

Financial Results for the First Half Ended September 30, 2023

TAKARA BIO INC.

November 14, 2023

This is an English translation from Japanese presentation material.

Contents

- **Consolidated Financial Results for the First Half Ended September 30, 2023**
- Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised)
- Future measures

Consolidated Financial Results for the First Half Ended September 30, 2023: Net Sales (1)

(million yen)	Net sales	Y/Y	Comparison with Aug. 8 forecast
Reagents	14,949	▲12,615 ▲45.8%	▲134 ▲0.9%
General research	14,091	+366 +2.7%	▲326 ▲2.3%
COVID	857	▲12,982 ▲93.8%	+192 +28.9%

Reagents for general research

Sales increased in the U.S., Europe, South Korea, and India.
Sales declined in Japan and China.

Entire reagent business

Lower sales of COVID reagents had a significant impact, resulting in lower sales in all regions except South Korea.

2

(Note: Explanation of year-on-year change)



Consolidated Financial Results for the First Half Ended September 30, 2023: Net Sales (2)

(million yen)	Net sales	Y/Y	Comparison with Aug. 8 forecast
Instruments	411	▲282 ▲40.7%	▲80 ▲16.4%
CDMO	2,702	▲480 ▲15.1%	▲46 ▲1.7%
Regenerative medicine	1,839	▲176 ▲8.8%	▲33 ▲1.8%
Gene analysis / testing & others	862	▲306 ▲26.2%	▲15 ▲1.7%
Gene Therapy	1,052	▲91 ▲8.0%	▲21 ▲2.0%

Instruments

Sales of both PCR instrument and single-cell analysis instrument decreased.

CDMO

Sales of cell processing increased as part of CDMO of regenerative medicine but sales of vector production and quality testing declined. Decrease in sales related to gene analysis and testing.

Gene Therapy

Sales of RetroNectin® and other AM products[†] dropped.

3

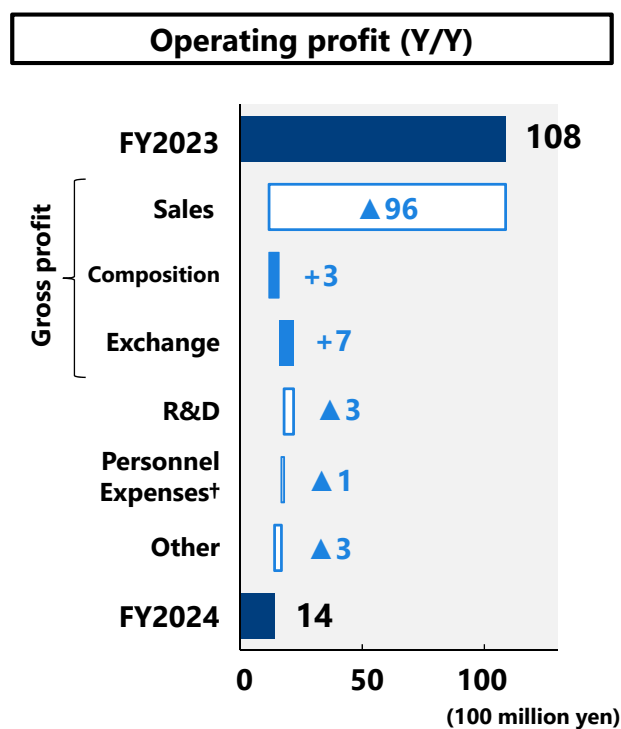
[†]AM: Ancillary Materials

(Note: Explanation of year-on-year change)



Consolidated Financial Results for the First Half Ended September 30, 2023: Operating profit

	FY2024	Y/Y	Comparison with Aug. 8 forecast
(million yen)			
Net sales	19,116	▲13,470 ▲41.3%	▲283 ▲1.5%
Gross profit	13,343	▲8,681 ▲39.4%	▲127 ▲0.9%
Operating profit	1,410	▲9,460 ▲87.0%	+310 +28.2%
R&D expenses	4,241	+387 +10.1%	▲257 ▲5.7%



4

† Excluding R&D personnel expenses



Contents

- Consolidated Financial Results for the First Half Ended September 30, 2023
- Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised)
- Future measures

5



Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised)

(million yen)	Full-year forecast (Revised)	Y/Y	Comparison with May 11 forecast
Net sales	45,500	▲32,642 ▲41.8%	▲7,800 ▲14.6%
Reagents	32,792	▲33,133 ▲50.3%	▲5,561 ▲14.5%
Instruments	1,314	▲61 ▲4.5%	▲705 ▲34.9%
CDMO	8,652	+451 +5.5%	▲1,261 ▲12.7%
Gene Therapy	2,740	+100 +3.8%	▲272 ▲9.0%
Gross profit	28,100	▲16,664 ▲37.2%	▲5,883 ▲17.3%
Operating profit	3,000	▲17,541 ▲85.4%	▲5,000 ▲62.5%
R&D expenses	8,810	+234 +2.7%	▲189 ▲2.1%

Y/Y change

Net sales: Expected to decrease overall due to the significant impact of the decline in sales of COVID reagents, despite the increase in sales in general research reagents, CDMO, and Gene Therapy businesses.

Operating profit: Expected to decrease due to the significant impact of the decline in gross profit from the decline in sales.

Comparison with May 11 forecast

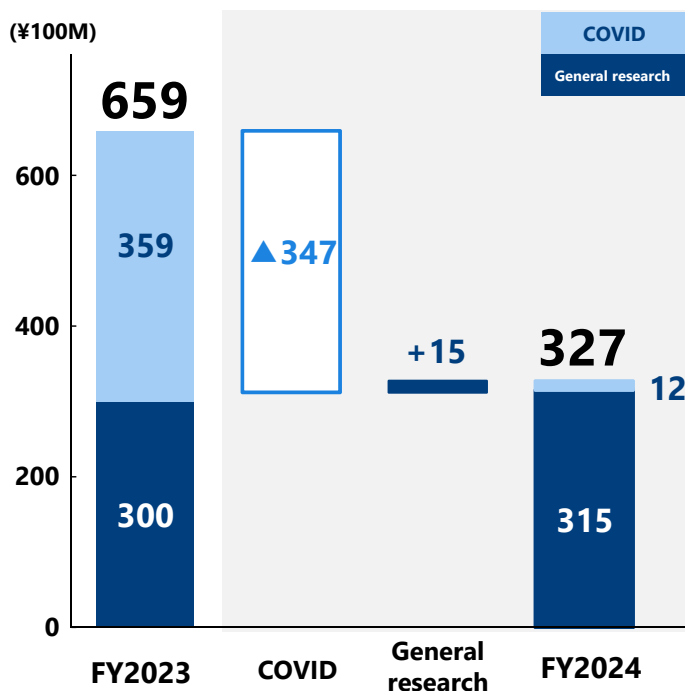
Net sales: Expected to be lower than the previous forecast in Reagents and Instruments business due to sluggish global life science market, etc. In CDMO business, the forecast is lower than the previous forecast due to intensifying price-based competition for gene analysis contracts.

Operating profit: Revised down from the previous forecast due to significant impact of lower sales despite efforts to reduce expenses.

6



Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised): Sales of Reagents Business (1)



COVID reagents

Demand is expected to decline worldwide, with sales forecast at ¥1.2 billion, minus ¥34.7 billion Y/Y.

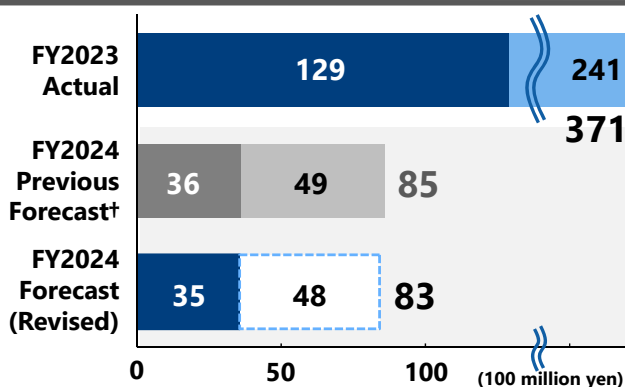
General research reagents

Despite a shortfall from the initial forecast due to a delay in recovery in the life science market, the forecast is for sales to increase by ¥1.5 billion Y/Y to ¥31.5 billion.

7

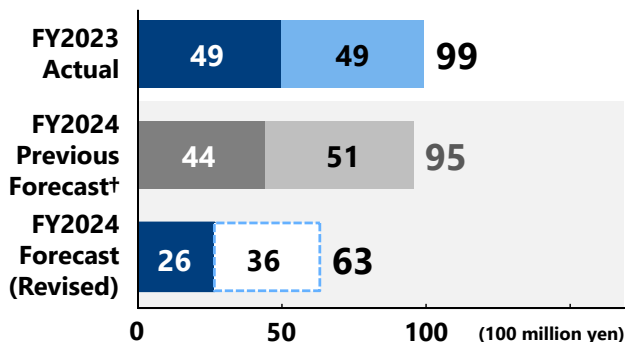


Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised): Sales of Reagents Business (2) Japan and China



Japan

In addition to changes in the market structure, there is a tendency to refrain from buying academia affected by high prices, and general research reagents are expected to be lower than the previous forecast. Demand for COVID reagents declined significantly due to a change in the legal positioning of the new coronavirus.



China

The government budget for research institutions has been drastically reduced, and the slump in the life science market has been prolonged. Competition is intensifying among Chinese competitors and product prices are falling.

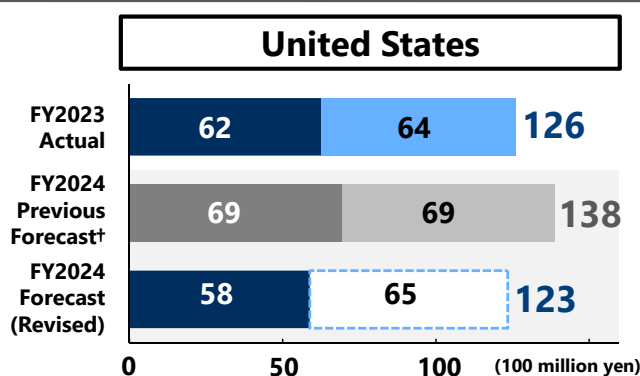
8

† Announced on May 11, 2023

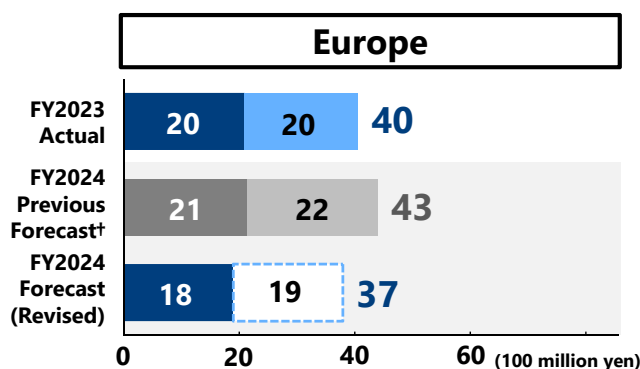
First half Second half



Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised): Reagent Business Sales (3) U.S. and Europe



United States



Europe

- In both the U.S. and Europe, cautious trends in R&D investment continued due to prolonged inflation and other factors, including the refraining from purchasing research materials.
- The life science market was sluggish due to funding difficulties at biotech companies such as ventures, shortages of human resources for core laboratories due to wage increases, cancellation of projects, and a decline in public budgets. Sales of COVID related products are expected to almost disappear, and reagents as a whole are expected to fall short of the previous forecast.
- Sales of reagents for general research are expected to increase YoY.

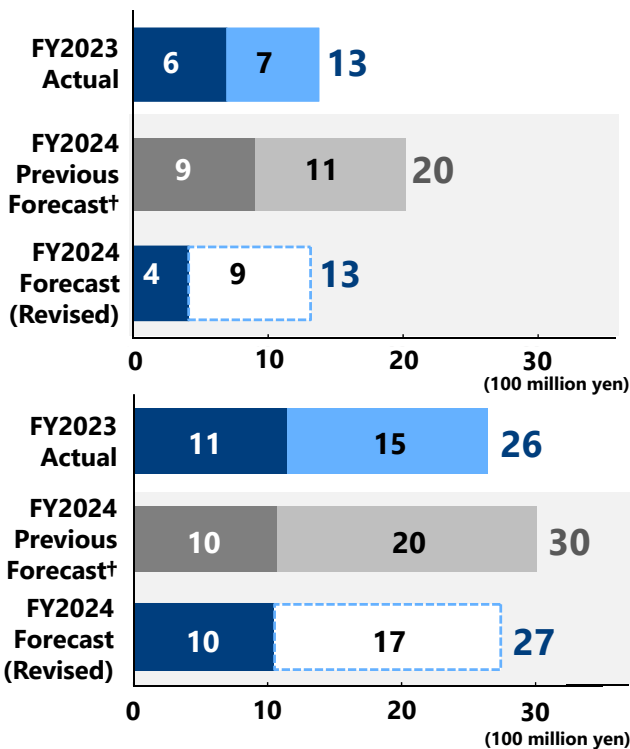
9

† Announced on May 11, 2023

First half Second half



Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised): Instruments and Gene Therapy Business Sales



Instruments Business

In addition to the decline in COVID related demand, results are expected to be lower than the previous fiscal year and the previous forecast due to the impact of the global slump in the life sciences market.

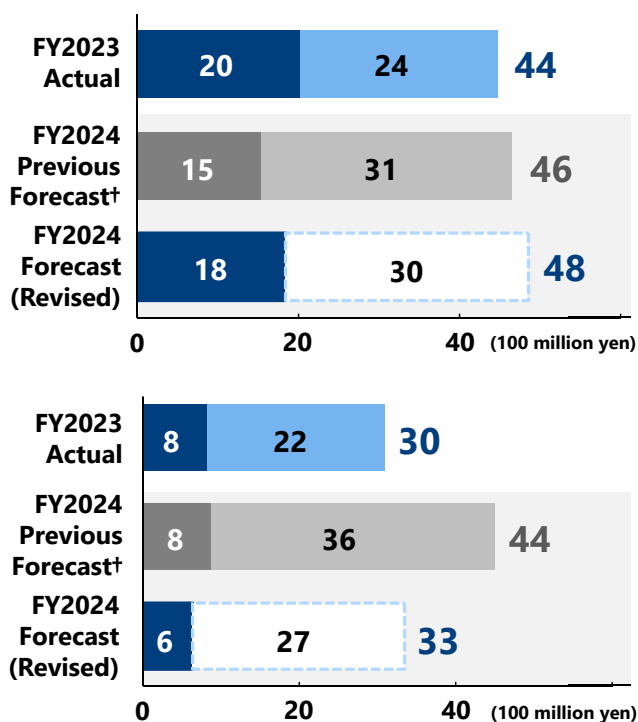
Gene Therapy Business

Projects at U.S., European, and Chinese companies which are the main customers of RetroNectin® for gene-introduction assistants, a mainstay product for AM products (Ancillary Materials; manufacturing assistants), tend to be delayed, and despite falling short of the previous forecast, sales are expected to increase YoY.

10 † Announced on May 11, 2023



Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised): CDMO Business sales



Regenerative medicine products

Sales rose for cell processing such as CAR-T cell production and vector manufacturing including mRNA pharmaceuticals. Results for the previous fiscal year and plans for exceeding the previous forecast.

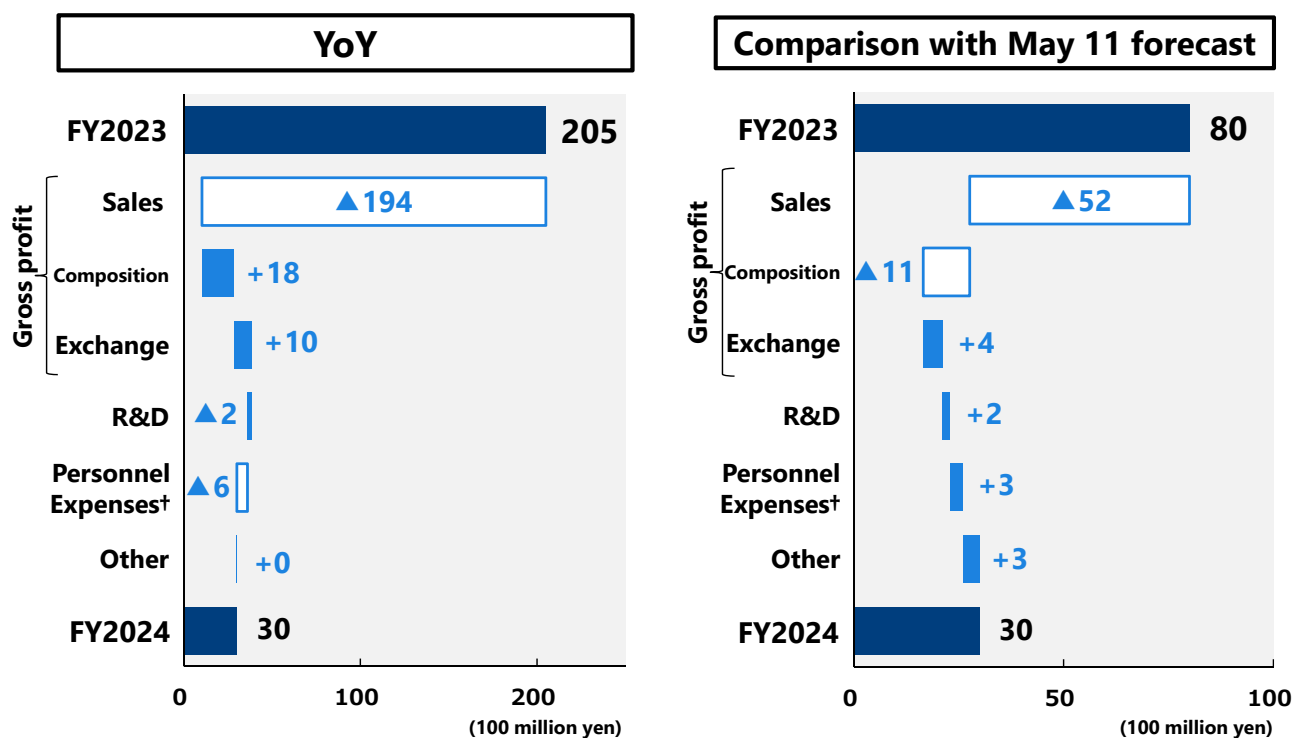
Gene analysis and testing

The large-scale genome analysis project led by the government has been reduced, and the unit price of the genome analysis consignment has also decreased. Despite lower than previous forecasts due to a harsh market environment, we expect to exceed its previous year's results.

11 † Announced on May 11, 2023



Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised): Operating Income



12

† Excluding R&D personnel expenses



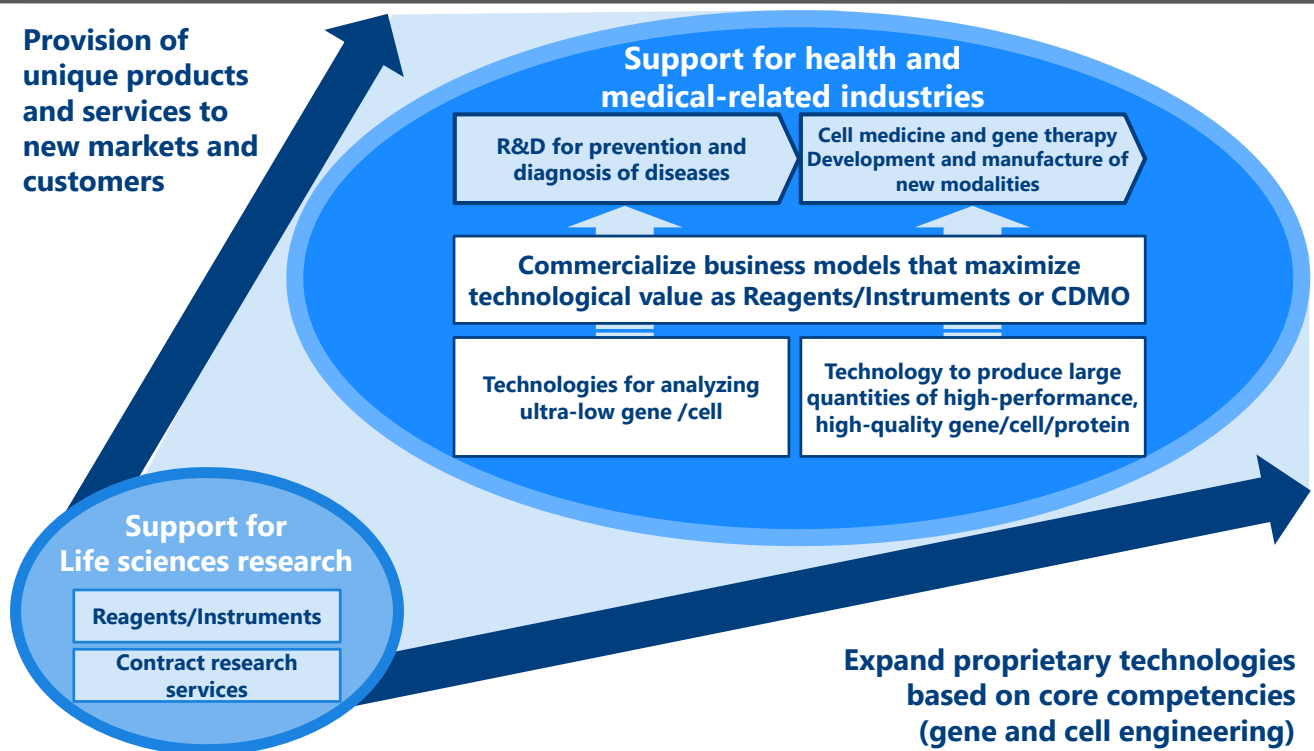
Contents

- Consolidated Financial Results for the First Half Ended September 30, 2023
- Consolidated Financial Forecast for the Year Ending March 31, 2024 (Revised)
- **Future measures**

13



Business Growth Strategy: Aiming to become a global platform provider responsible for Infrastructure in the Life Science Industry



14




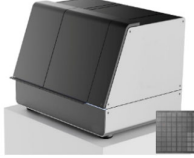

Reagents Business: Accelerate development of new products in the drug discovery, testing, and diagnostic fields

Searching for a biomarker	<ul style="list-style-type: none"> ● Development of specialized reagents optimized for next-generation single-cell library automated preparation instrument
Reproductive Health-Related Testing (RHT)	<ul style="list-style-type: none"> ● Sales of NGS's Embgenix™ pre-implantation diagnostics (PGT-A) system and related products are growing, particularly in the United States, and we are focusing on developing additional related technologies and products.
Genetic Testing	<ul style="list-style-type: none"> ● Developed Easy Direct series of reagents that can conduct genetic testing without performing nucleic acid refining from samples ● Promote the development of reagents for infectious disease testing
Cell and Gene Therapy	<ul style="list-style-type: none"> ● Expansion of research reagent series useful for the production and quality confirmation of virus vectors

15



Instrument Business: Expand product lineup Accelerate development of new genetic testing systems

Research	Biologics discovery/testing	
Automated nucleic acid refining	Single-cell analysis	Digital PCR
MACHERY-NAGEL MagnetaPure 32 Plus 	Takara Bio USA Next-generation single-cell library Automatic preparation instrument 	Stilla Technologies naica® system for Crystal Digital PCR™ 
Started Domestic exclusive sales in October 2023	Scheduled to start of upfront sales in Japan in January 2024	Scheduled to begin domestic exclusive sales in January 2024

Concluded a comprehensive business alliance agreement with Ushio Electric Co., Ltd. for the development and sales of reagents and instruments in the medical and life sciences fields

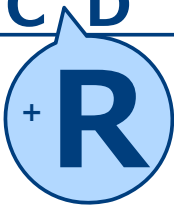
- By combining the technologies of the two companies, we aim to provide integrated systems, including instruments, reagents, and consumables, with high usability as a system that provides higher sensitivity and stable results.
- The first product to be developed is a genetic testing system in the field of infectious diseases. Providing product systems that solve problems such as simplifying work and speeding up measurement

16



Leverage proprietary platform-based techniques to differentiate from competitors through CDMO services

C D M O



- Our strengths are that we can provide our clients with experience in proprietary platform technology and clinical development projects to their development seeds
- Providing comprehensive support services for clients from the initial development stage in anticipation of future development (D) and manufacturing (M)

Client's Target Antigen/Therapeutic Genes
Our basic technologies

	in vivo gene therapy		ex vivo gene therapy	
Technologies for improving effectiveness and safety	CereAAV™	SonuAAV™	siTCR®	JAK/STAT •CAR
High-quality, high-efficiency manufacturing technology	AAV large scale manufacturing	LV large scale manufacturing	RetroNectin® method	Spo-T™ method

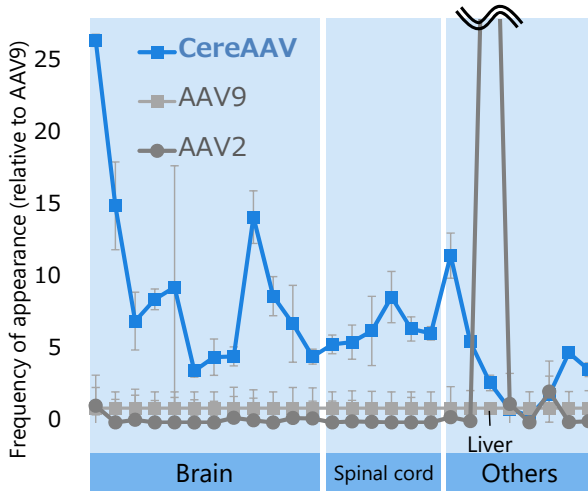
17

CDMO: Contract Development and Manufacturing Organization



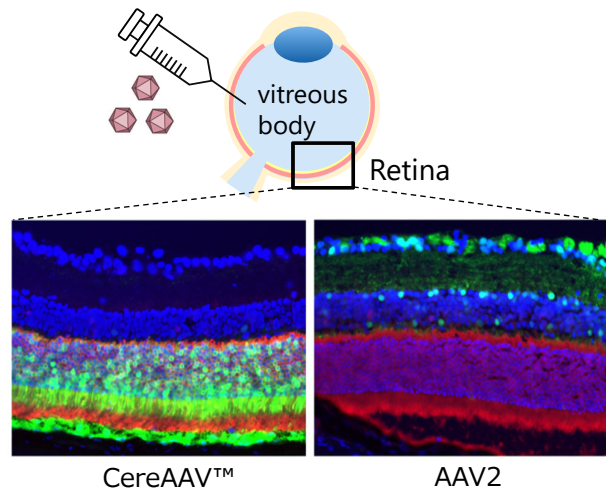
CereAAV™: Allows highly efficient transgene transfer to the brain and retina Planning clinical development projects

Assessment of Gene Expression in Cynomolgus



CereAAV™ exhibits higher gene expression in the brains and spinal cords compared to conventional gene therapy vectors (AAV2 and AAV9)

Evaluation by intra-vitreous administration of mouth†



CereAAV™ leads to more efficient gene transfer to the retina, which contains a large amount of visual cells (green), compared to AAV2

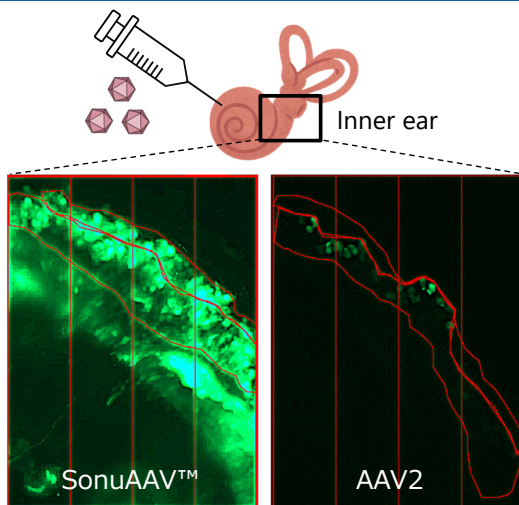
18

† Based on joint research data with Kazuhiko Namekata, project leader, Takayuki Harada, Tokyo Metropolitan Institute of Medical Research



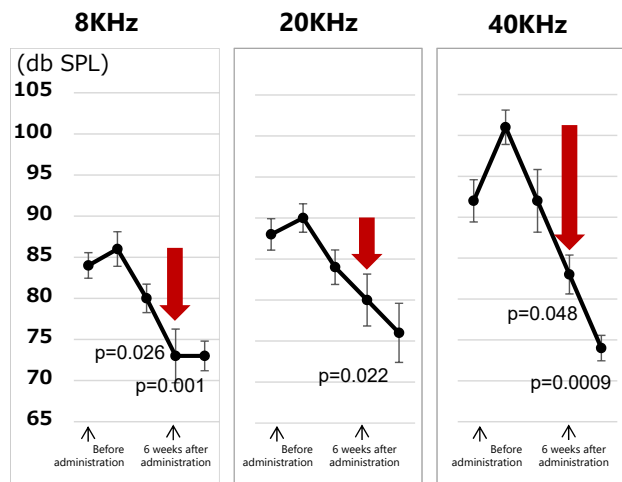
SonuAAV™: High-efficiency gene transfer into inner ear tissue Planning clinical development projects

Evaluation by administration to the mouse inner ear



SonuAAV™ was introduced into the internal ear support cells more than 10 times (green) as efficiently as the existing gene therapy vector (AAV2)

Assessment by Administration to Hearing Loss Model Mice



An experiment in which GJB2 gene-bearing SonuAAV™ was injected into hearing loss models confirmed an improvement in hearing at 6 weeks after administration.

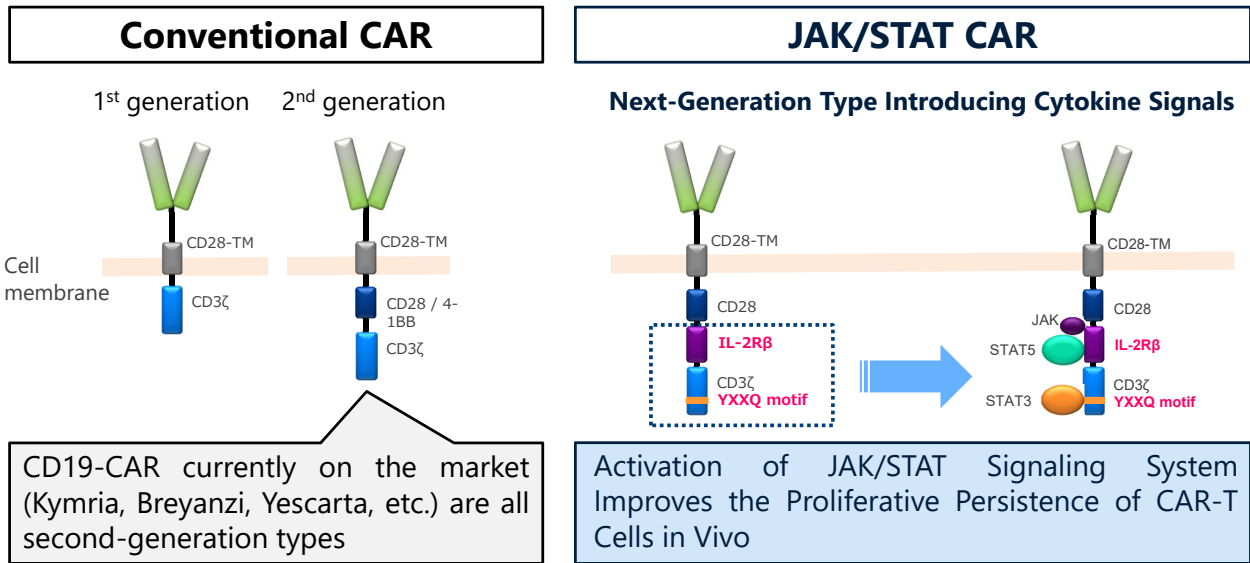
19

Data from joint research with associate professor kazusaku kamiya of Juntendo university



JAK/STAT: Sustained improvement in effectiveness of CAR-T therapy

TBI-2001 Canadian Physician-Led Clinical Trial in Progress



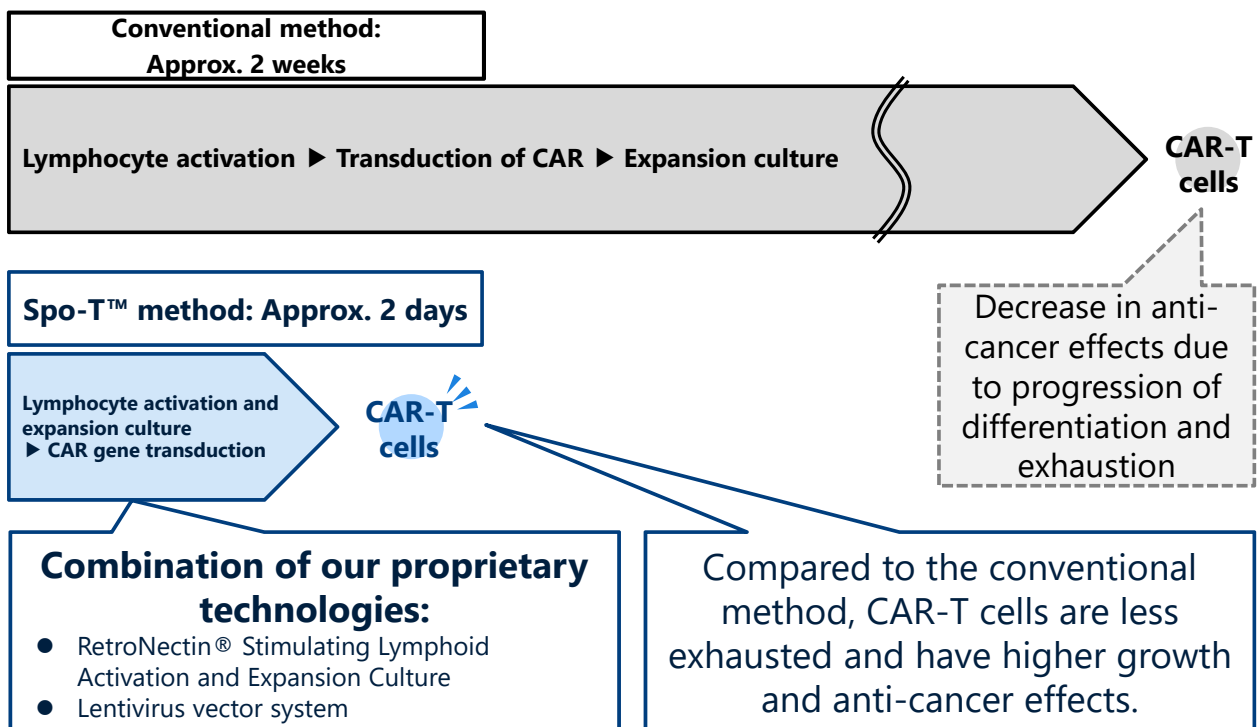
- Planning a clinical development project for new target antigens/diseases, while demonstrating an advantage over conventional CD19-CAR products through clinical trials of TBI-2001(CD19·JAK/STAT·CAR gene therapy)

20



Spo-T™ Method:

Develop a Short-Term Production Method for High-Quality CAR-T Cells



21

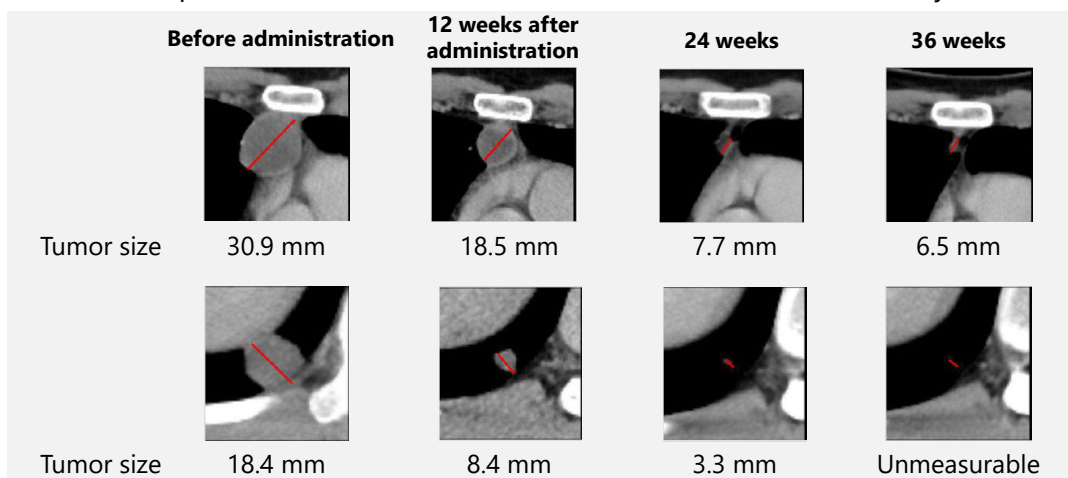
Spo-T™: Short period operation for T-cell production



siTCR®:TCR-T Therapy, TBI-1301 (Mip-Cel®) is preparing to apply for domestic manufacturing and marketing authorization.

- A case of domestic clinical trial (Phase I/II) for synovial sarcoma†

Response rate: 50% (4 of 8) Median overall survival: 650 days



- Under the SAKIGAKE Designation System, PMDA Preliminary Assessment of Quality-Related Products is in Progress
- Promote development with a view to expanding indications


*Selected from materials published by the American Society for Clinical Oncology (June 2023) and published in Clinical Cancer Research (October 2023)

22

TBI-1301 International Nonproprietary Name: mipetresgene autoleucl (abbreviation: Mip-Cel®)



Gene Therapy Products Manufacturing: Development of Ancillary Materials

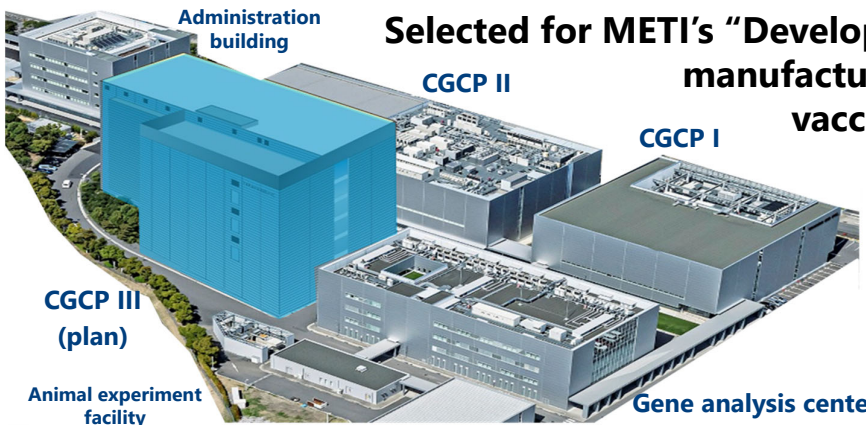
RetroNectin® GMP grade	mRNA synthesizing enzyme High Quality / GMP grade	Other Proteins GMP grade
<p>Recombinant protein capable of highly efficient gene transfer into blood-based cells by viral vectors</p> <p>Widely adopted in manufacturing processes for CAR-T cells, etc. Licensing supply for commercial manufacturing in addition to catalog product sales</p> 	<p>Enzymes Useful to Improve Productivity</p> <ul style="list-style-type: none"> ● T7 RNA Polymerase ver.2.0 ● Pyrophosphatase (inorganic) ● Vaccinia Capping Enzyme ● mRNA Cap 2'-O-Methyltransferase ● Recombinant RNase Inhibitor ver.2.0 ● <i>BspQ I</i> 	<ul style="list-style-type: none"> ● anti-CD3 monoclonal antibody GMP grade: Used in combination with RetroNectin® for expanding culture of CAR-T, TCR-T cells and other Lymphoid cells and Spo-T™ method ● Recombinant Cas9 Protein GMP grade : Used in the development and manufacture of an in vitro gene therapy using genome editing

23



CGCP3 Building New Planning

"Dual-use" facilities for large-scale manufacturing



Selected for METI's "Developing biopharmaceutical manufacturing sites to strengthen vaccine production project"

Building area: approx. 2,650 m²
 Floor space: approx. 16,400 m²
 Structure: 7-story seismic isolation structure
 Construction started: April 2024 (plan)
 Completion: June 2027 (plan)

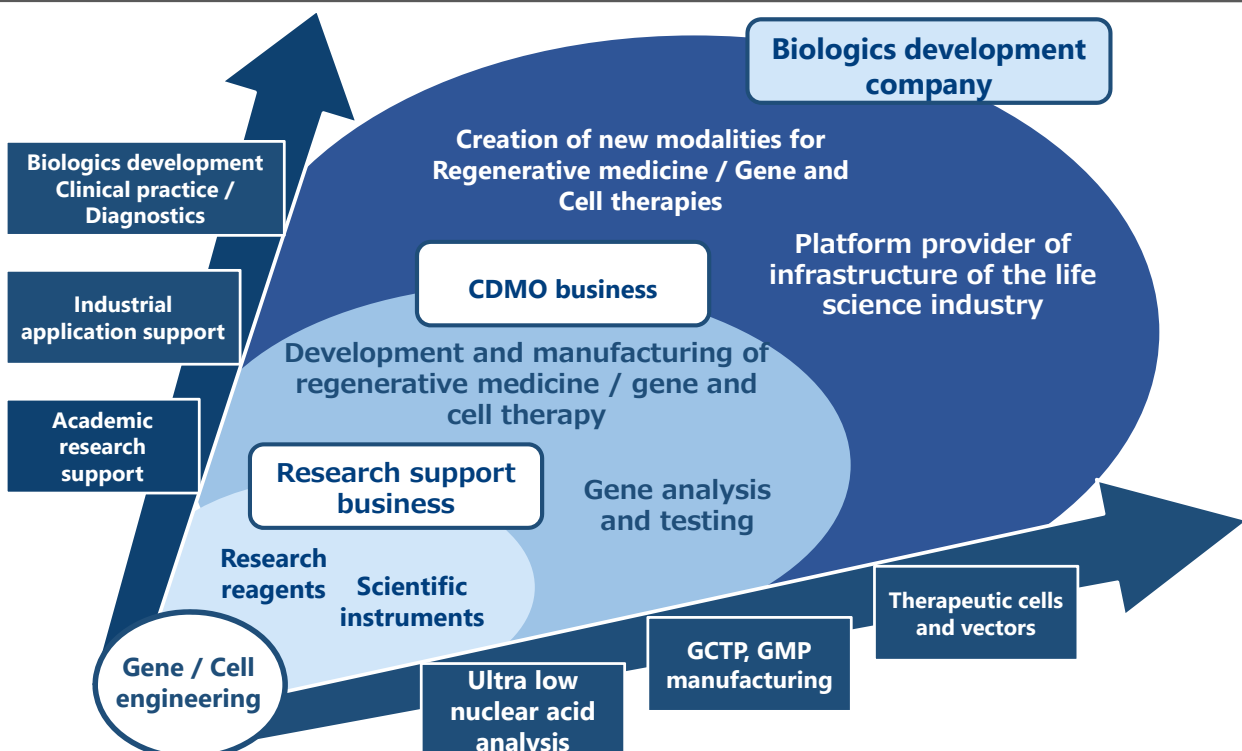
Manufacture vaccines in emergencies and utilized in CDMO business/ R&D in normal times

Our adaptation	Normal times	Emergency
1. Vaccine production site	Various viral vectors for gene therapy mRNA drug substance	Viral vector vaccine mRNA vaccine
2. Materials production site	RetroNectin®, mRNA production enzymes and other GMP grade reagents	Enzymes for mRNA production

24 CGCP : Center for Gene and Cell Processing



Business Strategy : Aim to become a global platform provider of infrastructure for the life science industry



25



Forward-looking Statements

Statements in this news release, other than those based on historical fact, concerning the current plans, prospects, strategies and expectations of the Company and its Group represent forecasts of future results. While such statements are based on the conclusions of management according to information available at the time of writing, they reflect many assumptions and opinions derived from information that includes major risks and uncertainties. Actual results may vary significantly from these forecasts due to various factors. Factors that could influence actual results include, but are not limited to, economic conditions, especially trends in consumer spending, as well as exchange rate fluctuations, changes in laws and government systems, pressure from competitors' prices and product strategies, decline in selling power of the Company's existing and new products, disruptions to production, violations of our intellectual property rights, rapid advances in technology and unfavorable verdicts in major litigation.

For more Information : Public & Investor Relations Department
E-mail: bio-ir@takara-bio.co.jp

26



[Reference]

Reference Information

- Consolidated Financial Results (First Half)
- Consolidated Financial Forecast (Full-year Forecast [Revised])
- Net Sales by Category (First Half)
- Net Sales by Category (Full-year Forecast [Revised])
- Reagents Sales by Region (First Half) – 1
- Reagents Sales by Region (First Half) – 2
- Reagents Sales by Region (First Half) – 3
- Reagents Sales by Region (Full-year Forecast [Revised]) – 1
- Reagents Sales by Region (Full-year Forecast [Revised]) – 2
- Performance by Subsidiaries (First Half, Full-year Forecast [Revised])
- Exchange Rate (Actual and Forecast)

27



Consolidated Financial Results (First Half)

(millions of yen)

	FY2024 First Half	Y / Y		Comparison with initial forecast†		Comparison with previous forecast‡	
		Change	Ratio	Change	Ratio	Change	Ratio
Net sales	19,116	▲13,470	▲41.3%	▲3,683	▲16.2%	▲283	▲1.5%
Cost of sales	5,772	▲4,789	▲45.3%	▲1,911	▲24.9%	▲155	▲2.6%
Gross profit	13,343	▲8,681	▲39.4%	▲1,771	▲11.7%	▲127	▲0.9%
SG&A expenses	11,933	+778	+7.0%	▲1,081	▲8.3%	▲438	▲3.5%
Operating profit	1,410	▲9,460	▲87.0%	▲689	▲32.8%	+310	+28.2%
Ordinary profit	1,598	▲9,356	▲85.4%	▲501	▲23.9%	+428	+36.7%
Net income attributable to owners of parent	1,084	▲7,454	▲87.3%	▲115	▲9.7%	+434	+66.8%

(28)

† Announced on May 11, 2023

‡ Announced on August 8, 2023



Consolidated Financial Forecast (Full-year [Revised])

(millions of yen)

	FY2024 full-year forecast (Revised)	Y / Y		Comparison with previous forecast†	
		Change	Ratio	Change	Ratio
Net sales	45,550	▲32,642	▲41.8%	▲7,800	▲14.6%
Cost of sales	17,399	▲15,977	▲47.9%	▲1,916	▲9.9%
Gross profit	28,100	▲16,664	▲37.2%	▲5,883	▲17.3%
SG&A expenses	25,100	+876	+3.6%	▲883	▲3.4%
Operating profit	3,000	▲17,541	▲85.4%	▲5,000	▲62.5%
Ordinary profit	3,200	▲17,482	▲84.5%	▲5,000	▲61.0%
Net income attributable to owners of parent	2,000	▲14,012	▲87.5%	▲3,500	▲63.6%

(29)

† Announced on May 11, 2023.



Net Sales by Category (First Half)

(millions of yen)

	FY2024 First Half	Y / Y		Comparison with initial forecast†		Comparison with previous forecast‡	
		Change	Ratio	Change	Ratio	Change	Ratio
Reagents	14,949	▲12,615	▲45.8%	▲3,131	▲17.3%	▲134	▲0.9%
Instruments	411	▲282	▲40.7%	▲493	▲54.5%	▲80	▲16.4%
CDMO	2,702	▲480	▲15.1%	▲58	▲2.1%	▲46	▲1.7%
Gene Therapy	1,052	▲91	▲8.0%	0	0%	▲21	▲2.0%
Total net sales	19,116	▲13,470	▲41.3%	▲3,683	▲16.2%	▲283	▲1.5%

30

† Announced on May 11, 2023

‡ Announced on August 8, 2023



Net Sales by Category (Full-year [Revised])

(millions of yen)

	FY2024 full-year forecast (Revised)	Y / Y		Comparison with previous forecast†	
		Change	Ratio	Change	Ratio
Reagents	32,792	▲33,133	▲50.3%	▲5,561	▲14.5%
Instruments	1,314	▲61	▲4.5%	▲705	▲34.9%
CDMO	8,652	+451	+5.5%	▲1,261	▲12.7%
Gene Therapy	2,740	+100	+3.8%	▲272	▲9.0%
Total net sales	45,500	▲32,642	▲41.8%	▲7,800	▲14.6%

31

† Announced on May 11, 2023.



Reagents Sales by Region (First Half) – 1

(millions of yen)

	FY2024 First Half	Y / Y		Y / Y (Exchange excluded)	
		Change	Ratio	Change	Ratio
Japan	3,560	▲9,359	▲72.4%	▲9,359	▲72.4%
U.S.	5,884	▲388	▲6.2%	▲904	▲14.4%
China	2,654	▲2,324	▲46.7%	▲2,390	▲48.0%
Europe	1,896	▲196	▲9.4%	▲344	▲16.5%
Korea	641	+61	+10.6%	+33	+5.8%
India	312	▲407	▲56.6%	▲411	▲57.2%
Total	14,949	▲12,615	▲45.8%	▲13,377	▲48.5%

32



Reagents Sales by Region (First Half) – 2

(millions of yen)

	FY2024 First Half	Comparison with initial forecast†		Comparison with initial forecast† (Exchange excluded)	
		Change	Ratio	Change	Ratio
Japan	3,560	▲65	▲1.8%	▲65	▲1.8%
U.S.	5,884	▲1,051	▲15.2%	▲832	▲12.0%
China	2,654	▲1,759	▲39.9%	▲1,752	▲39.7%
Europe	1,896	▲238	▲11.2%	▲302	▲14.2%
Korea	641	+5	+0.8%	▲15	▲2.4%
India	312	▲21	▲6.5%	▲10	▲3.1%
Total	14,949	▲3,131	▲17.3%	▲2,979	▲16.5%

33

† Announced on May 11



[Reference]

Reagents Sales by Region (First Half) – 3

(millions of yen)

	FY2024 First Half	Comparison with previous forecast‡		Comparison with previous forecast‡ (Exchange excluded)	
		Change	Ratio	Change	Ratio
Japan	3,560	▲164	▲4.4%	▲164	▲4.4%
U.S.	5,884	+19	+0.3%	+19	+0.3%
China	2,654	+1	+0.1%	+1	+0.1%
Europe	1,896	+9	+0.5%	+9	+0.5%
Korea	641	0	0%	0	0%
India	312	+1	+0.4%	+1	+0.4%
Total	14,949	▲134	▲0.9%	▲134	▲0.9%

(34)

‡ Announced on August 8



[Reference]

Reagents Sales by Region (Full-year [Revised]) – 1

(millions of yen)

	FY2024 full-year forecast (Revised)	Y / Y		Y / Y (Exchange excluded)	
		Change	Ratio	Change	Ratio
Japan	8,329	▲28,771	▲77.5%	▲28,771	▲77.5%
U.S.	12,343	▲273	▲2.2%	▲977	▲7.7%
China	6,315	▲3,612	▲36.4%	▲3,676	▲37.0%
Europe	3,794	▲257	▲6.3%	▲576	▲14.2%
Korea	1,341	+114	+9.3%	+48	+4.0%
India	668	▲332	▲33.2%	▲344	▲34.4%
Total	32,792	▲33,133	▲50.3%	▲34,297	▲52.0%

(35)



Reagents Sales by Region (Full-year [Revised]) – 2

(millions of yen)

	FY2024 full-year forecast (Revised)	Comparison with previous forecast†		Comparison with previous forecast† (Exchange excluded)	
		Change	Ratio	Change	Ratio
Japan	8,329	▲258	▲3.0%	▲258	▲3.0%
U.S.	12,343	▲1,524	▲11.0%	▲1,489	▲10.7%
China	6,315	▲3,239	▲33.9%	▲3,303	▲34.6%
Europe	3,794	▲597	▲13.6%	▲848	▲19.3%
Korea	1,341	+47	+3.7%	▲27	▲2.2%
India	668	+10	+1.6%	+10	+1.6%
Total	32,792	▲5,561	▲14.5%	▲5,916	▲15.4%

36 † Announced on May 11, 2023.



Performance by Subsidiaries

(millions of yen)

	First half results		Full-year forecast[Revised]	
	Net sales	Operating profit	Net sales	Operating profit
Takara Bio (Non-consolidated)	13,269	868	29,310	1,334
Takara Bio Europe (Consolidated)	2,275	▲175	4,841	▲204
Takara Biotechnology (Dalian)	1,554	61	3,964	301
Takara Biomedical Technology (Beijing)	2,981	199	6,954	603
Takara Korea Biomedical	732	119	1,519	261
DSS Takara India	319	30	691	64
Takara Bio USA	7,633	245	16,835	1,312

37



Exchange Rate (Actual, Forecast)

(Unit: Yen)	FY2023 First Half	FY2024 First Half	FY2023 Full-year	FY2024 Full-year
	Actual	Actual	Actual	Forecast
US dollar	123.15	134.99	131.64	139.60
Euro	134.39	145.92	138.15	151.00
Yuan	18.97	19.45	19.50	19.70
100 Won	9.97	10.43	10.18	10.70
Rupee	1.62	1.64	1.67	1.70
Sweden Krona	12.82	12.87	12.99	13.10
Pound	159.58	166.61	162.02	173.90