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FY2023 Ajinomoto Co., Inc. Business Briefing

Follow-up to the Acquisition of US-Based Forge Biologics Holdings

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Chief Innovation Officer(CIO)**

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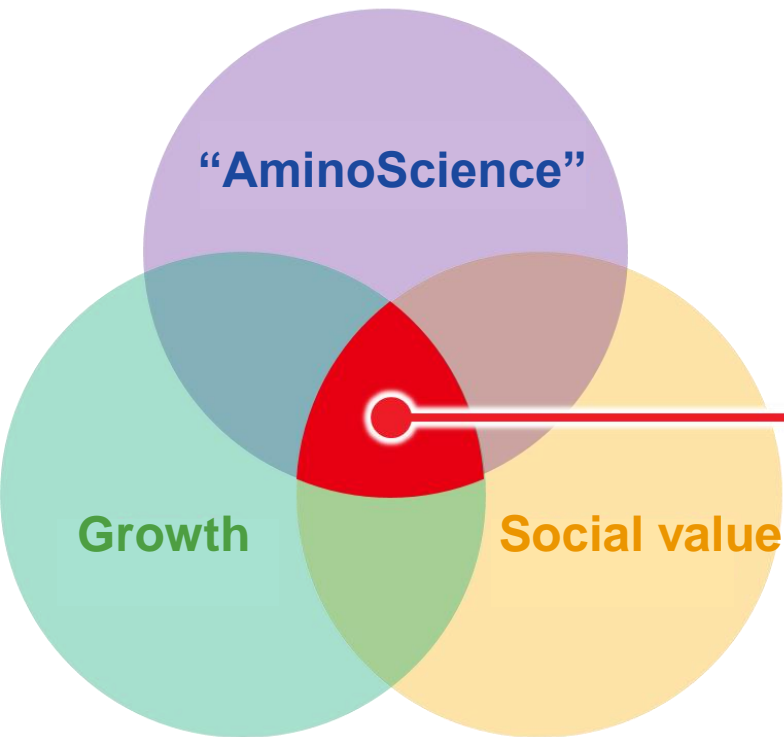


Today's Message

- **In the Healthcare area, in addition to business model transformation (BMX) (nucleic acid-based drug contract development and manufacturing, culture media, and medical foods), we will engage in next-generation businesses by addressing unmet needs with high social value and by advancing into the fast-growing nucleic acid-based drug contract development and manufacturing market. Pursuing a high-value-added model, we will aim to accelerate business growth and be highly profitable.**
- **Among the Innovation Strategy Teams that we organized for the four areas in order to achieve our 2030 Roadmap, the Healthcare Team undertook partnering activities and the construction of an intelligence network, leading to the acquisition of Forge Biologics.**
- **Forge Biologics has strengths in business, human resources, and technology, as well as cutting-edge manufacturing facilities and a highly advanced production and quality control structure for the reliable production of viral vectors, drug raw materials that are very challenging to manufacture. The manufacturing sites used for these difficult investigational drugs present high hurdles to change by customers. Combining its substantial existing pipeline growth with new pipelines to be acquired, Forge Biologics will achieve strong growth.**
- **We will further reinforce the strengths of Forge Biologics through synergy with “AminoScience” and will expand and accelerate the growth of the contract development and manufacturing business. Through the evolution of “AminoScience,” we will also connect these activities to the construction of a robust platform in areas of advanced medicine, including expansion of our culture media business and entry into the cell therapy area.**

Ajinomoto Group Growth Strategy

By leveraging the strengths of the Ajinomoto Group’s unique “AminoScience” offerings, we aim to achieve dramatic growth in four growth areas. These areas were defined through our basic policy to focus on areas where there is great market growth potential and social value.



Eat Well, Live Well.

Healthcare



Contribute to the extension of healthy life expectancy and to the evolution of treatment and prevention through a deep understanding of the human body

ICT



Contribute to the realization of faster, more efficient semiconductors and to a smart society

Food & Wellness



Contribute to “health and happiness” and self-fulfillment through a deep understanding of food

Green

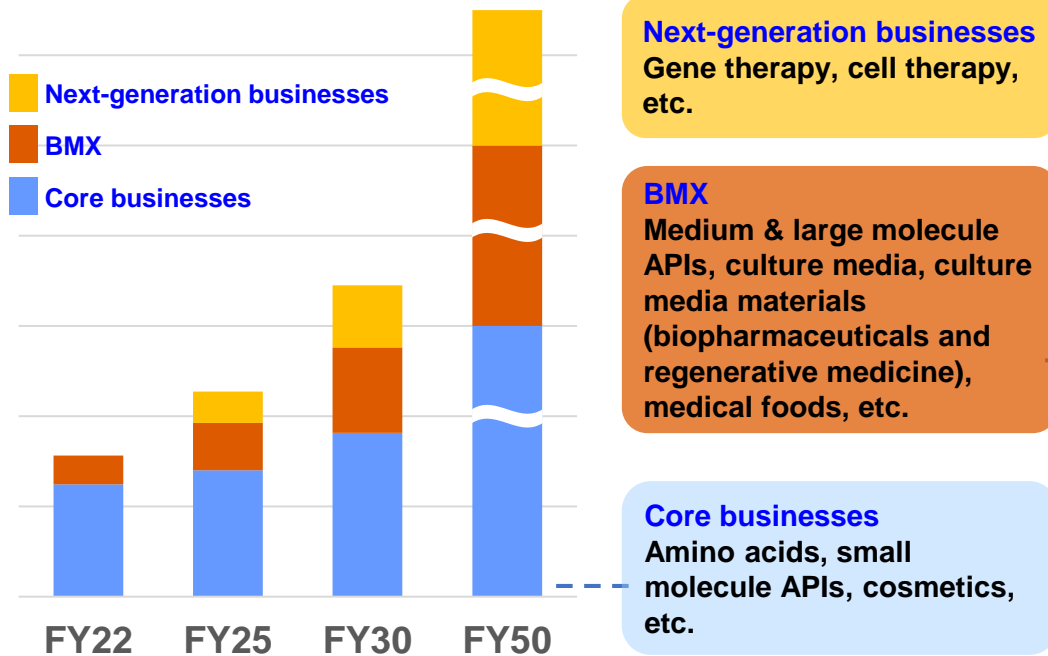


Coexist with the earth, reduce environmental impacts, and create new food standards for future generations

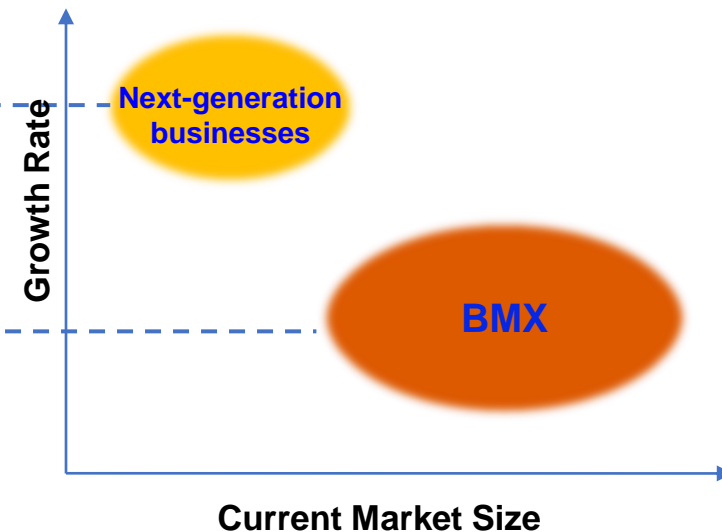
Growth Strategy in the Healthcare Area

- ✓ Continue to grow in core businesses such as amino acids and small molecule APIs
- ✓ Drive growth through BMX (nucleic acid-based drug contract development and manufacturing, culture media, medical foods)
- ✓ Respond to unmet needs with high social value, advance our shift to a business model incorporating high added value from next-generation businesses (the fast-growing gene therapy and cell therapy areas), and aim to accelerate business growth and be highly profitable

Growth Vision



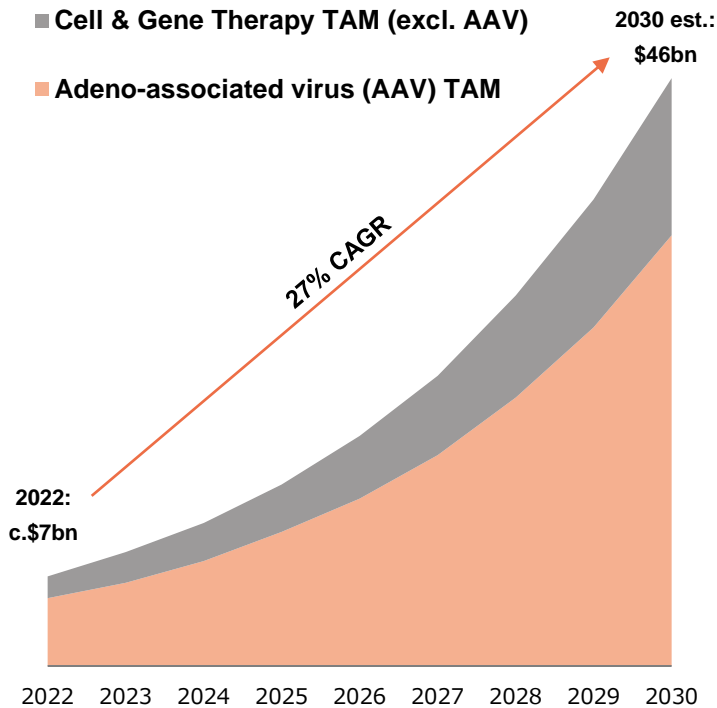
Target Markets (Growth Rate x Size)



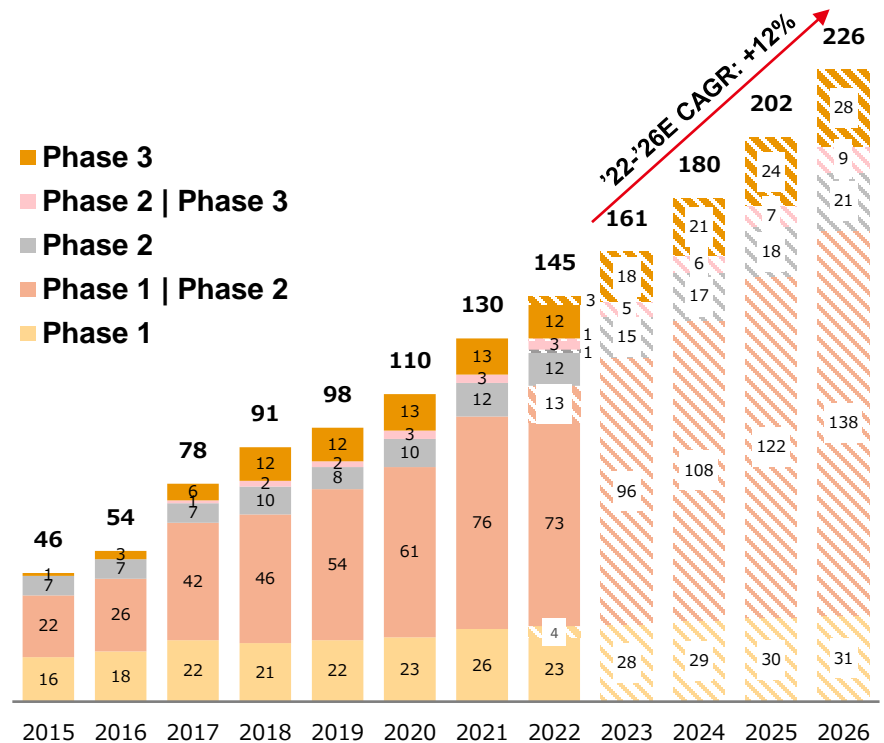
Rapid Growing Gene Therapy CDMO Market

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 ¹ (\$bn)



AAV Clinical Trials



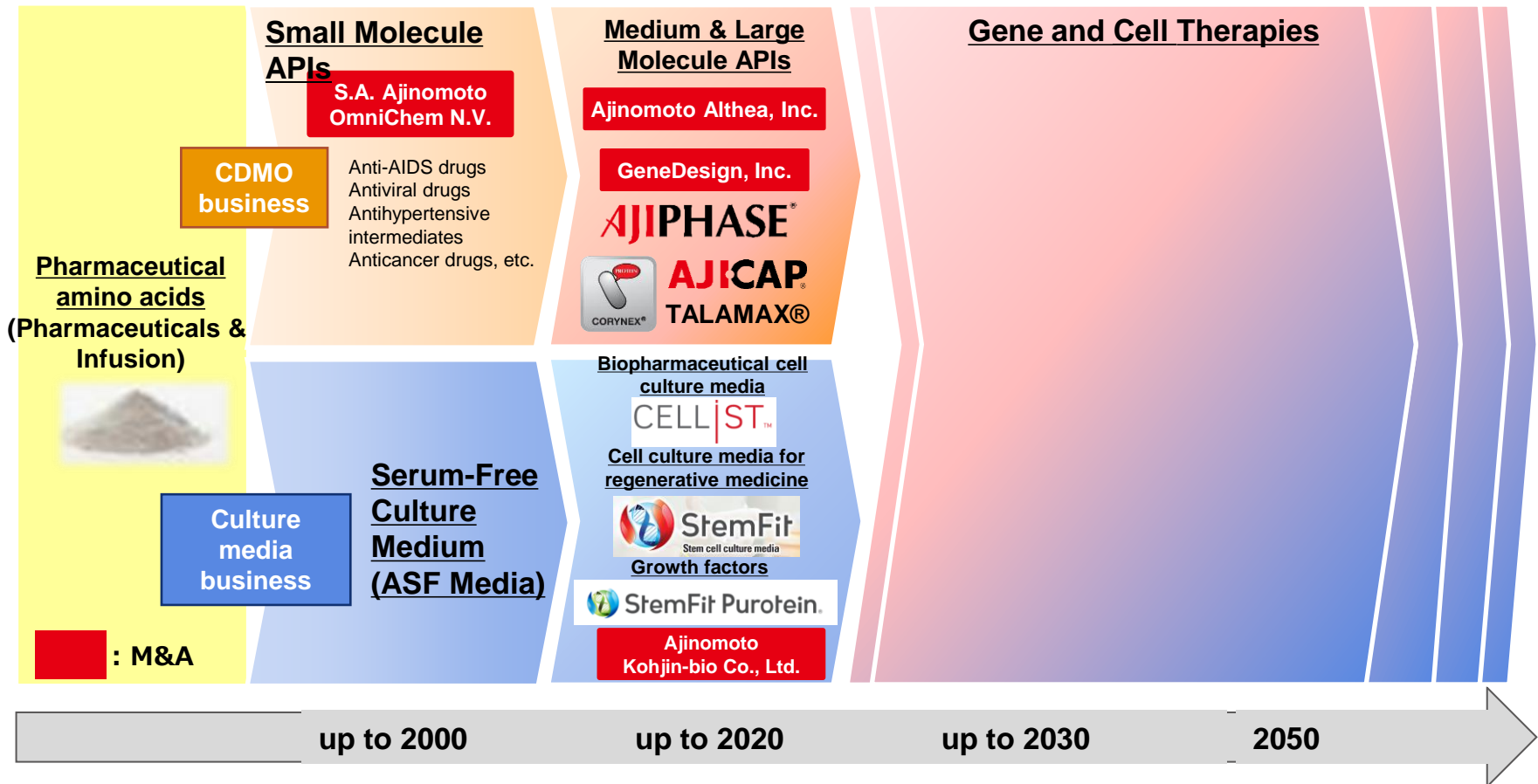
Source: Wall Street Research, Alliance of Regenerative Medicine, Roots Analysis and public press releases

1. Total Addressable Market

Growth Strategy in the Healthcare Area

Anticipating Advanced Medical Modalities

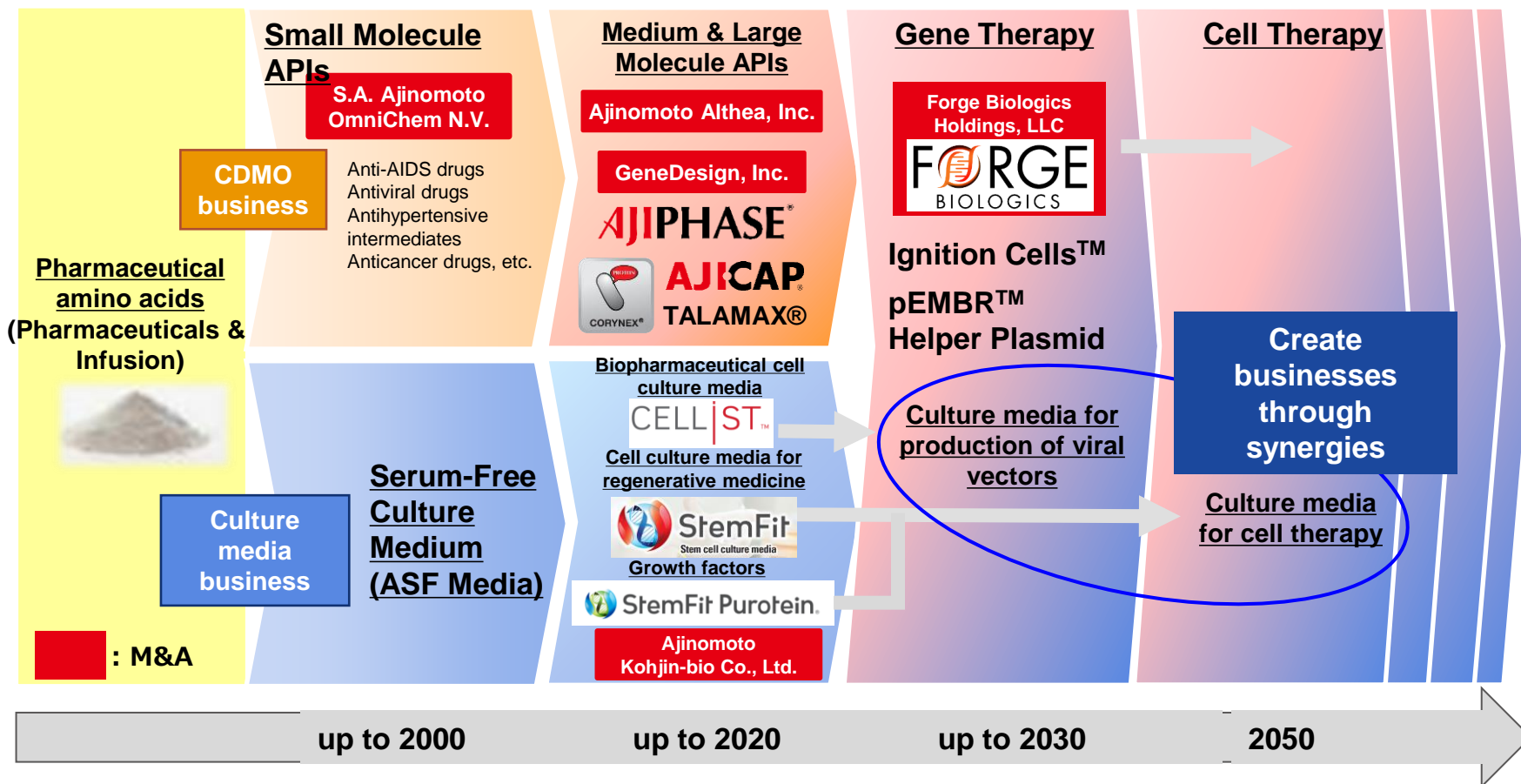
In the Healthcare area, the keys to our growth strategy are anticipating advanced medical modalities, creating unique and differentiated technologies through “AminoScience,” and building a business foundation through partnering, such as M&A.



Growth Strategy in the Healthcare Area

Acquisition of Forge Biologics and Expansion

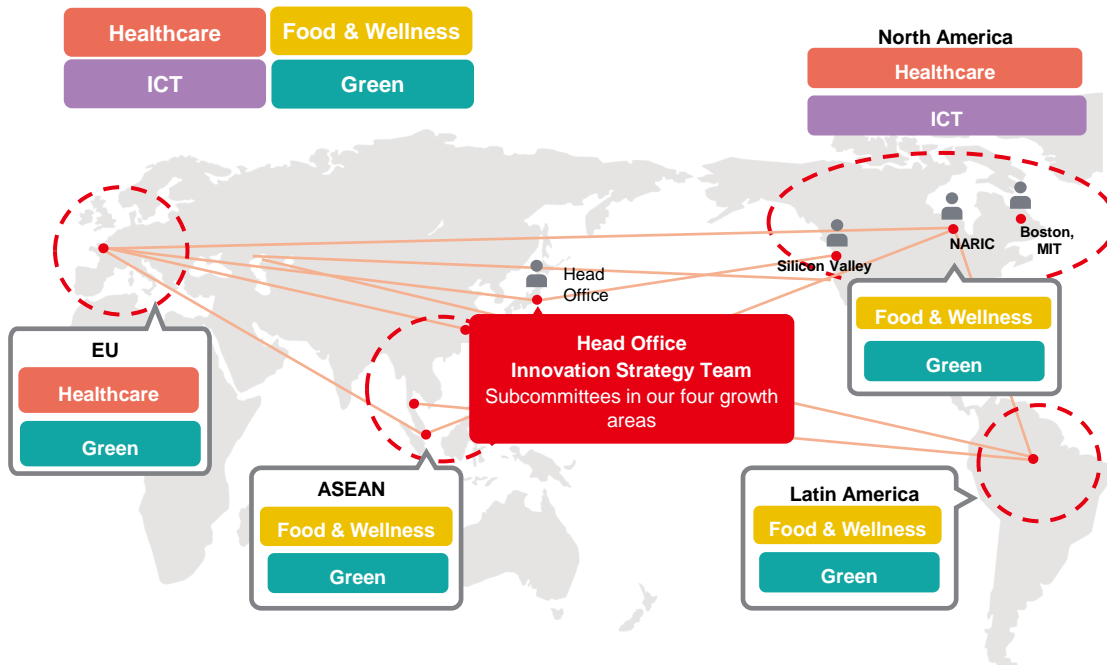
With the acquisition of Forge, we acquired the business foundation and unique differentiating technology of a gene therapy CDMO, and gained a foothold to strengthen and create business through synergies and expand into the cell therapy field.



Strengthening Inorganic Strategy through the Innovation Strategy Team

To achieve our 2030 Roadmap through medium-term ASV initiatives, for each of four areas we organized an Innovation Strategy Team featuring a three-way integration of business, R&D/intellectual property, and M&A/corporate venture capital (CVC), and undertook partnering activities

Strategy Team in each of four areas



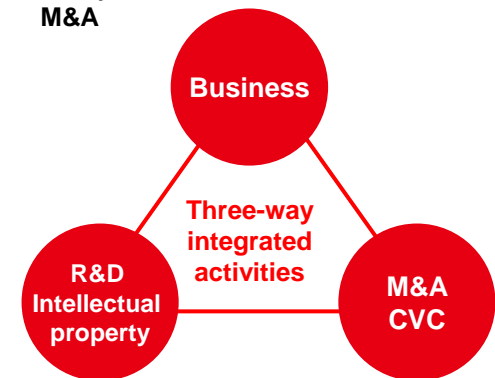
Growth strategies in four areas

Innovation Strategy Team

Market & business intelligence functions

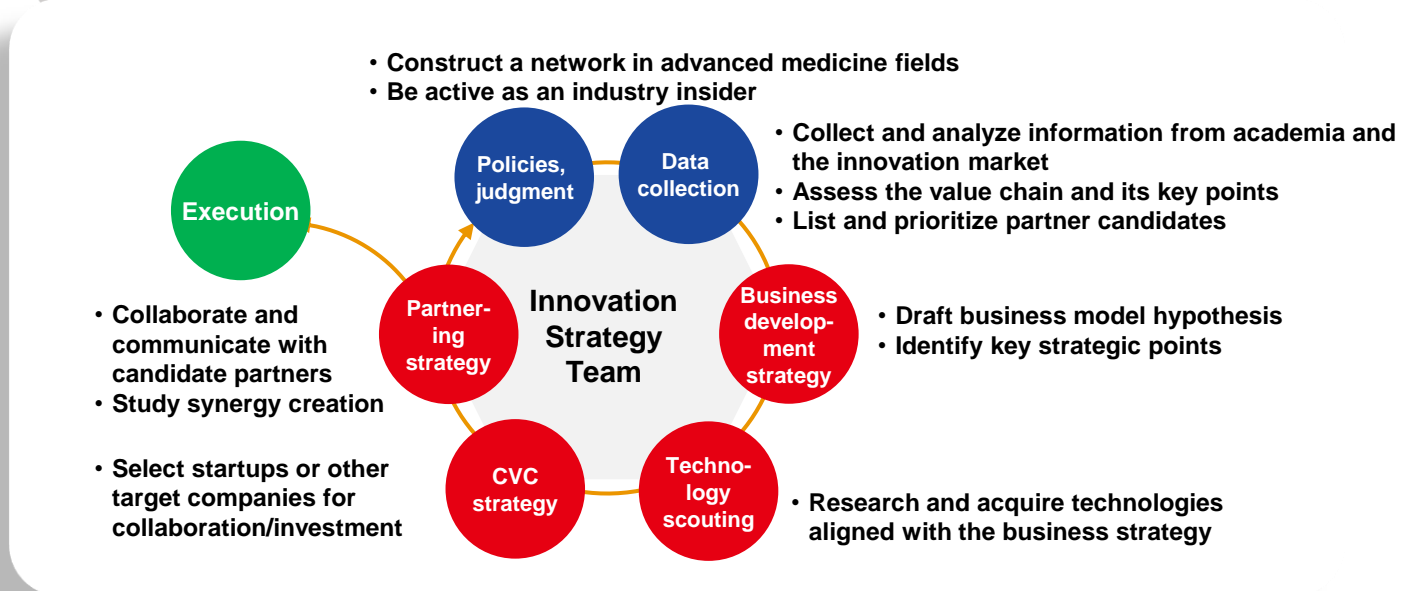
Communication with and search for, listing, and evaluation of potential partners

Study of venture investment and M&A



Creation of a Partnering Strategy through our Intelligence Network

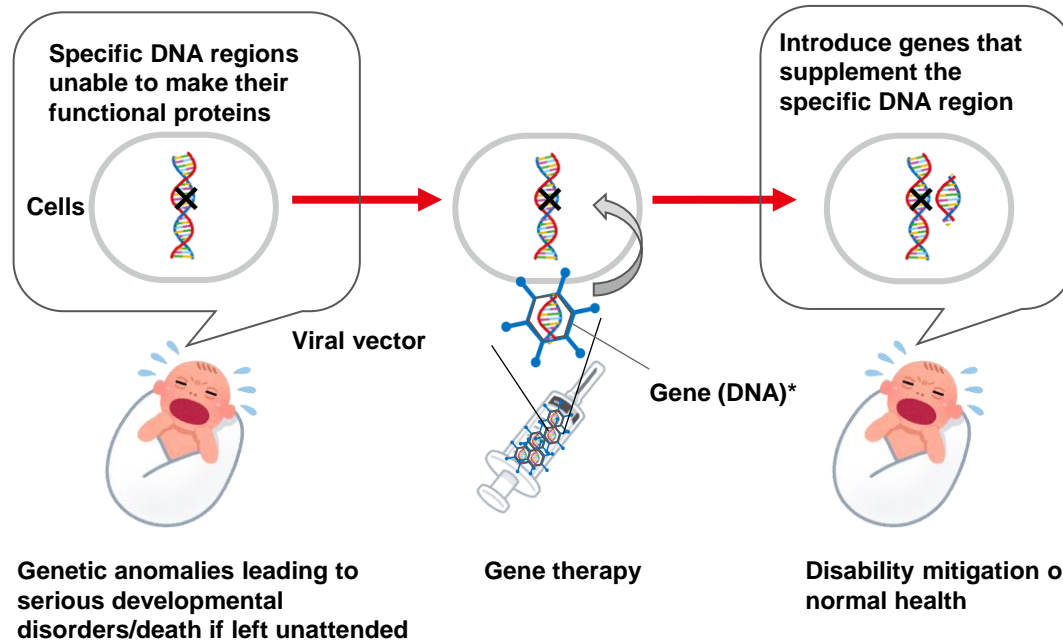
Network in the Healthcare area



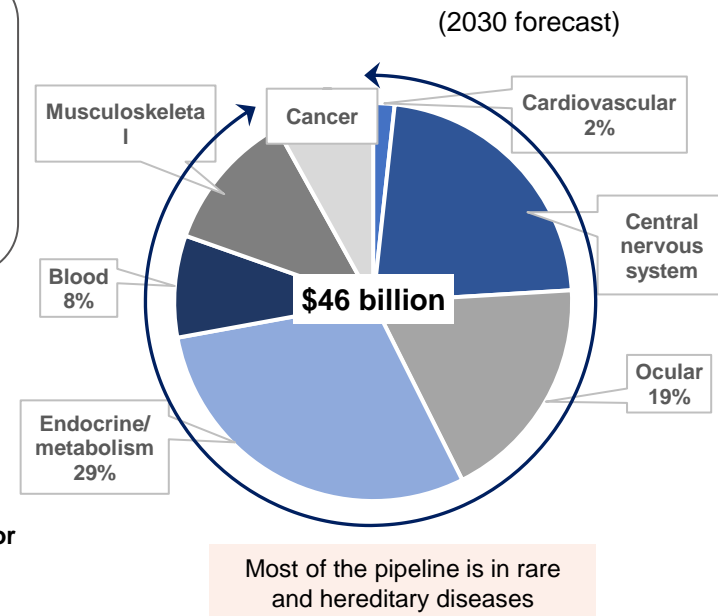
What is Gene Therapy?

- ✓ Medical technology for treating disease-causing genetic abnormalities by modifying/adding genes in the body
- ✓ Treatment that uses viral vectors to introduce genes directly into the body (**in vivo gene therapy**), often uses an adeno-associated virus (AAV) vector, which is very safe.

Principles of gene therapy



Breakdown of gene therapy drug market



* The illustration depicts two strands for explanation purposes, but the actual AAV is single-strand.

Source: ADL (partially modified)

Overview of Forge Biologics



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

Competitive Advantages of Forge Biologics (1): Human Resources

Ohio

The center of gene therapy in North America



A strong network with a wide range of pharmaceutical companies, centered on the pediatric hospital responsible for development of the first gene therapy drug, Zolgensma®



A leadership team composed of highly skilled professionals with extensive experience in the field of gene therapy



Maintenance and improvement of high quality manufacturing and customer service through an extremely low turnover rate relative to the average for biotech companies in the U.S.



Columbus, OH



200+ Years of Gene Therapy Leadership



Timothy J. Miller, Ph.D.
CEO, PRESIDENT AND CO-FOUNDER



David Dismuke, Ph.D.
CHIEF TECHNICAL OFFICER



John Maslowski, M.S.
CHIEF COMMERCIAL OFFICER



Maria Escotar, M.D., M.S.
CHIEF MEDICAL OFFICER



Jaysson Eicholtz, M.S.
CO-FOUNDER & CHIEF OPERATING OFFICER



Erandi De Silva, Ph.D.
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Christina Perry, MSA, CPA
SVP OF FINANCE & INVESTOR RELATIONS



Magdalena Tyypinen, MBA
SVP AND HEAD OF BUSINESS DEVELOPMENT



Christopher Shilling, M.S.
SVP OF REGULATORY AFFAIRS & QUALITY



Stephen Goden
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Juan Ruiz, M.D., Ph.D., MBA
SVP OF CLINICAL AFFAIRS



Frank Agbogbo, Ph.D., MBA
VP OF PROCESS DEVELOPMENT



Adam Davis
VP OF ANALYTICAL DEVELOPMENT



Taleen Barsoumian
VP OF CLIENT DEVELOPMENT



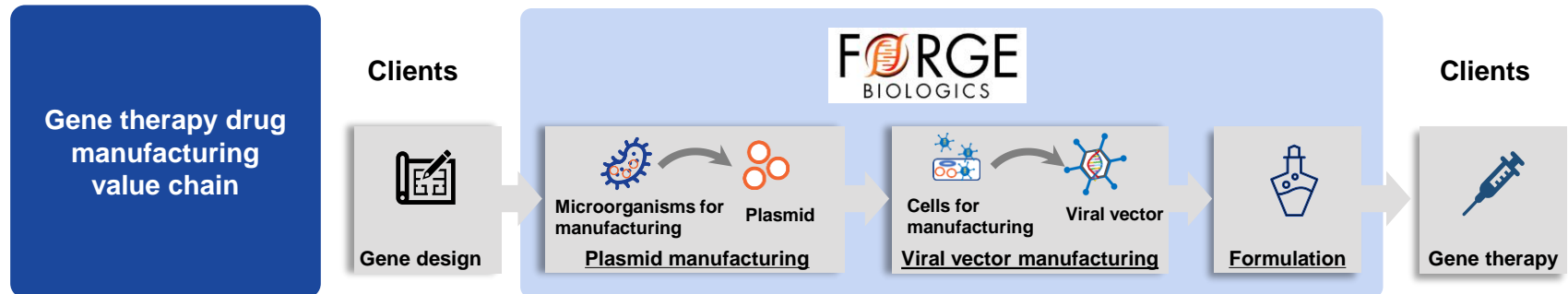
Meghan Leonard
VP OF QUALITY MANAGEMENT



Chris McPherson
VP OF GMP MANUFACTURING

Competitive Advantages of Forge Biologics (2): Business

Forge Biologics possesses extensive pipelines grounded in the full value chain for the development and manufacture of gene therapy drugs



Clinical track record

- Strengths in high capability with a high level of production and quality control and a track record of regulatory compliance through GMP manufacturing of APIs for clinical trials, including our own gene therapy drugs.



Extensive clinical stage pipelines

- Pipelines with ongoing clinical trials numbering in the double digits or more



Diverse customers and substantial no. of pipelines

- Pipelines approaching three digits from wide-ranging customers, including pharmaceutical majors, small and medium-sized biotech pharmaceutical firms, public institutions, and academia





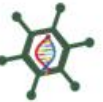




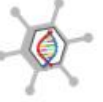

Continuous orders from customers

- High hurdles to change by customers, based on advanced technical know-how that enables cGMP manufacturing of gene therapy drugs with complex structures



Competitive Advantages of Forge Biologics (3): Technology

- ✓ **cGMP manufacturing in gene therapy contract development and manufacturing requires high standards of technology, quality, and experience. Success in initial clinical trials after winning an order yields a high probability of winning orders at subsequent stages.**
- ✓ **Forge Biologics is capable of cGMP manufacturing for all nine major types of AAVs and wields extremely strong competitiveness in the industry.**

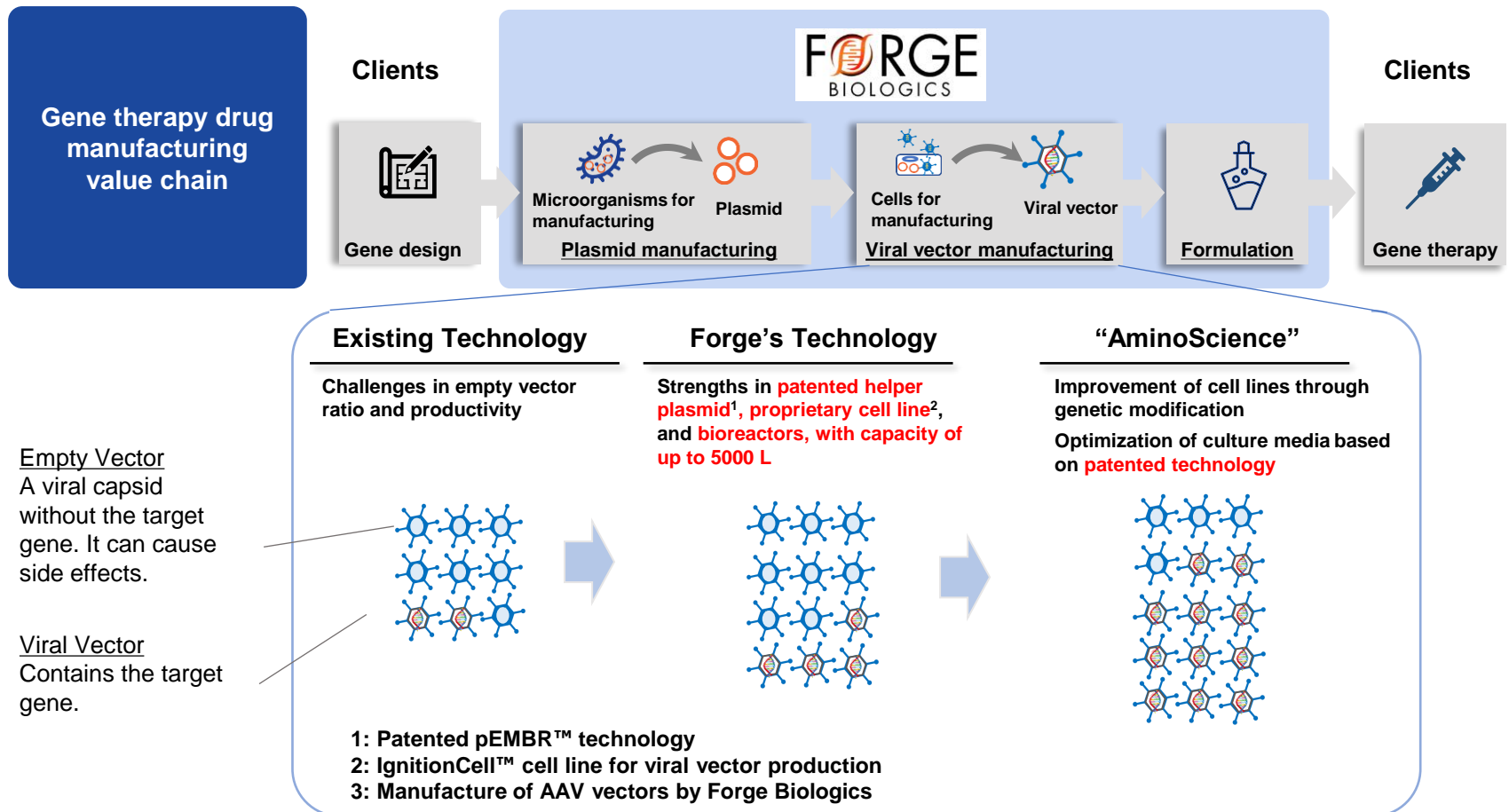
cello-type									
	AAV1	AAV2	AAV3	AAV4	AAV5	AAV6	AAV7	AAV8	AAV9
Organs Orientation	Liver, heart, skeletal muscle	Liver, heart and muscle	Heart, Liver	Heart, lung, Liver	Liver	Liver, heart, skeletal muscle	Liver, skeletal muscle	Heart, Liver, brain, muscle	Liver, heart, brain, Lung, skeletal muscle

Adeno-associated viruses (AAVs)

Source: M.Vance et al (partially modified)

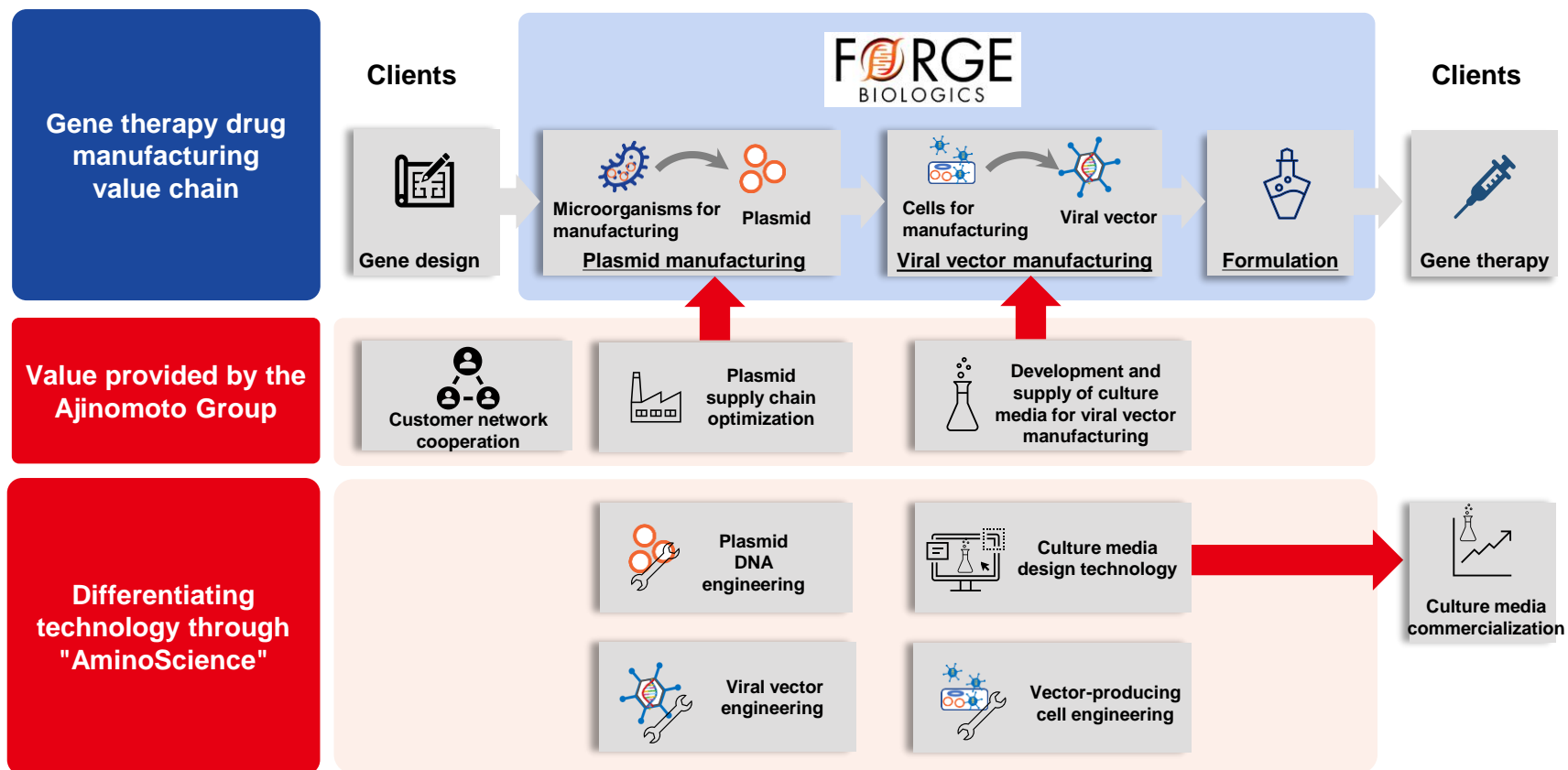
Competitive Advantages of Forge Biologics (3): Technology

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

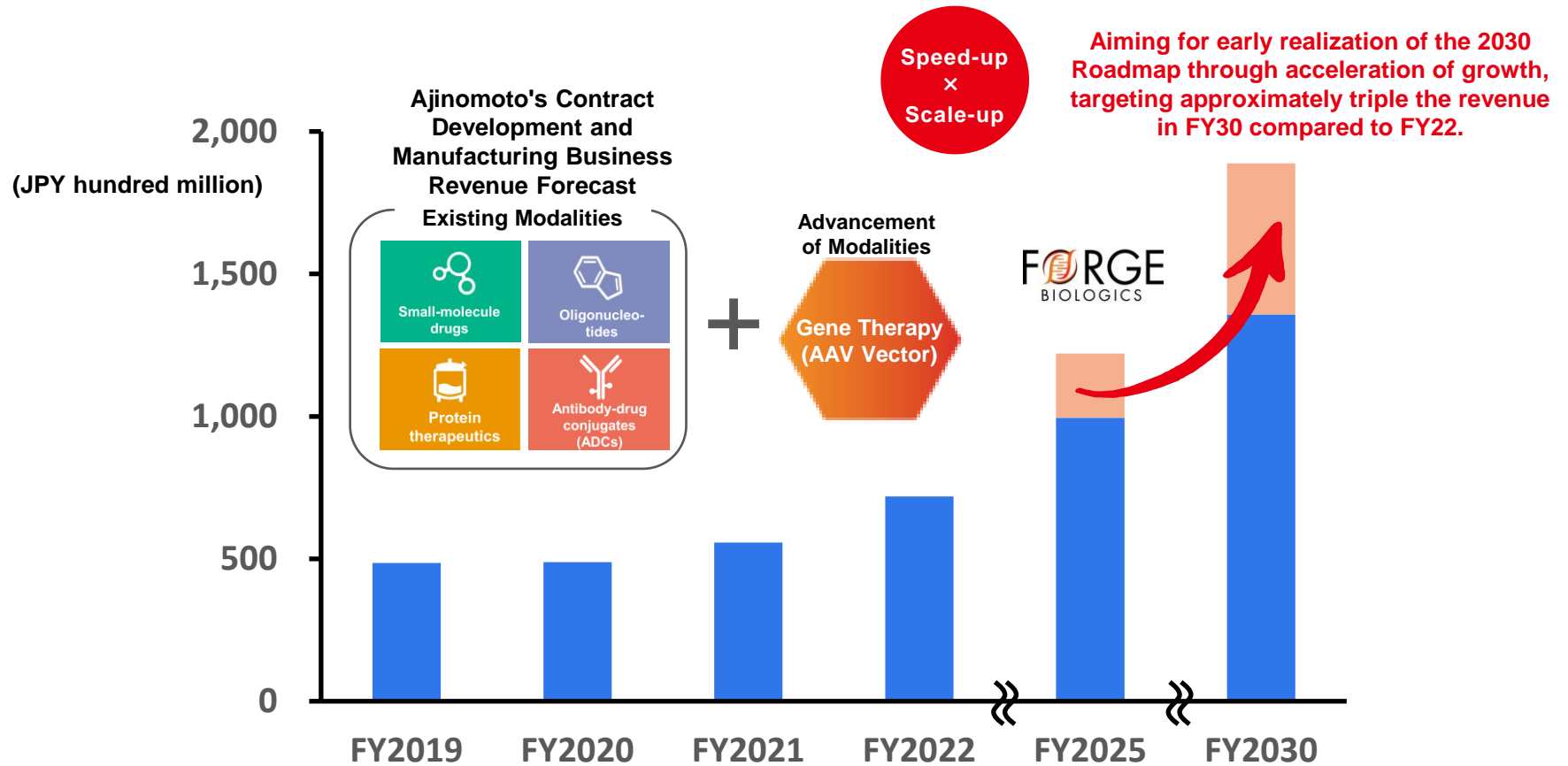


Strengthening of Forge Biologics' CDMO Service by the Ajinomoto Group

Potential for creating business and technical synergies in the manufacturing processes of gene therapy



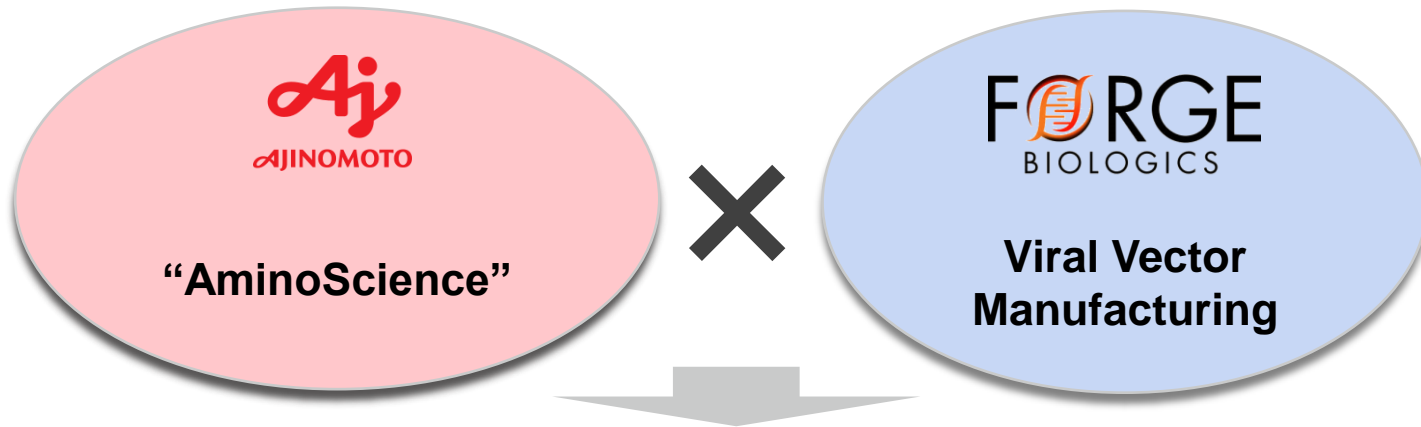
Future Growth of Ajinomoto Group's CDMO Service



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

Evolution of “AminoScience”

Build a stronger platform in the advanced medicine area through the evolution of “AminoScience”



Establish an overwhelming position through technology and achievements in the CDMO field of manufacturing AAV vectors* for gene therapy

Improve Forge Biologics’ productivity and quality through optimized culture media development, and also create new business by making culture media for gene therapy drugs a domain of the culture media business

Establish a new platform by viral vectors for cell therapy, and work toward further evolution into an advanced modality CDMO that includes the cell therapy business

*AAV: Adeno-associated virus

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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.**
- **“AminoScience” is a trademark of Ajinomoto Co., Inc. registered in Japan.**

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.