

Eat Well, Live Well.



Ajinomoto Co., Inc.

Acquisition of the US Based Forge Biologics Holdings

Taro Fujie

**Member of the Board, Representative Executive Officer,
President & Chief Executive Officer**

November 13, 2023

This event and this document does not constitute an offer of any securities for sale. This event and this document is prepared for the sole purpose of publicly announcing that the Company has resolved matters relating to the Acquisition of All Units of US-based Forge Biologics Holdings, and not for the purpose of soliciting investment or engaging in any other similar activities within or outside Japan.

This event and this document is not an offer of securities for sale in the United States. Securities may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements, under the United States Securities Act of 1933, as amended.



Acquisition of All Units of US based Forge Biologics Holdings (a consolidated subsidiary)

Ajinomoto Group has signed a definitive merger agreement to acquire all units of Forge Biologics Holdings, a US-based gene therapy CDMO, for approximately USD 554 million. (approximately JPY 82.8 billion)

Company Name	Forge Biologics Holdings, LLC (“Forge”)
Establishment	2020
Location	Ohio, USA
Representative	Timothy J. Miller, CEO and President
Business Overview	Gene therapy CDMO Gene therapy drug development
Number of Employees	327 (As of July 2023)
Revenue	Approx. USD 30 million (FYE December 2022)
EBITDA	USD ▲39 million (FYE December 2022) EBITDA break-even by fiscal year 2025 targeted

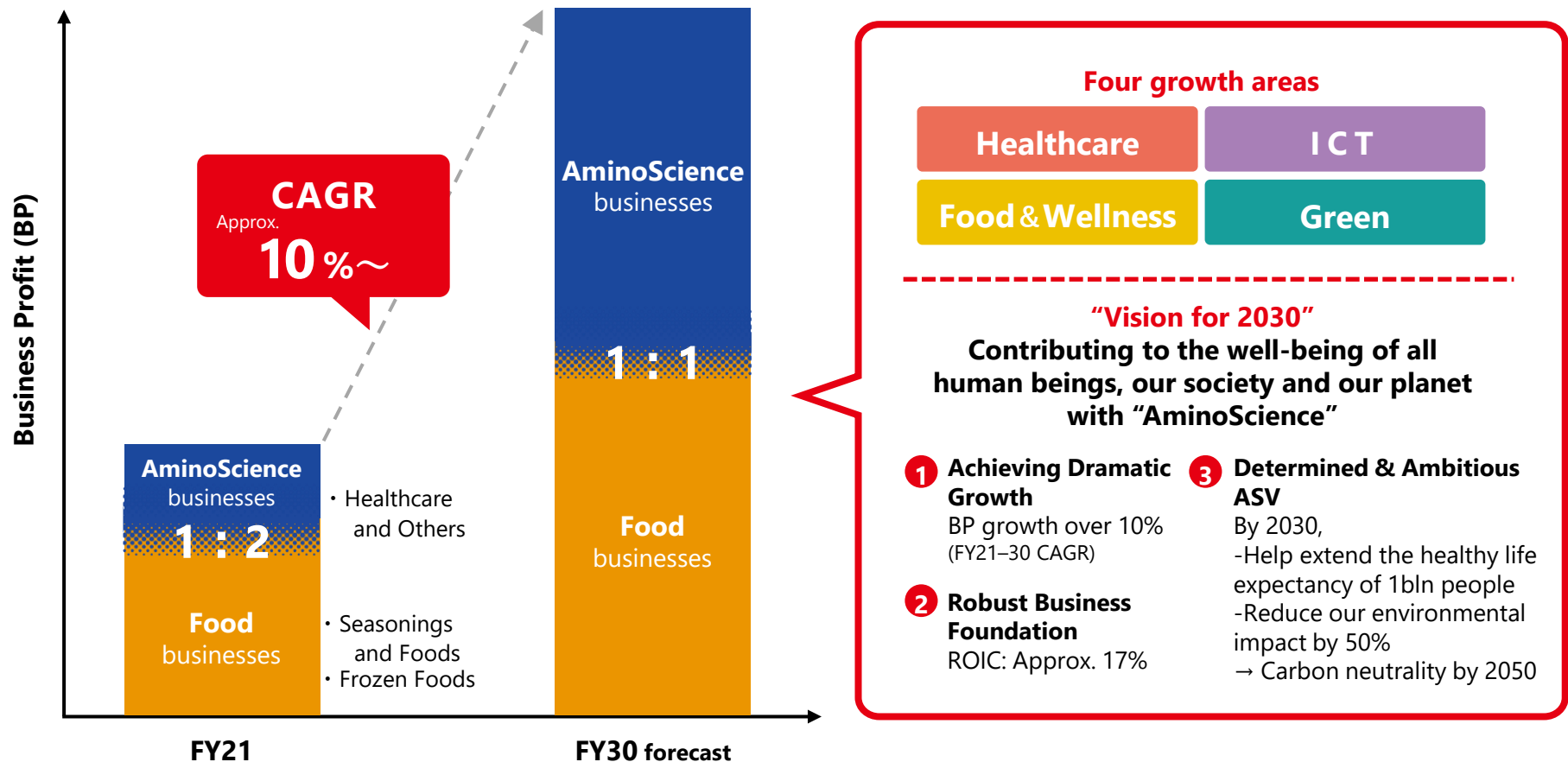


Acquisition of All Units of US based Forge Biologics Holdings (a consolidated subsidiary)



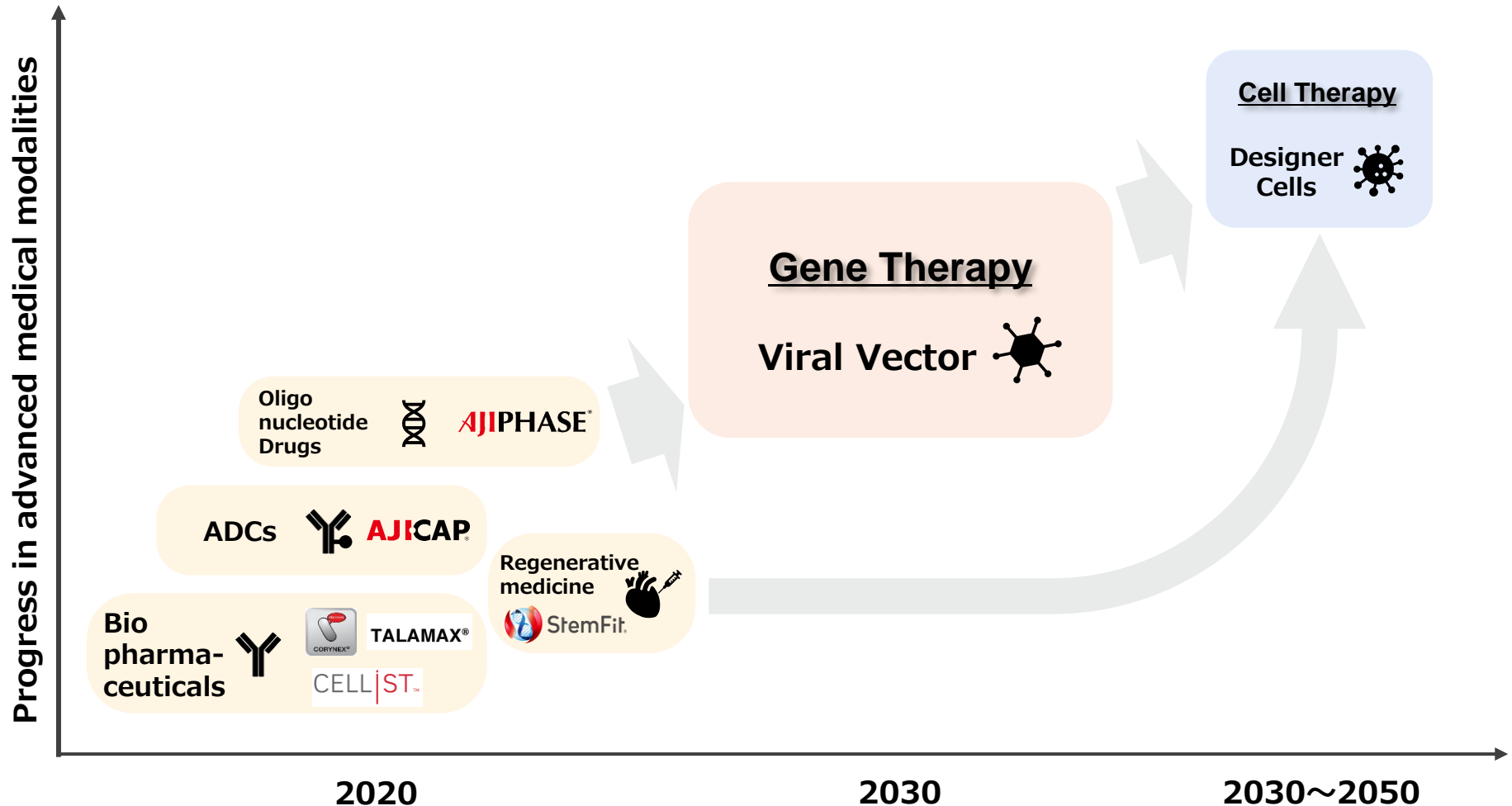
Purpose of the Acquisition in the 2030 Roadmap

Accelerating the development of a unique business portfolio by proactively investing in the healthcare business, one of the four strategic growth areas leveraging the strengths of proprietary “AminoScience” platform.



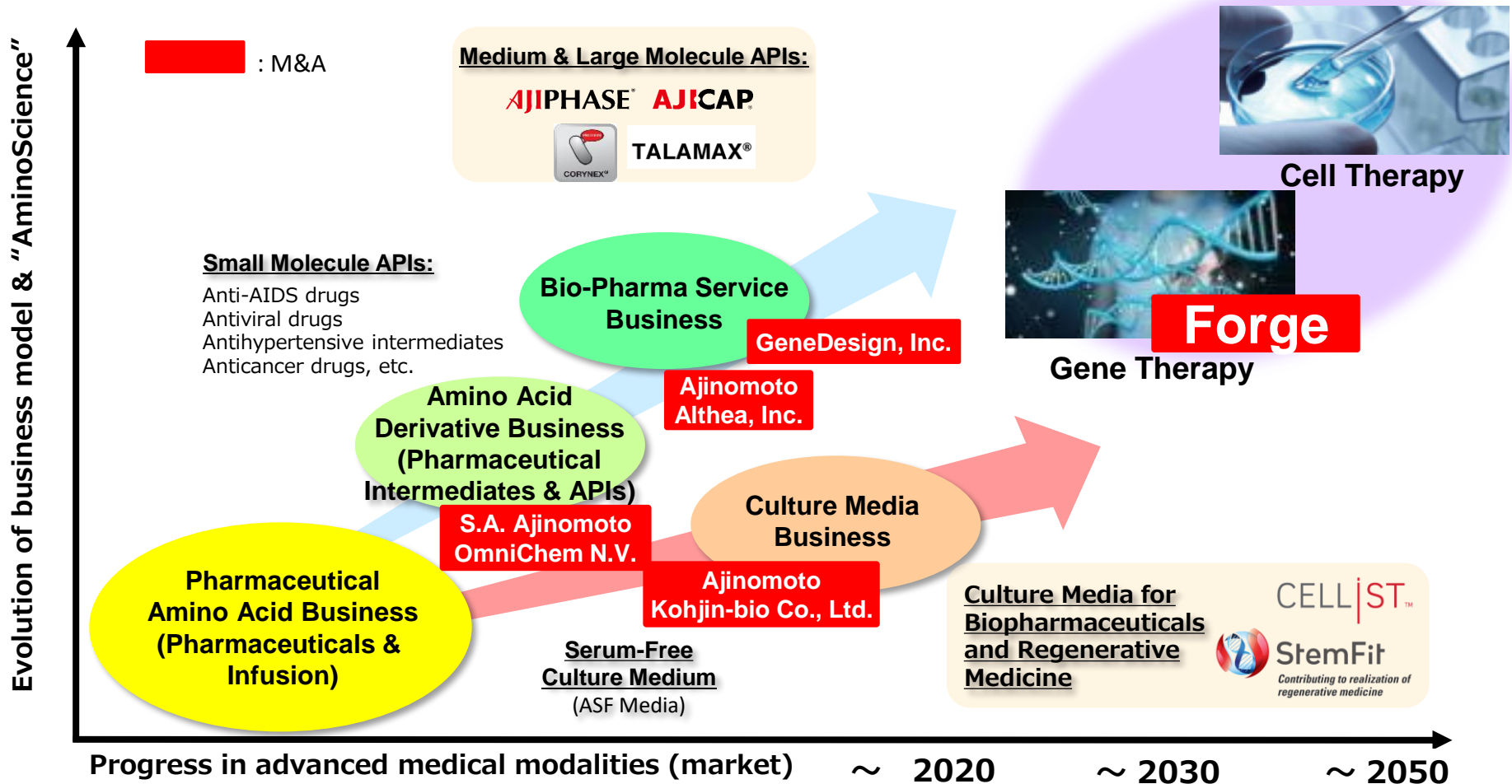
Evolution of Business Model in Healthcare Area

As advanced medical modalities progress, Ajinomoto Group enters new product and manufacturing service businesses.



Evolution of Business Model in Healthcare Area

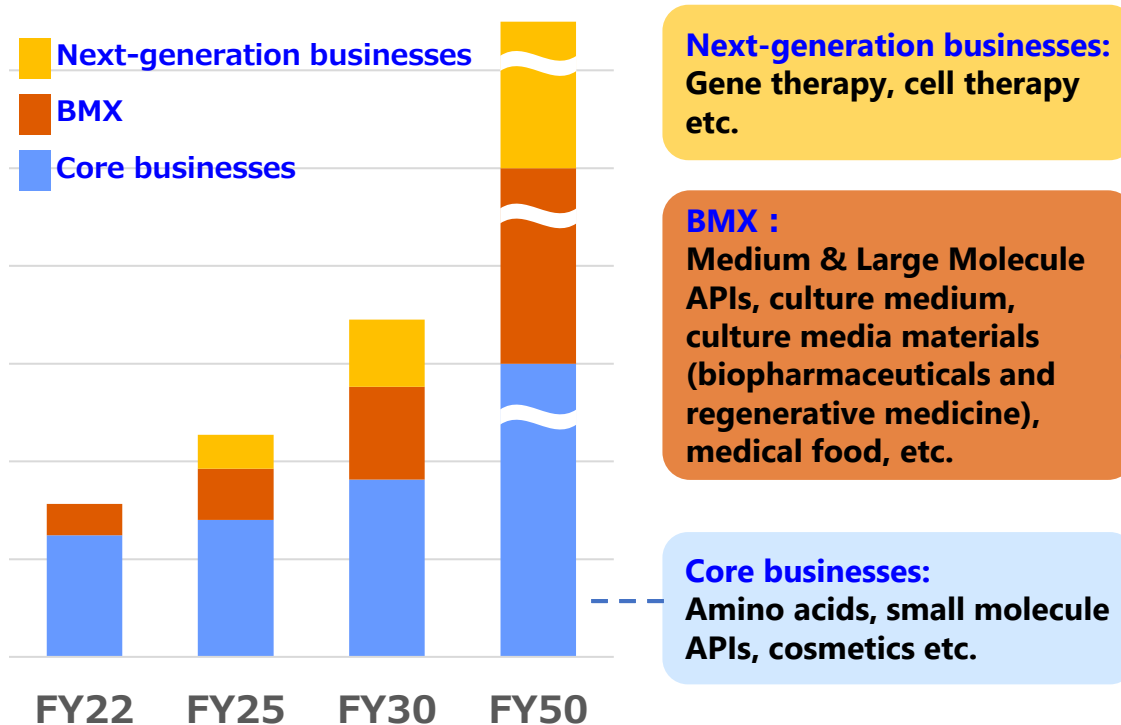
Leveraging the power of “AminoScience” and speed up x scale up through M&A, business model in healthcare area has successfully evolved. By acquiring Forge, Ajinomoto Group enters the next-generation space of gene therapy.



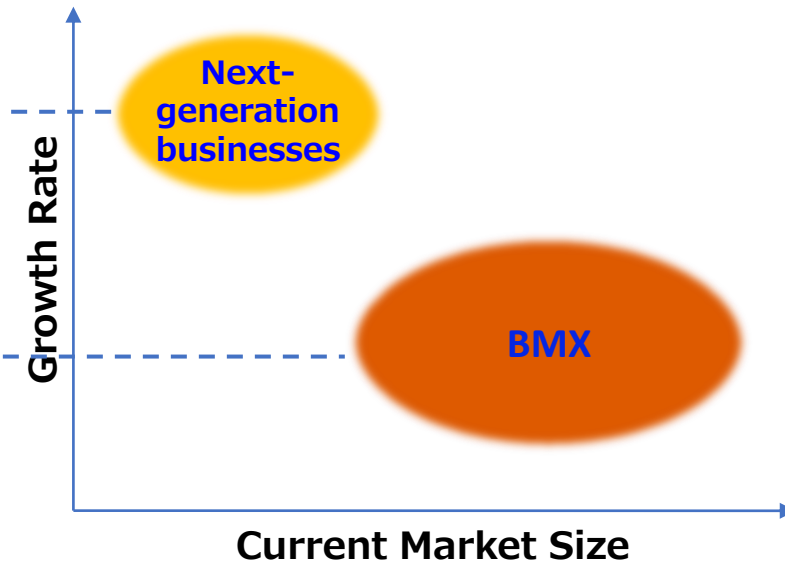
Growth Strategy in Healthcare Area

- ✓ Continued growth in core businesses such as amino acids and small molecule APIs
- ✓ Significant growth in BMX (oligonucleotide medicine, culture media, medical food) in the future
- ✓ **Achieving a leading position in the next-generation businesses (gene therapy, cell therapy)**

Growth Vision



Target Market (Growth Rate x Size)



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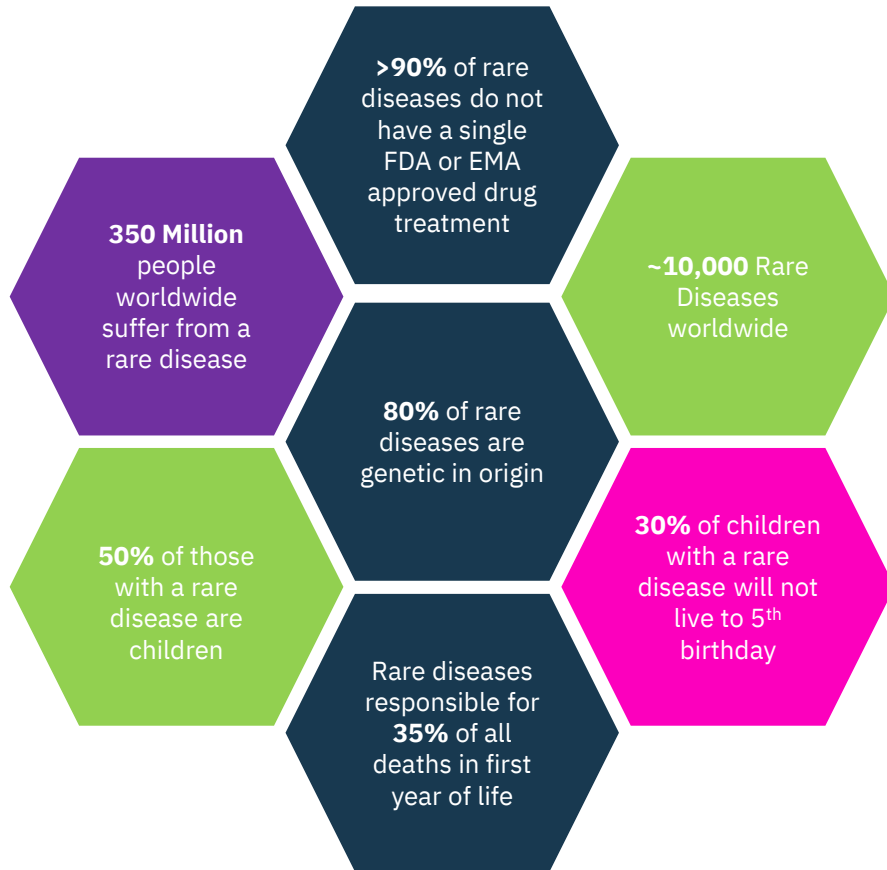
Yasuyuki Ootake

**Corporate Executive, General Manager,
Bio-Pharma Services Dept.**

November 13, 2023

- 1. What is Gene Therapy?**
- 2. Background of Ajinomoto Group's
Entry into Gene Therapy CDMO Market**
- 3. Overview of Forge**
- 4. Growth Strategy**
- 5. Management Structure After the Acquisition**

Rare Diseases and genetic Disorders

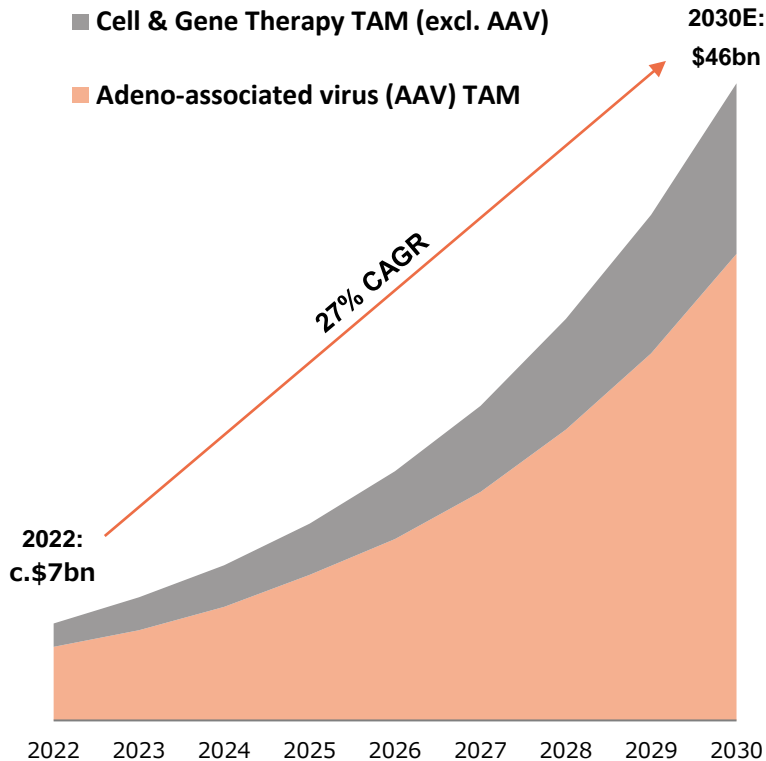


Background of Market Entry (1/2)

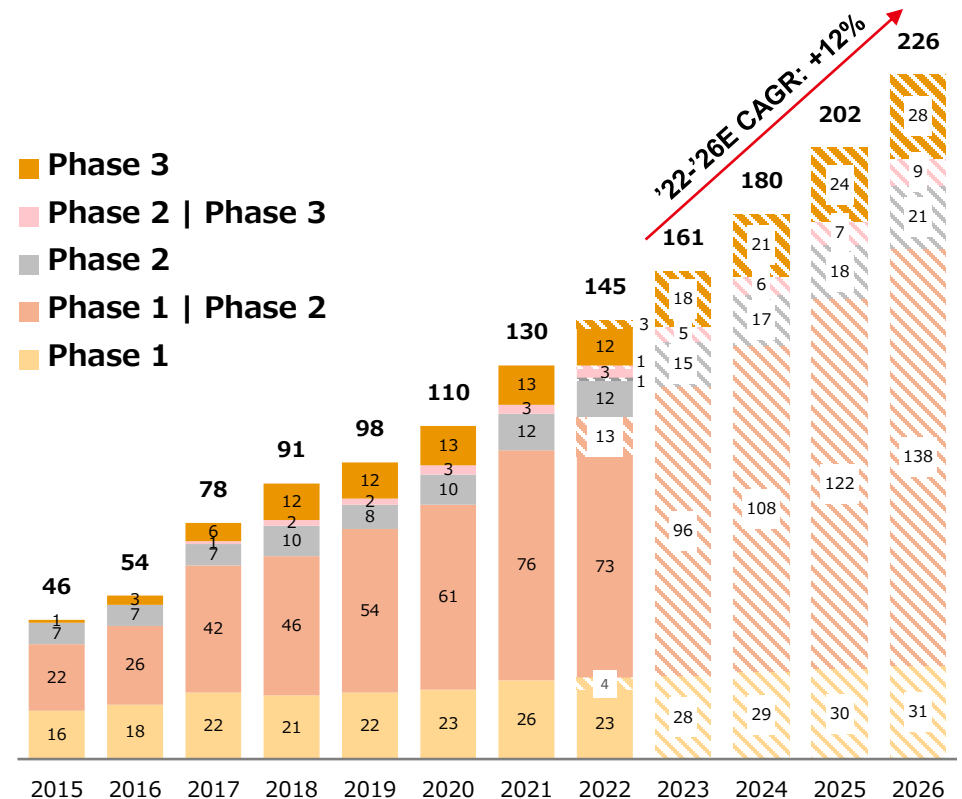
Rapid Growing Gene Therapy CDMO Market

Gene therapy market is expected to grow rapidly at double-digit rates annually, driven by expanding market size and increasing clinical trials.

Cell and Gene Therapy TAM (\$bn) ¹⁾



AAV Clinical Trials



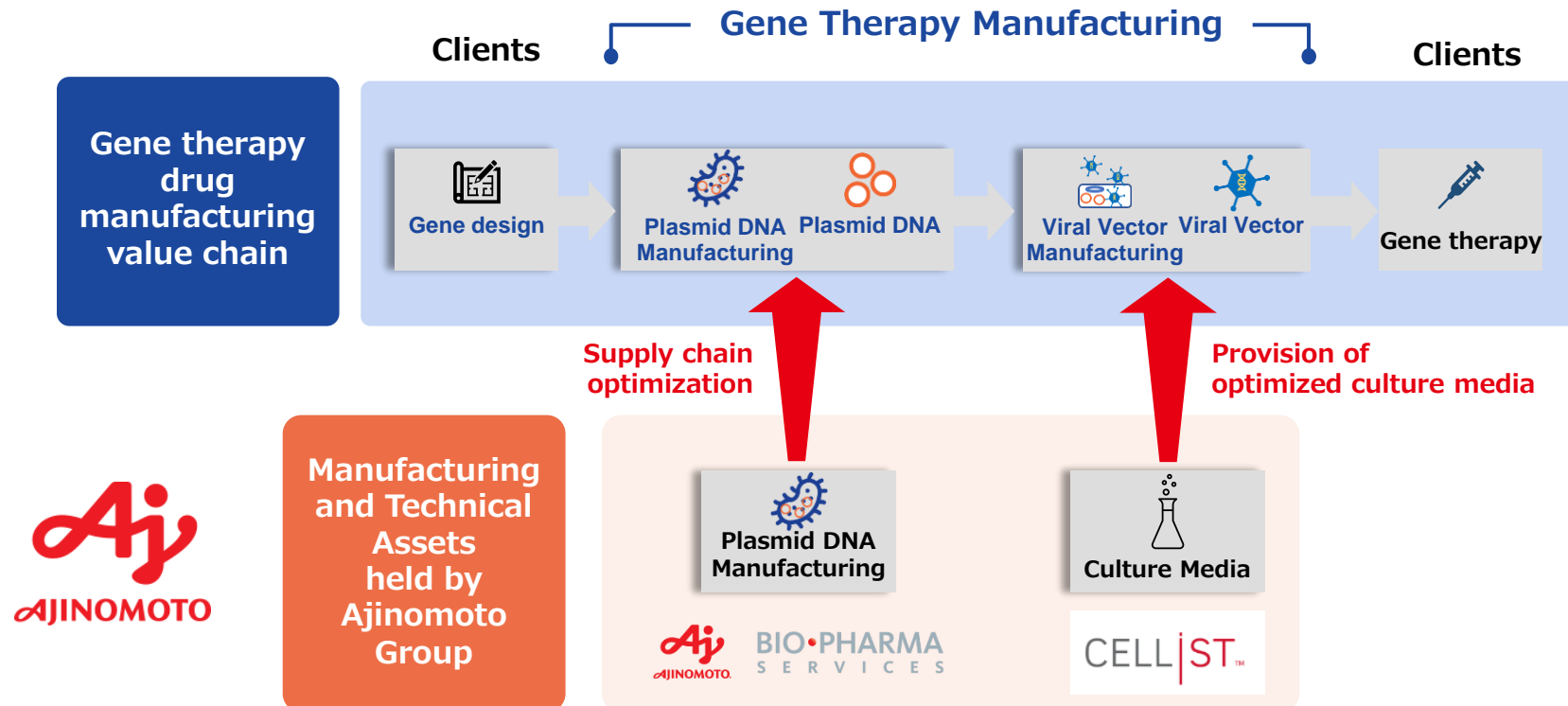
Source: Wall Street Research, Alliance of Regenerative Medicine, Roots Analysis and public press releases

1) Total Addressable Market

Background of Market Entry (2/2)

Existing Key Assets in the Gene Therapy Field

Utilizing our manufacturing and technical assets in both viral vector production and plasmid DNA production, which are key components of the gene therapy manufacturing value chain.



Forge's Manufacturing Facility and Equipment



Gene Therapy CDMO

20 cGMP Suites

1L – 5,000L
AAV Development and cGMP

>200,000L Current Capacity
and Ability to Expand Under One Roof

Lots Produced >260

+100% YoY Client Growth

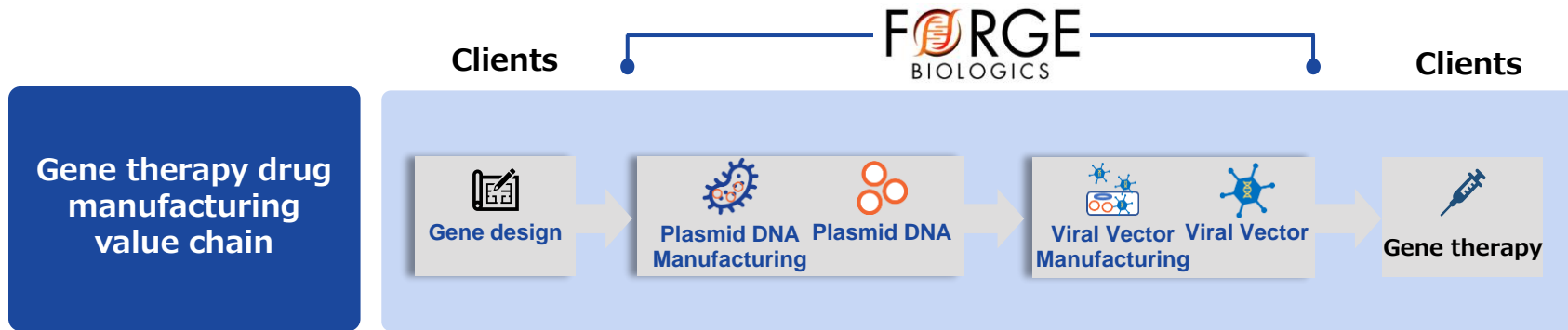
300+ Employees



2020
Founded


Forge's Business Overview

A comprehensive gene therapy CDMO with an end-to-end value chain for developing and manufacturing gene therapy drugs.




Gene therapy drug manufacturing value chain


Integrated gene therapy manufacturing platform

- Enhancing capabilities in two critical areas of the value chain: AAV manufacturing and plasmid DNA 


Experienced professionals

- Highly experienced professionals with extensive expertise in gene therapy area 

Extensive manufacturing capacity

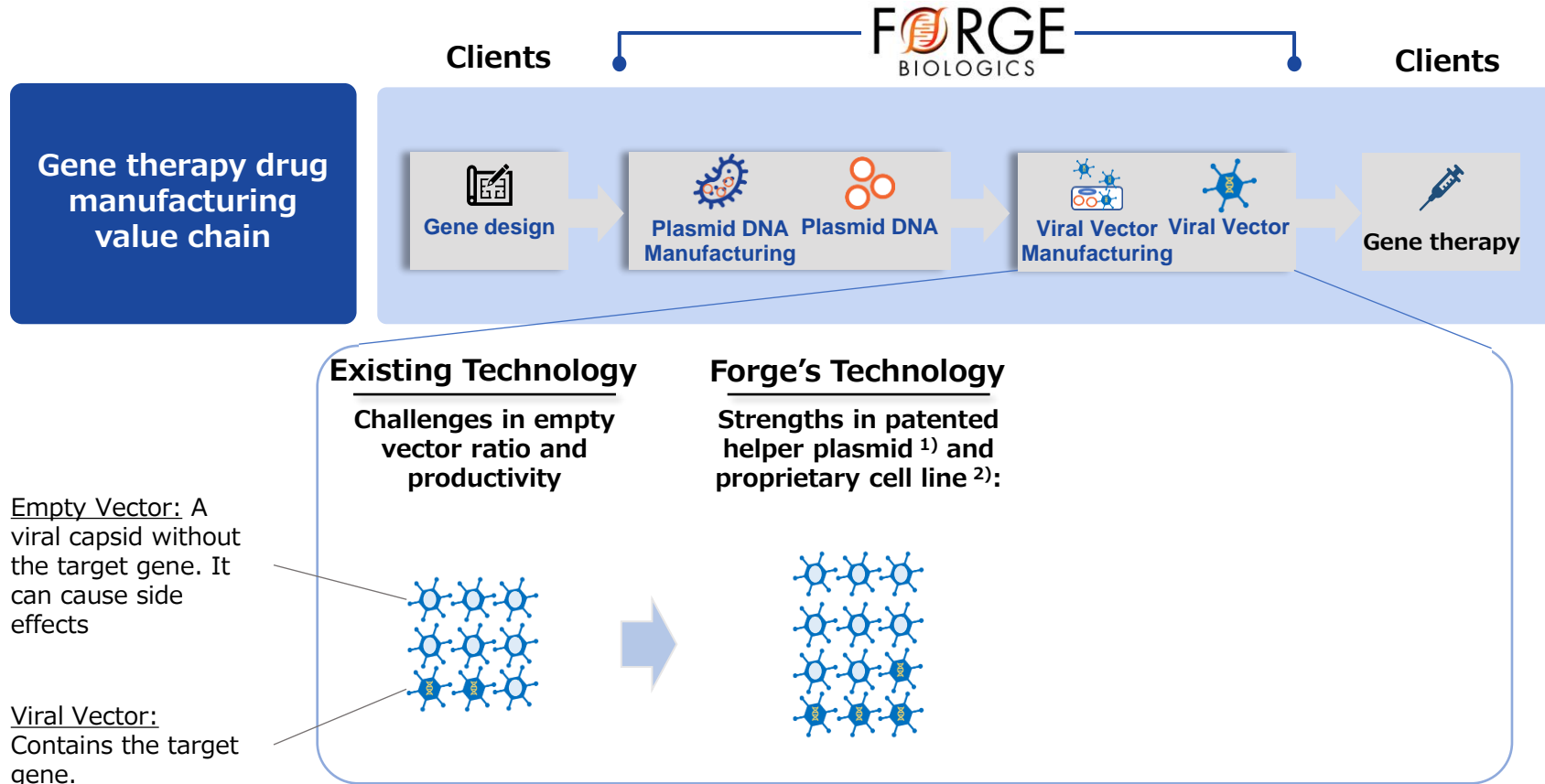
- One of the largest manufacturing equipment with 5,000L capacity 

Abundant pipelines and clinical trial track record

- Regulatory compliance track record through cGMP manufacturing of in-house gene therapy drugs for clinical use
- Dozens of customer programs, including in-house pipeline projects 

Combining Forge's Technology with "AminoScience"

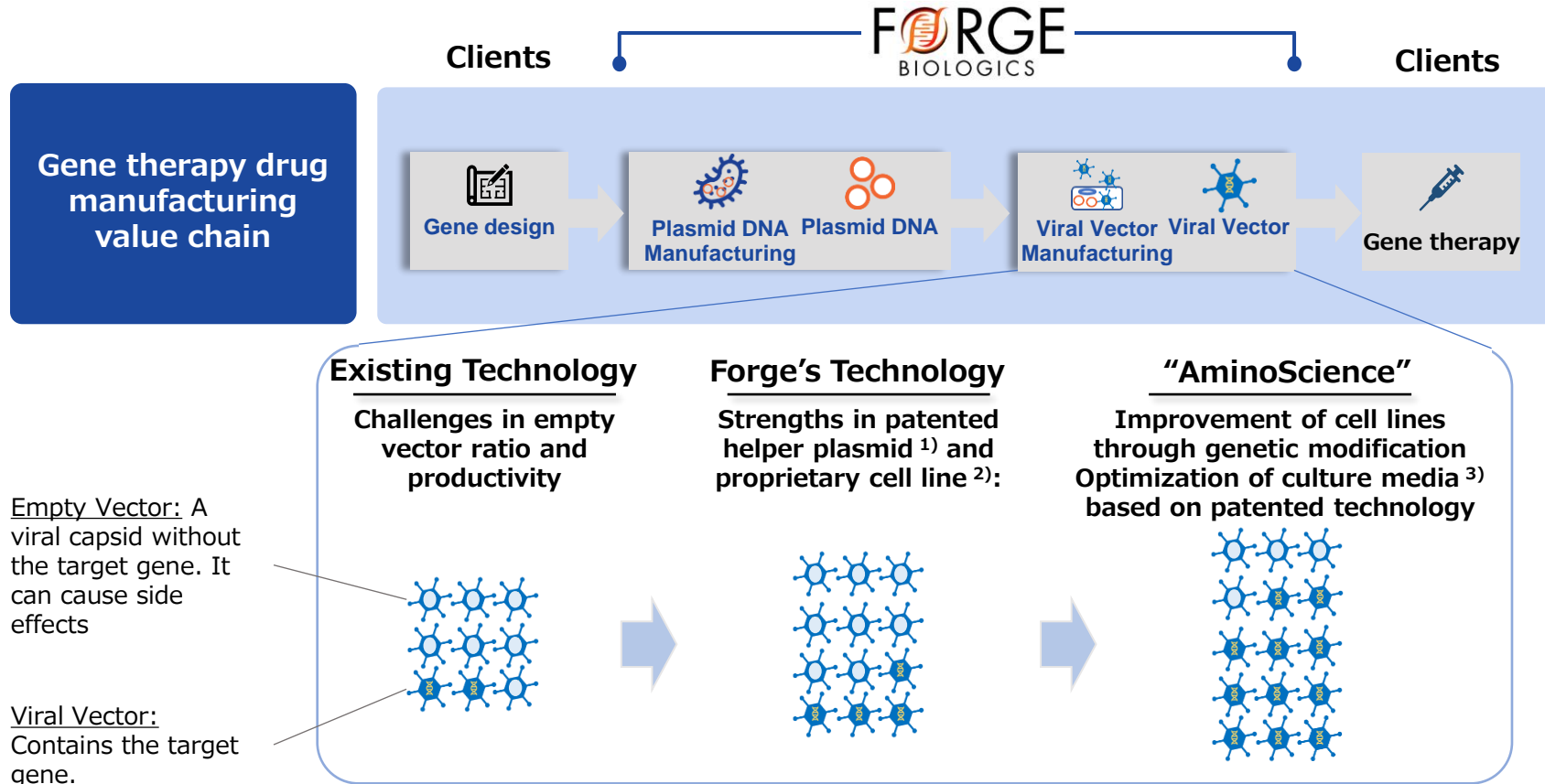
By merging Forge's technology and "AminoScience", we aim to create unparalleled viral vector manufacturing capabilities and become a leader in the gene therapy contract manufacturing field.



- 1) Helper Plasmid: DNA of the protein required for inserting the target gene into the viral shell
- 2) Cell Line: Special cells used for introducing the target gene's DNA (plasmid) and helper plasmid, and producing viral vectors
- 3) Culture Media: A source of nutrients needed for cell growth and viral vector production.

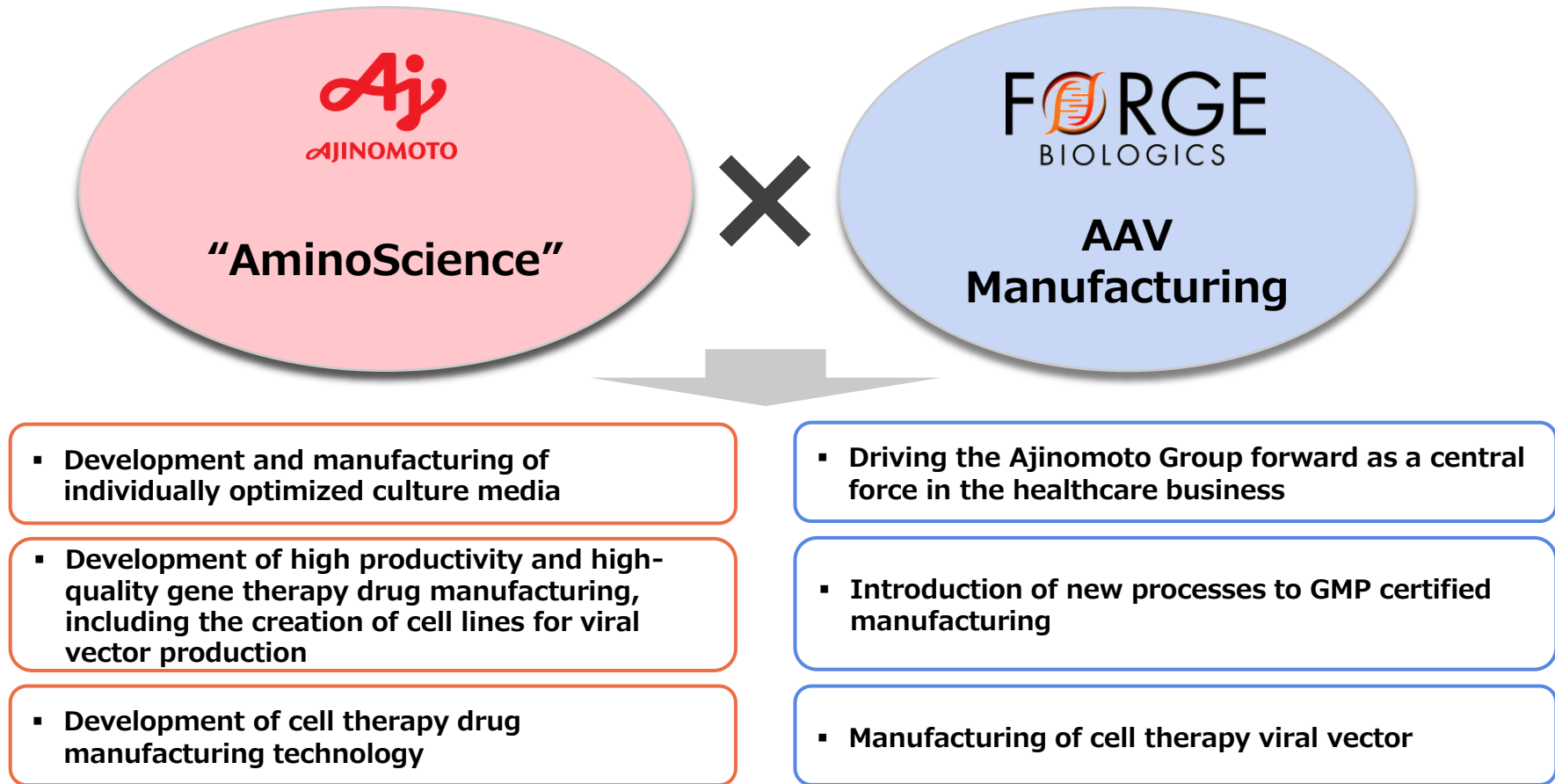
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Evolution of “AminoScience”



Robust platform in the advanced therapy field through the evolution of “AminoScience”

Ajinomoto Group's CDMO Business Portfolio (Before the acquisition of Forge)

With the acquisition of Forge, Ajinomoto Group will expand its contract business utilizing its unique technology and promote further value-added growth in the business.

Ajinomoto Group's solutions

Advanced therapy modalities

AJIPHASE[®]

Proprietary efficient manufacturing technology for oligonucleotides, which have an expanding market as a therapeutic agent for intractable diseases. Already successfully commercialized.

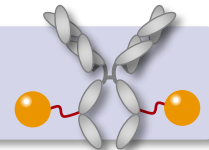
Oligonucleotides



AJICAP[®]

Breakthrough technology to control the number of drugs that bind to antibodies.

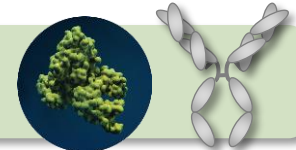
Antibody drug conjugates



TALAMAX[®]

Attracting attention as a manufacturing technology for antibody-like proteins and antibodies without sugar chains.

Proteins



**RNA fermentation
production technology, etc.**

mRNA is attracting attention for novel coronavirus vaccines.

Vaccines

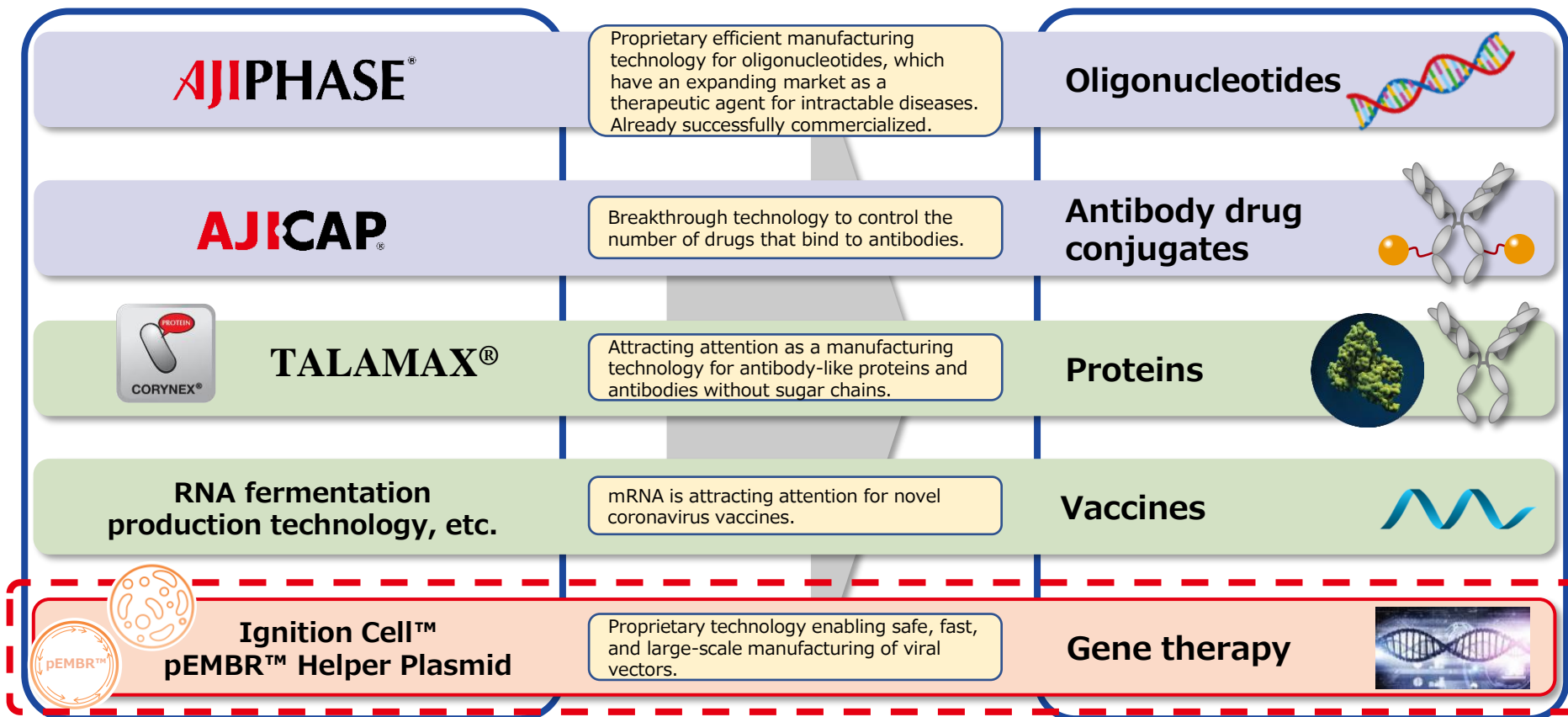


Ajinomoto Group's CDMO Business Portfolio (After the acquisition of Forge)

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Ajinomoto Group's solutions

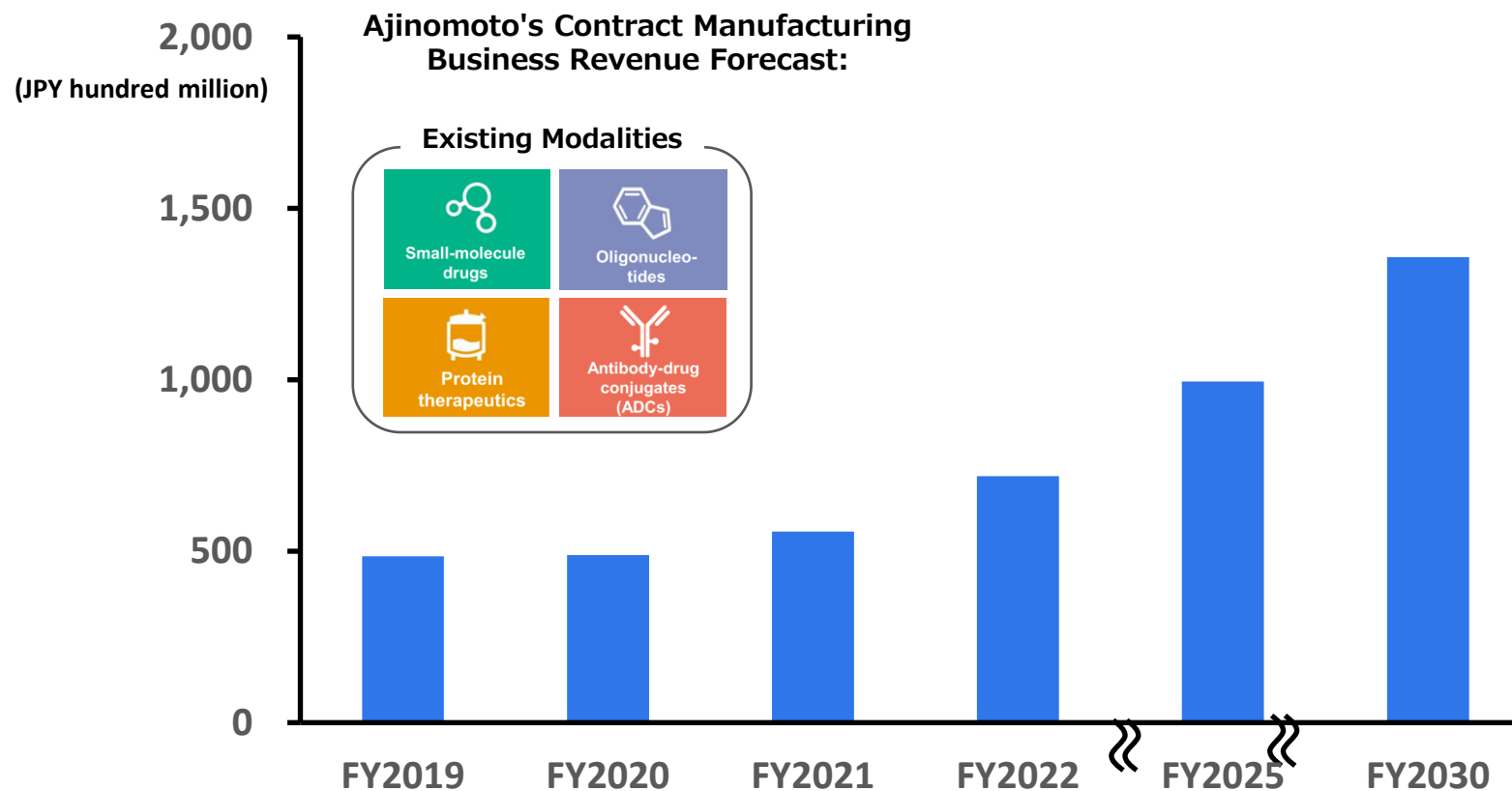
Advanced therapy modalities



Expansion through the acquisition of **FORGE**
BIOLOGICS

Growth Strategy of Ajinomoto Group's CDMO Business

Becoming a Leader in Next-Generation Modalities.



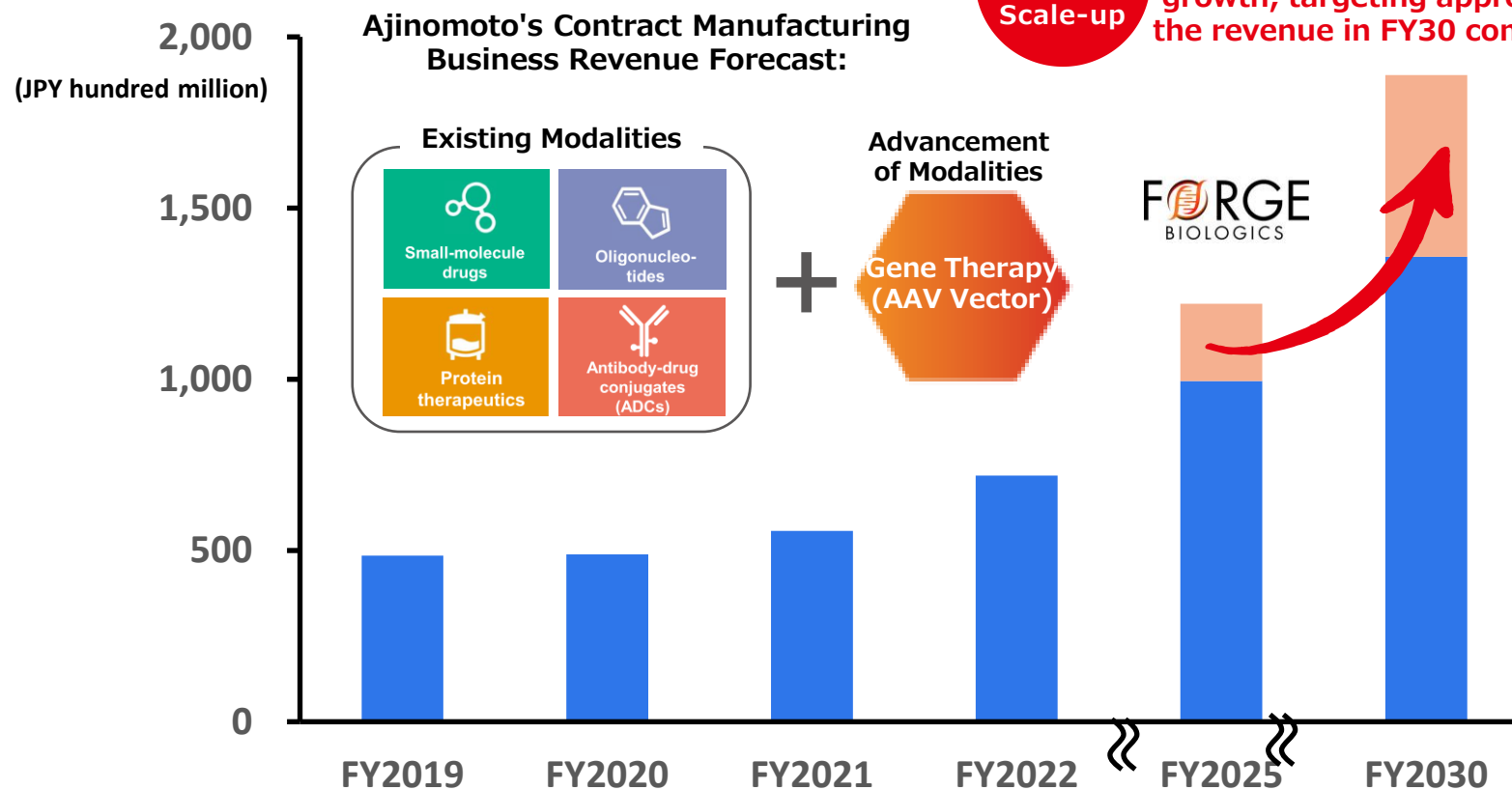
Advancing the transition towards a high-value business model,
fostering growth acceleration and enhanced revenue generation in the healthcare business

Growth Strategy of Ajinomoto Group's CDMO Business

Becoming a Leader in Next-Generation Modalities.

Speed-up
×
Scale-up

Aiming for early realization of the 2030 Roadmap through acceleration of growth, targeting approximately triple the revenue in FY30 compared to FY22.



Advancing the transition towards a high-value business model, fostering growth acceleration and enhanced revenue generation in the healthcare business

Management Structure After the Acquisition

Ajinomoto Group will maintain Forge's current management structure while also assigning its own management personnel to facilitate a swift business integration and create synergies.

Forge's Top Management

CEO and President Timothy J. Miller, Ph.D.



- The President and CEO, who co-founded Forge in 2020, has over 20 years of experience in business development, research, product development, and clinical operations.
- Before establishing Forge, he founded Abeona Therapeutics, which focuses on gene and cell therapies for rare diseases and held the positions of CEO and President from 2012 to 2018 and successfully took the company public in 2015.

Detailed Management Structure

Ajinomoto Group will assign executives, including those who will serve as new directors of Forge, to accelerate value creation.

Collaboration between Ajinomoto North America HD and Althea, which is involved in the CDMO business, will be strengthened, including through mutual personnel assignments.

After the acquisition, the rest of the current management team also plans to continue their commitment to the company's management.

Furthermore, Ajinomoto Group will dispatch necessary personnel, strengthen governance, and provide essential management resources to support growth

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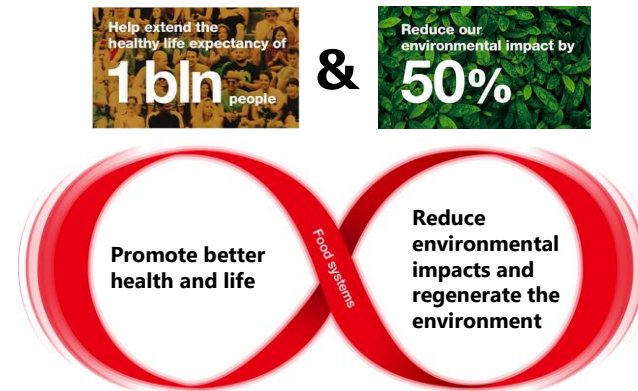
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(Summary)**

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**Contributing to the well-being of all human beings,
our society and our planet with “AminoScience”**



**Entry into the Gene Therapy Field Contributes to ASV Initiatives
Aiming to Realize Our “Purpose” Together with Forge**

Contribution of Gene Therapy to Patients with Rare Diseases

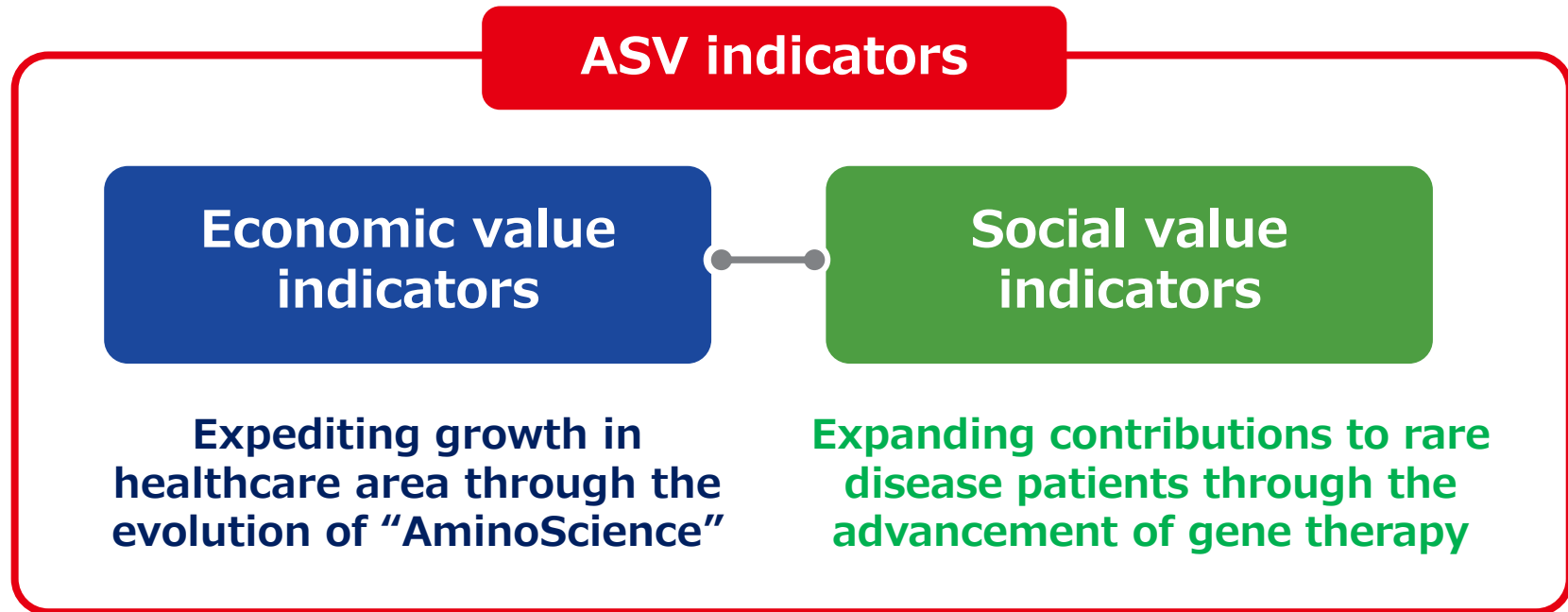
Maria Escolar, M.D., Chief Medical Officer at Forge Biologics shares her thoughts on the Krabbe Disease (genetic disease) project.



Contribution to Our "Purpose" & ASV

Realizing our "Purpose" and contributing to ASV Initiatives through entry into the gene therapy field with a market-leading platform.

**Contributing to the well-being of all human beings,
our society and our planet with "AminoScience"**



Key Points of the Acquisition

Contribute to our "Purpose" and ASV

Expanding contributions to patients suffering from rare diseases and accelerating growth in the healthcare area

Accelerate growth in the healthcare domain

"AminoScience" xForge technology establishes dominant position in gene therapy

Speed-up x Scale-up

Early and significant growth in growth rate and profitability through "Speed-up" x "Scale-up"

Improve Patient Well-being with Forge

Purpose
x
Passion
x
OE

Speed-up
x
Scale-up

Increase growth and profitability by establishing a dominant position in gene therapy

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- **Forward-looking statements, such as business performance forecasts, made in these materials are based on management's estimates, assumptions and projections at the time of publication. A number of factors could cause actual results to differ materially from expectations.**
- **This material includes summary figures that have not been audited so the numbers may change.**
- **Amounts presented in these materials are rounded down.**

Appendix

Glossary (1/2)

©Adeno-associated virus (AAV):

A small virus that infects humans and primates, AAV is non-pathogenic and cannot replicate itself without the presence of another virus. It can efficiently deliver normal genes to cells with defective genes, allowing them to synthesize normal proteins. As it can safely and easily deliver genes to patients' cells, the possibility of treating many diseases is suggested.

©Viral vector:

In gene therapy, a vector is a carrier used to deliver therapeutic genes to cells. Viral vectors are based on viruses that have lost their infectious properties.

©Gene therapy:

A medical technology that treats patients by replacing a part of the genes in their cells. Gene therapy methods include in vivo gene therapy and ex vivo gene therapy.

In vivo gene therapy involves directly injecting the target gene into the body. AAV vector-based gene therapy falls into this category.

Ex vivo gene therapy involves taking cells out of the body, introducing genes, and returning the cells to the body. Genetic modification immunotherapies, such as CAR-T cell therapy, are examples of this method.

©Plasmid:

A plasmid is a small piece of DNA found in bacterial and yeast cells that can self-replicate. Technically modified for delivering the target gene to mammalian cells, plasmid DNA can be used to insert the target gene and make it work within the cell.

Glossary (2/2)

©GMP Suite:

GMP stands for "Good Manufacturing Practice," referring to the standards and rules established to ensure product quality. A GMP suite is a "special room" for producing viral vectors for gene therapy, where specific rules and criteria are in place. This ensures that viral vectors are manufactured safely and function effectively.

©Krabbe Disease:

A neurological disorder caused by genetic abnormalities that prevent the body from properly breaking down specific lipids. As these lipids accumulate, they destroy brain nerve cells, leading to various health problems. Symptoms of Krabbe disease generally include developmental delays, vision and hearing loss, tremors and spasms in hands and feet, and mental issues. Currently, treatment options are limited and mainly focus on symptom management and improving the quality of life.

Forge Biologics is conducting clinical trials for the gene therapy drug FBX-101 using AAV vectors, targeting Krabbe disease. If successful, this development could offer a new treatment option and bring hope to patients with Krabbe disease.