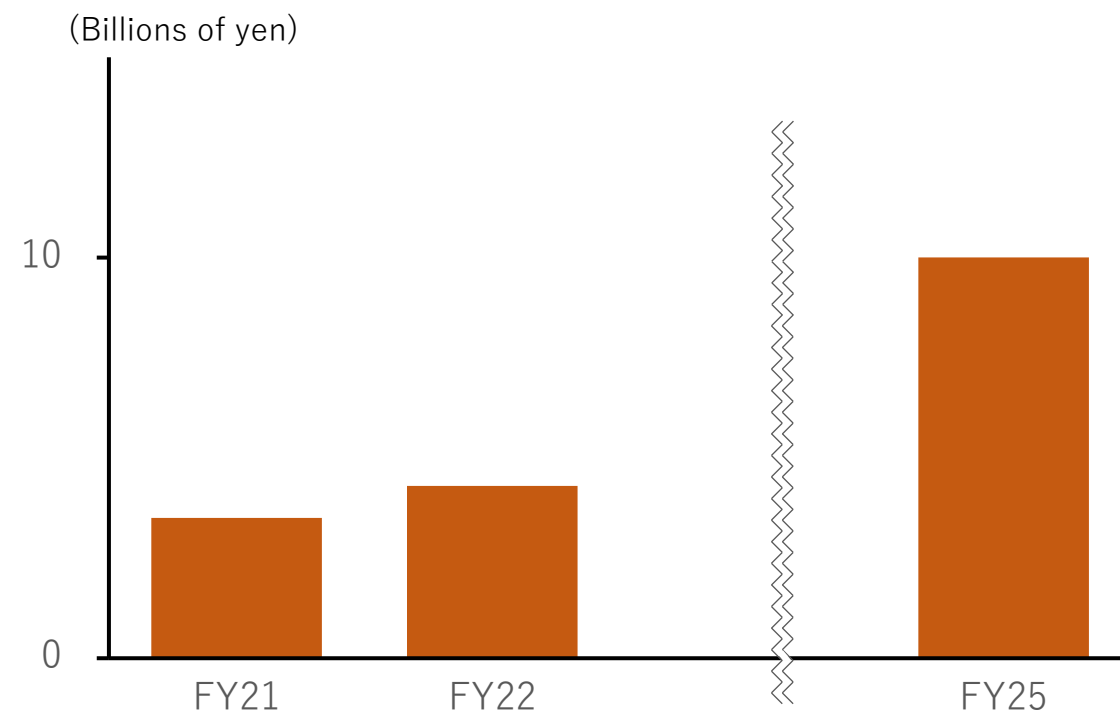
(*)GCTP: Good Gene, Cellular, and Tissue-based Products Manufacturing Practice

(*)GMP: Good Manufacturing Practice

Revenue



Operating profit



Grow operating profit to ¥10.0B in 2025