Conference on FY2023.12 Q2 Financial Results

CHUGAI PHARMACEUTICAL CO., LTD.

27 July 2023

Important Reminder

Forward-Looking Statements

This presentation may include forward-looking statements pertaining to the business and prospects of Chugai Pharmaceutical Co., Ltd. (the “Company”). These statements reflect the Company’s current analysis of existing information and trends. Actual results may differ from expectations based on risks and uncertainties that may affect the Company’s businesses.

Core Results

Chugai discloses its results on a Core basis from 2013 in conjunction with its transition to IFRS. Core results are the results after adjusting non-recurring items recognized by Chugai to IFRS results. Chugai’s recognition of non-recurring items may differ from that of Roche due to the difference in the scale of operations, the scope of business and other factors. Core results are used by Chugai as an internal performance indicator, for explaining the status of recurring profits both internally and externally, and as the basis for payment-by-results.

Note:

- Amounts shown in this report are rounded to the nearest 0.1 billion yen
- Variance and % are calculated based on the amounts shown

Agenda

01	FY2023 Q2 Overview	**Dr. Osamu Okuda** President & CEO
02	FY2023 Q2 Consolidated Financial Overview (Core)	**Toshiaki Itagaki** Director, Executive Vice President & CFO
03	Overview of Development Pipeline	**Tetsuya Yamaguchi** Executive Vice President, Head of Project & Lifecycle Management Unit

FY2023 Q2 Overview

Dr. Osamu Okuda

President & CEO

Financial Overview

- **Increases in revenue and profits were mainly driven by good penetration of new/mainstay products and steady growth of exports to Roche**
- **Excluding the impact of COVID-19-related sales decrease, full-year revenue and profits are expected to increase YoY, with no changes to the initial forecast**

Core (billions of JPY)	2022 Jan -Jun actual*	2023 Jan -Jun actual	Growth		2023 Jan - Dec forecast	Progress (%)
Revenue	**504.0**	**579.7**	**+75.7**	**+15.0%**	**1,070.0**	**54.2%**
Domestic sales	273.8	313.6	+39.8	+14.5%	541.7	57.9%
Overseas sales	179.0	209.4	+30.4	+17.0%	378.3	55.4%
Other revenue	51.2	56.6	+5.4	+10.5%	150.0	37.7%
Operating profit	**201.4**	**232.0**	**+30.6**	**+15.2%**	**415.0**	**55.9%**
Operating margin	40.0%	40.0%	-	-	38.8%	-
Net income	**144.7**	**171.4**	**+26.7**	**+18.5%**	**306.0**	**56.0%**
EPS (yen)	**87.97**	**104.19**	**+16.22**	**+18.4%**	**186.00**	**56.0%**

* Starting from FY 2023, Chugai has excluded income from disposal of product rights from revenue. In conjunction with this change, the results for FY 2022 have been restated accordingly.

- Domestic sales grew due to the good market penetration of new/mainstay products and the supply of Ronapreve to the government despite the impact of NHI drug price revision and generics.
- Overseas sales significantly increased mainly due to Alecensa and Hemlibra exports to Roche.
- Other revenue increased mainly due to the increase of milestone income.

Hemlibra: Patient Share in Hemophilia A in Japan

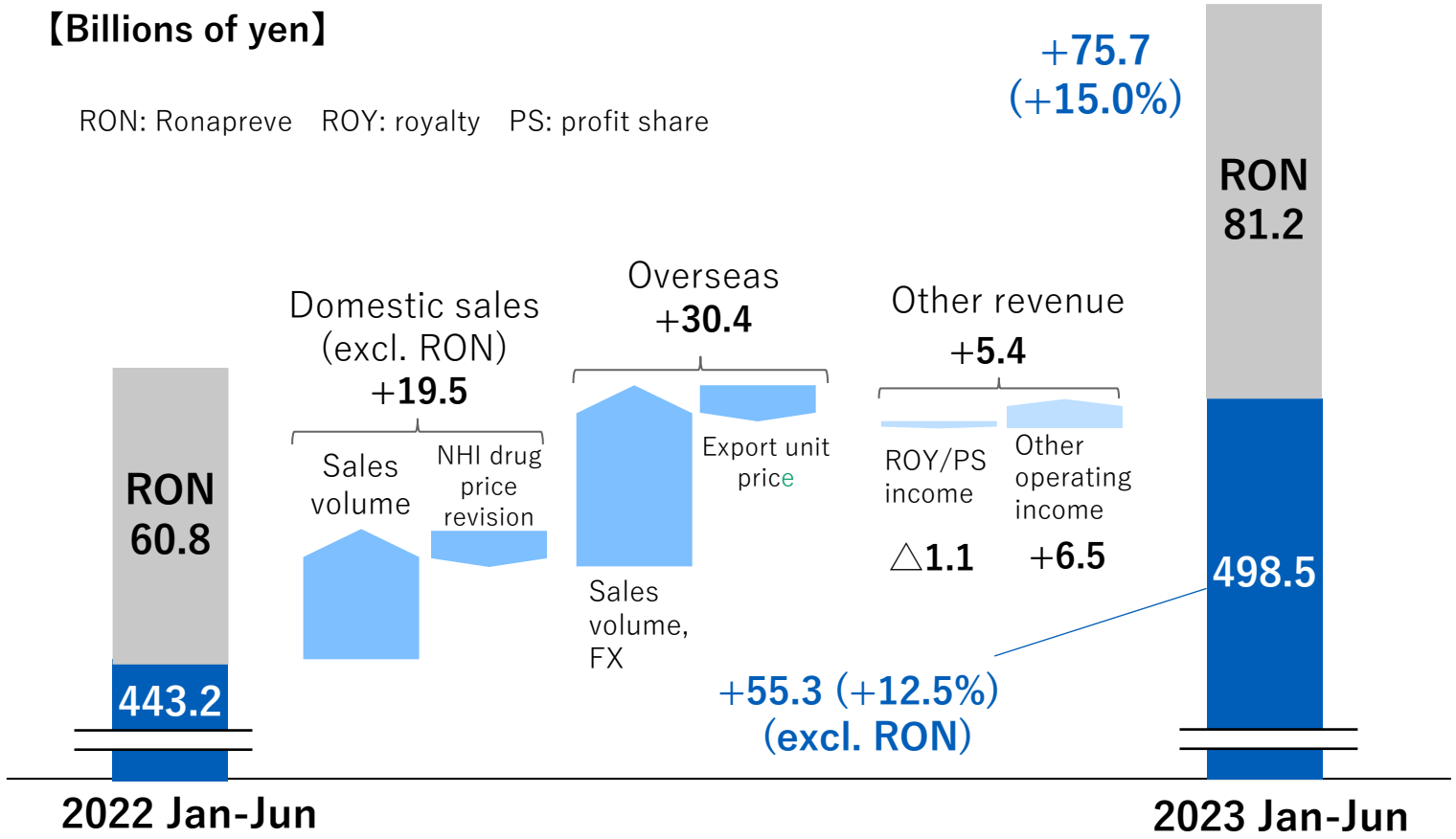
Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
27.3%	28.5%	29.2%	30.0%	30.8%

Topline Overview

- **Domestic sales (excl. RON) increased due to the steady penetration of new/mainstay products despite the impact of NHI drug price revision, etc.**
- **Overseas sales increased due to the impacts of foreign exchange and sales volume, surpassing the decrease in export unit price**
- **Other revenue increased as other operating income compensated for the decline in royalty income**

【Billions of yen】

RON: Ronapreve　ROY: royalty　PS: profit share



- Domestic sales (excl. RON) increased due to growth of the new products such as Polivy and Vabysmo, as well as the favorable sales of the mainstay products including Hemlibra, Enspryng, and Tecentriq, absorbing the negative impacts of NHI drug price revision and the erosion of generic drugs, as expected.
- Overseas sales increased significantly by FX and sales volume, surpassing the decline in export unit price.
  Export of Alecensa significantly increased and export of Hemlibra progressed well.
  Generally progressed as expected.
- Other revenue increased overall primarily due to a significant increase in milestone income, despite the termination of royalty income from initial shipments of Hemlibra as expected.

R&D Overview

■ Steady progress in R&D centered on in-house projects

- Crovalimab (PNH) and nemolizumab (AD) achieved their primary endpoints in global P3 studies, respectively
- Regulatory submissions were completed for crovalimab (PNH: JP/US/EU), Mitchga[1)] (PN, pediatric AD: JP), Actemra (CRS: JP) and Vabysmo (RVO)
- Alecensa, readout and regulatory filing for NSCLC adj are planned in 2023

Phase 3 study readout

① crovalimab (PNH/February)
② nemolizumab (AD/March)
③ Alecensa (NSCLC adj)
④ tiragolumab* (1L NSCLC)

*readout: 2023-2024

Regulatory filing

① Actemra (CRS/February, JP)
② Vabysmo (RVO/April)
③ Mitchga[1)] (PN, pediatric AD/Q2,JP)
④ crovalimab (PNH/June, JP/US/EU)
⑤ Alecensa (NSCLC adj)
⑥ Tecentriq/Avastin (HCC adj)

Approval/Additional indication

① FoundationOne Liquid CDx (May, additional CDx indication)
② Actemra (additional indication[2)] /EU)
③ crovalimab (PNH/China)
④ RG6264 [3)] (BC/CRC)

Letters in blue: planned in 2023

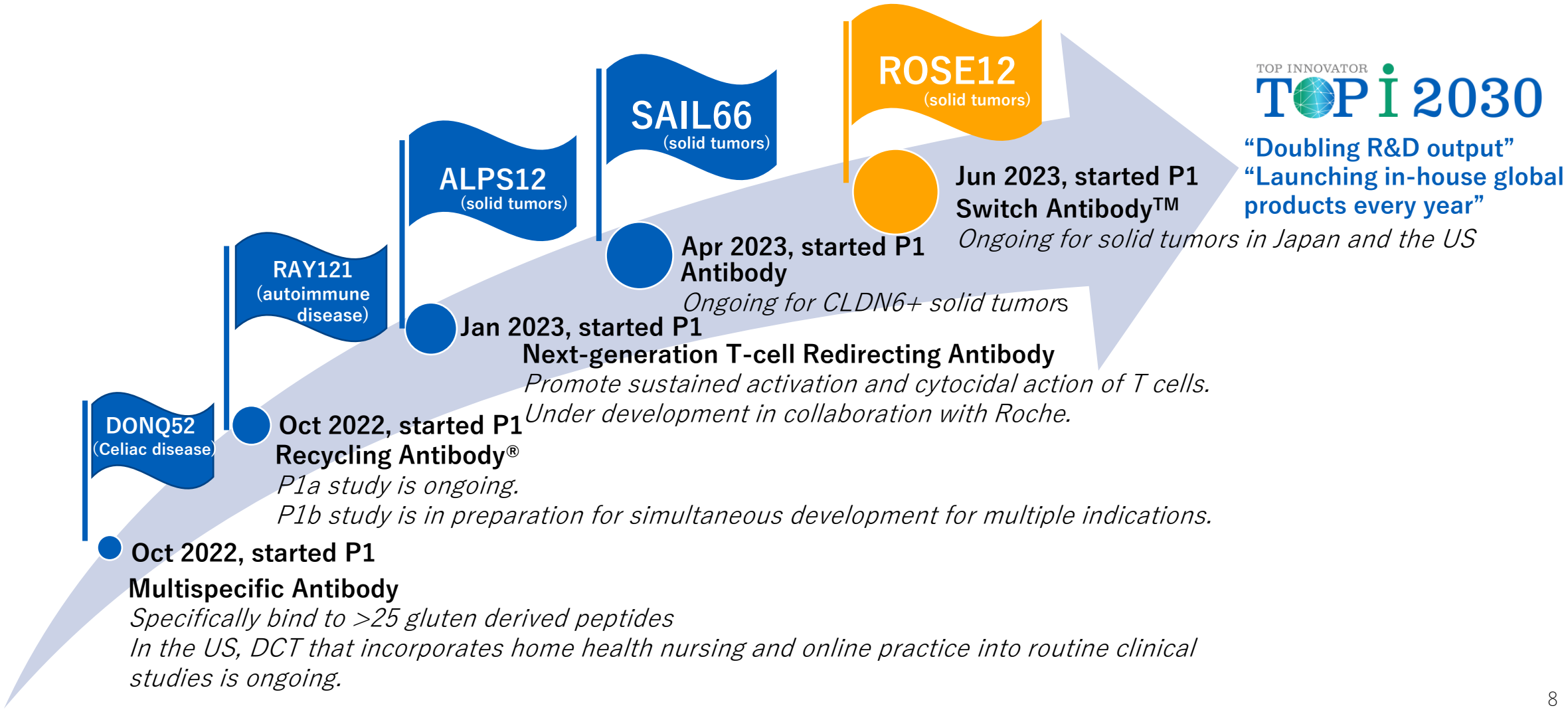
1) Conducted by Maruho, licensee in Japan
2) SSc-ILD (EU)
3) Herceptin + Perjeta (subcutaneous injection)
4) Presented by Eli Lilly and Company, a licensee

■ Presentation in Main Medical Conference

Product	Study	Medical conference
crovalimab	COMMODORE 1/2 studies (P3: PNH)	EHA
orforglipron[4)]	P2 studies (obesity/type 2 diabetes)	ADA

In-house Product: Progress of Early-stage Products in a Year

Continuous initiation of P1 studies in multiple projects utilizing next-generation antibody engineering tech



DCT: Decentralized Clinical Trial, methods for clinical trials not dependent on hospital visits

Chugai's Model for Developing Innovation

Chugai's Unique Drug Discovery Generates Continuous Innovation

DX, RED SHIFT, Open Innovation

Management that supports unique and original research

Chugai's Unique Drug Discovery Technologies
<antibodies, mid-size molecules>

Dedication to Quality
-Researcher's mindset-

Attract top-class researchers and support their growth

Strategic Alliance with Roche (Unique Business Model)

Pursuing Innovation with a "Venture Mindset"

【Shift to Biopharmaceutical Drug Discovery (Neutrogin, Epogin), creation of the first antibody drug in Japan (Actemra)】

Drug Discovery/Pharmaceutical Research – Manufacturing system

Investment in Drug substance/Pharmaceutical facilities, aiming at strengthening in-house manufacturing platform

Investment announced in H1 2023 (Figures are investment amount) As of Jul 27, 2023

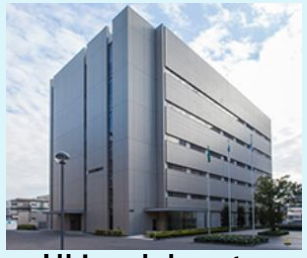
Drug discovery/Pharmaceutical research

Chugai Life science Park Yokohama

Multi modality: drug discovery
Mid-size molecule: pharmaceutical research

CPR (Singapore)

Antibody, mid-size molecule: drug discovery



Ukima laboratory

Multi modality: manufacturing process research for drug substance and pharmaceuticals

bio drug substance

Phase 1

Ukima: 12.1 billion yen
To be operated in Jan 2024

Phase 1- Phase 2

Ukima

Utsunomiya: 37.4 billion yen
To be operated in Oct 2026

*UK1/2 and UT3 are also utilized for commercial production

Phase 3 - initial commercial

Ukima

small - mid-size drug substance

Phase 1 - Phase 2

Fujieda

Fujieda

Phase 3 - initial commercial

Fujieda: 55.5 billion yen
To be operated in Mar 2025

pharmaceutical

Phase 2 - commercial

Small - mid-size molecule
Fujieda: 4.9 billion yen
(facility for new pharmaceutical)

To be operated in Q3

Phase 3 - commercial

Biopharmaceutical
Utsunomiya: 19.0 billion yen
(new injection building)

To be operated in Mar 2026

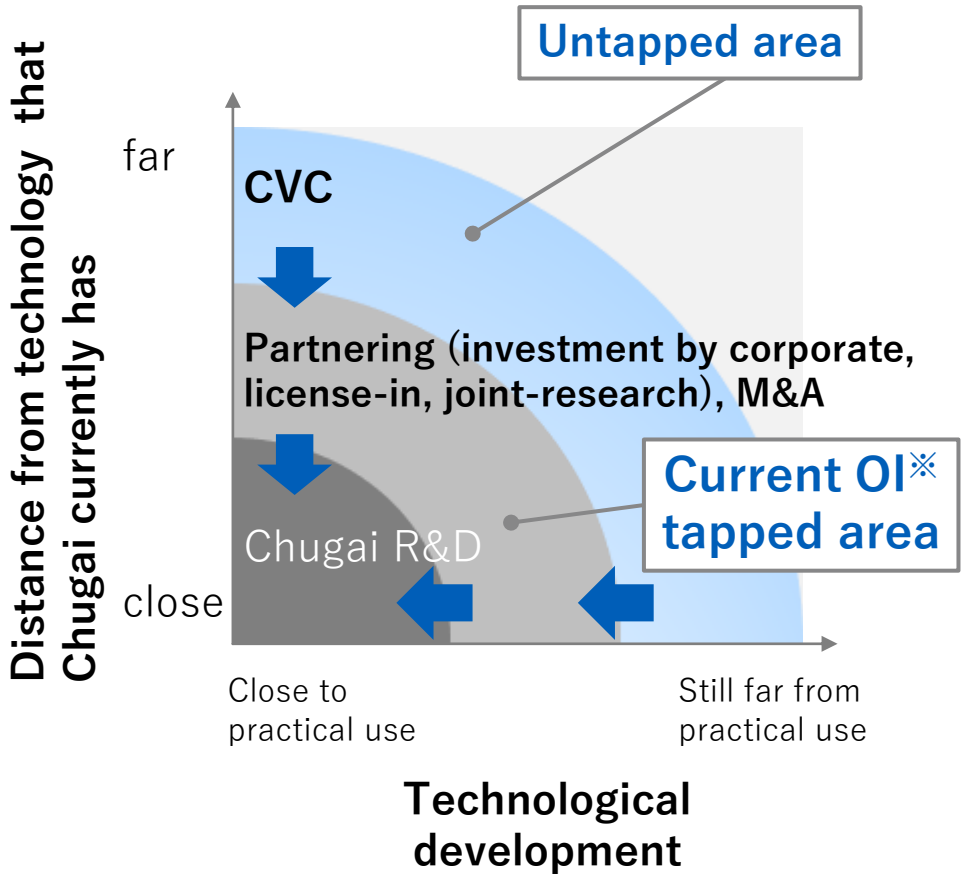
Establishment of Corporate Venture Capital（CVC）

Overview

- Name: Chugai Venture Fund, LLC
- Aiming at combining Chugai's strengths with external technologies
- Investment: up to 200 million USD
- Location: in the Boston area, MA, U.S.A.
- Investment area: primarily in the U.S., Europe, and Japan

Scope

1 Target	Novel therapeutic target, and technologies related to deep cultivation of disease biology that identifies the target, and to analyze large-scale data, etc.
2 Tech-nology	Technologies that can ensure and/or enhance Chugai's core technologies Novel technologies that are new to Chugai and complementary to Roche
3 Digital	Digital and AI technology that can assist drug discovery and translational research



※OI: Open Innovation

Summary

- H1 results: Increases in revenue and profits were driven by steady growth of new/mainstay products and exports to Roche
- FY results: Excluding COVID-19-related drug impact, full-year revenue and profits are expected to increase
- Steady progress towards “TOP I 2030” led by continuous creation of in-house products and the establishment of CVC
- Working on continuous creation of innovation driven by Chugai’s Unique drug discovery technology and persistence on quality

FY2023 Q2 Consolidated Financial Overview(Core)

Toshiaki Itagaki

Director, Executive Vice President & CFO

FY2023 Q2 Consolidated Financial Overview (Core)

P/L Jan – Jun (Non-core adjustment)

(Billions of JPY)	IFRS results	Non-core items		Core results
		Intangible assets	Others	
Revenue	**579.7**			**579.7**
Sales	523.0			523.0
Other revenue	56.6			56.6
Cost of sales	-243.0	+0.6	+0.1	-242.3
Research and development	-87.4	+5.1	+5.7	-76.5
Selling, general and administration	-54.3		+9.3	-45.0
Other operating income (expense)	16.0		+0.2	16.2
Operating profit	**210.9**	**+5.8**	**+15.3**	**232.0**
Financial account balance	2.7			2.7
Income taxes	-57.0	-1.8	-4.6	-63.3
Net income	**156.7**	**+4.0**	**+10.7**	**171.4**
EPS (JPY)	**95.23**			**104.19**

Non-core items (Billions of JPY)

Intangible assets

Amortization	+0.9
Impairment	+4.9

Others

Restructuring expenses, etc.	+4.9
Early retirement incentive program	+10.4

P/L (2022 Jan – Jun)Renaming and Reclassification

(Billions of JPY)	2022 Actual
Revenue	**504.3**
Sales	452.8
Domestic	273.8
Overseas	179.0
Royalties and other operating income	51.4
Royalty and profit-sharing income	50.4
Other operating income	1.0
Cost of sales	**- 193.7**
(cost to sales ratio)	42.8%
Operating expenses	**- 109.2**
M&D and G&A	- 43.4
Research and development	- 65.8
Operating profit	**201.4**
(operating margin)	39.9%
Net income	**144.7**
EPS (JPY)	**87.97**

For 2022 results in the following slides,
categories are shown after renaming and reclassification.

Blue text :renamed categories

0.2 billion JPY

Income from disposal of product rights is reclassified to the new category “Other operating income (expense)”

1.2 billion JPY

Income and expenses associated with operating activities that were previously included in “G&A” but could not be classified into functional expense categories such as gain (loss) on sale of land and buildings, etc., is reclassified to the new category “Other operating income (expense)”

(Billions of JPY)	2022 Actual
Revenue	**504.0**
Sales	452.8
Domestic	273.8
Overseas	179.0
Other revenue	51.2
Cost of sales	- 193.7
(cost to sales ratio)	42.8%
Research and development	- 65.8
Selling, general and administration	- 44.6
Other operating income (expense)	1.4
Operating profit	**201.4**
(operating margin)	40.0%
Net income	**144.7**
EPS (JPY)	**87.97**

FY2023 Q2 Consolidated Financial Overview (Core)

P/L Jan – Jun (Year on Year)

(Billions of JPY)	2022	2023	Growth	
Revenue	**504.0**	**579.7**	**+ 75.7**	**+ 15.0%**
Sales	452.8	523.0	+ 70.2	+ 15.5%
Domestic	273.8	313.6	+ 39.8	+ 14.5%
Overseas	179.0	209.4	+ 30.4	+ 17.0%
Other revenue	51.2	56.6	+ 5.4	+ 10.5%
Cost of sales	-193.7	-242.3	- 48.6	+ 25.1%
(cost to sales ratio)	42.8%	46.3%	+3.5%pts	-
Research and development	-65.8	-76.5	- 10.7	+ 16.3%
Selling, general and administration	-44.6	-45.0	- 0.4	+ 0.9%
Other operating income (expense)	1.4	16.2	+ 14.8	12 times
Operating profit	**201.4**	**232.0**	**+ 30.6**	**+ 15.2%**
(operating margin)	40.0%	40.0%	-	-
Financial account balance	-0.0	2.7	+ 2.7	-
Income taxes	-56.7	-63.3	- 6.6	+ 11.6%
Net income	**144.7**	**171.4**	**+ 26.7**	**+ 18.5%**
EPS (JPY)	**87.97**	**104.19**	**+16.22**	**+ 18.4%**

Domestic sales
Increase due to growth of new and mainstay products

Overseas sales
Increase in sales of Alecensa and Hemlibra

Other revenue
Increase mainly in milestone incomes

Cost of sales
Cost to sales ratio higher due to impacts including increasing foreign exchange rate

Research and development expenses
Increase due to investments in research and early development, including start of operations at Chugai Life Science Park Yokohama and progress of development projects

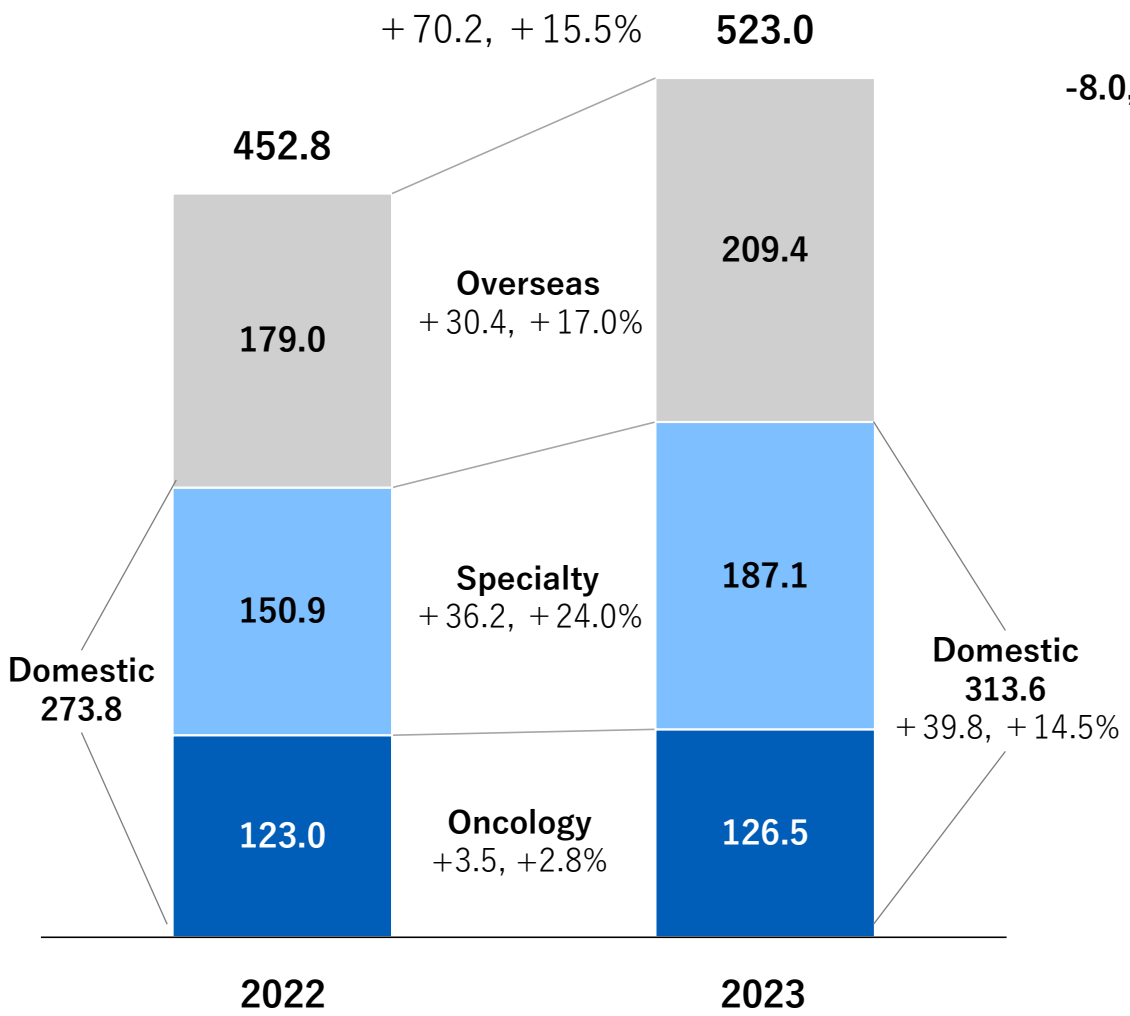
Selling, general and administration expenses
Same level as the same period of the previous year

Other operating income (expense)
Increase in income from disposal of product rights and gain on sales of property, plant and equipment, etc.

Sales Jan – Jun (Year on Year)

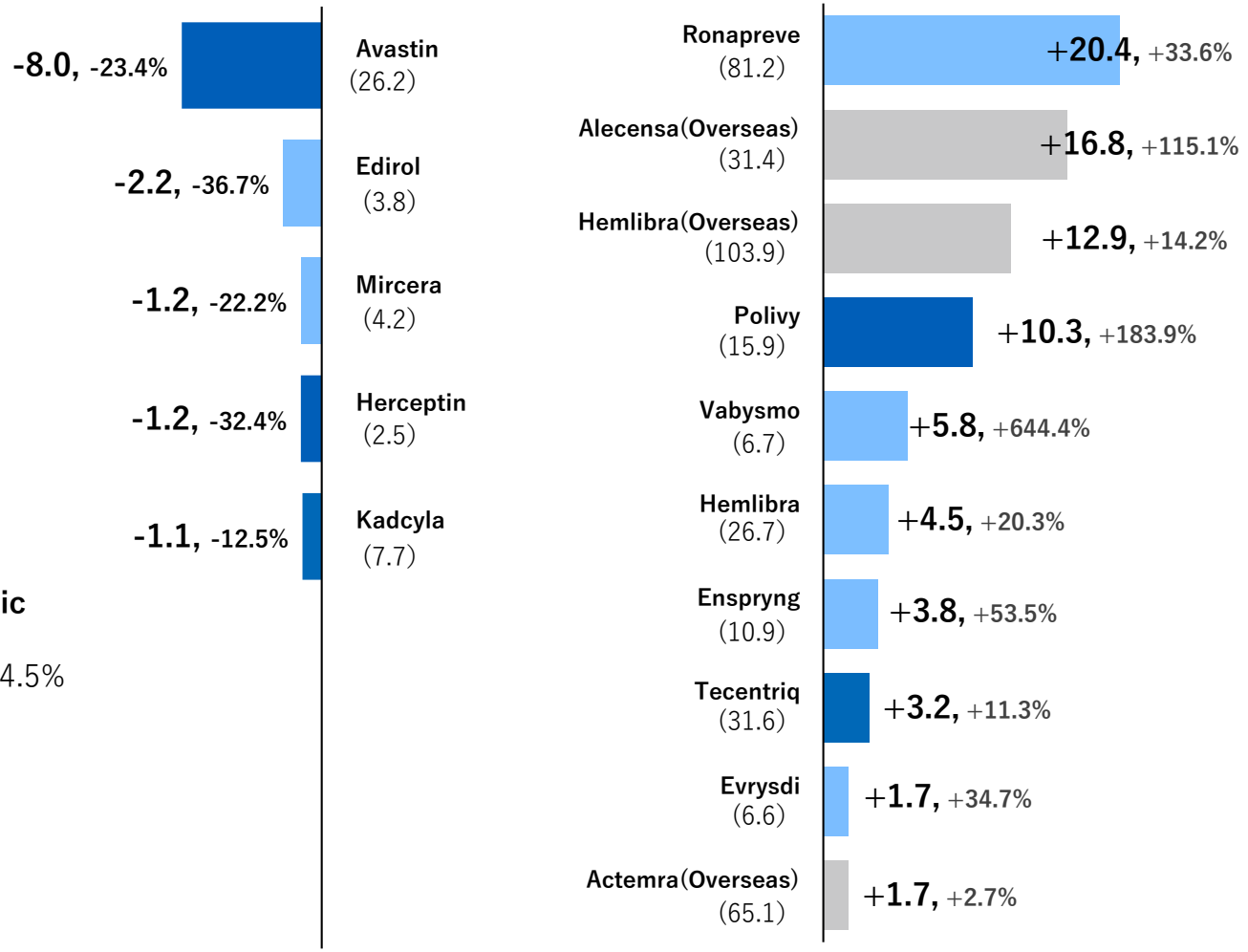
(Billions of JPY)

Sales by Disease Area

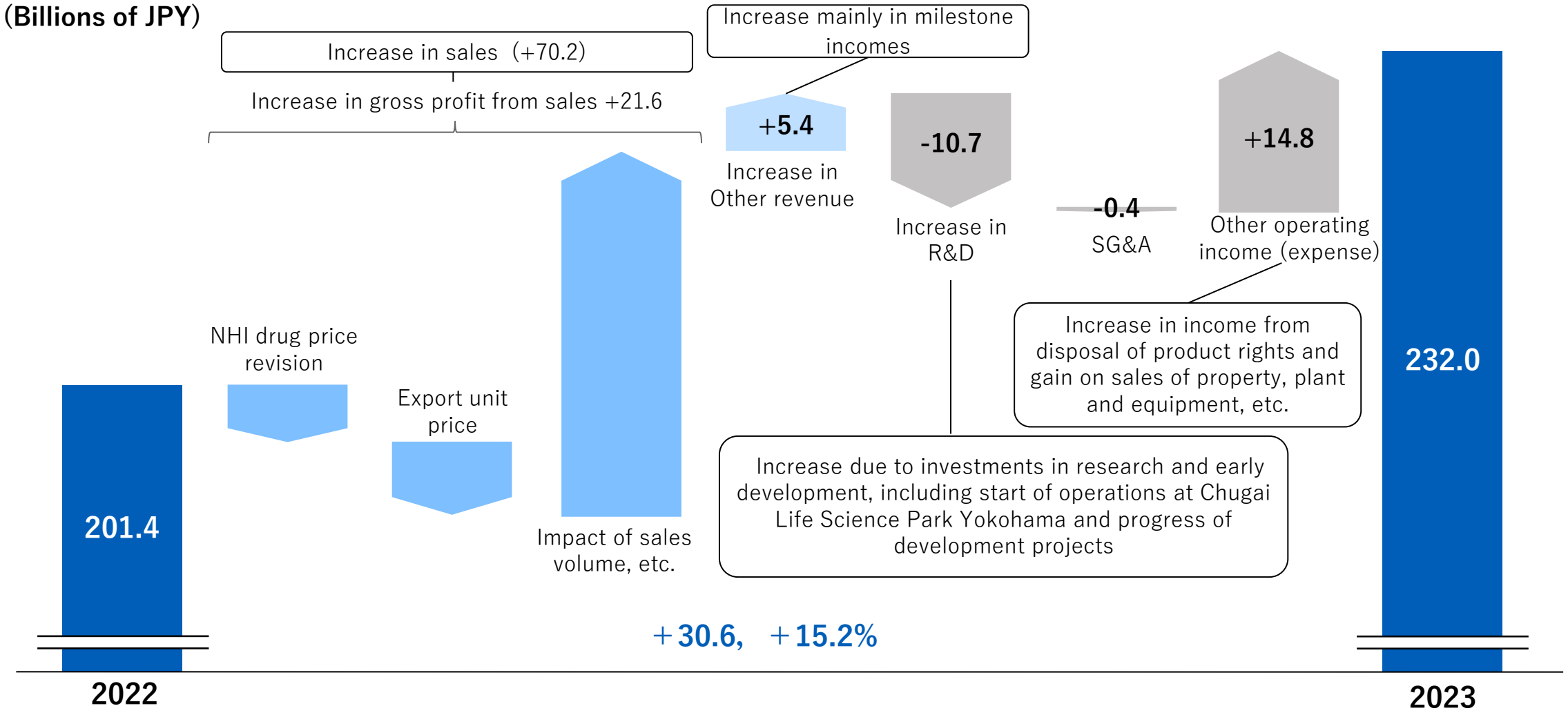


Sales by Product

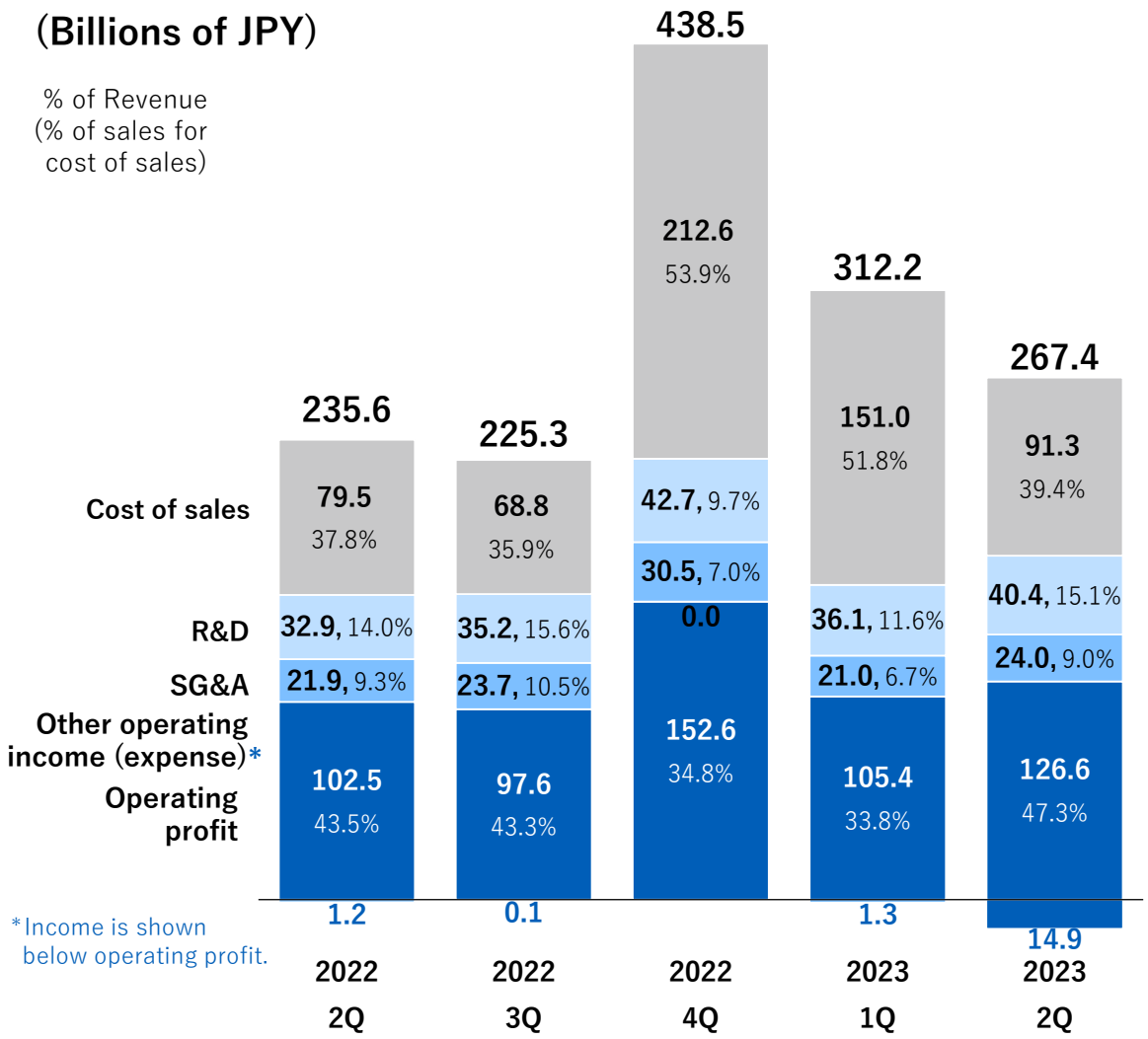
( ): Actual sales in FY2023
%: Year-on-year percentage change



Operating Profit Jan – Jun (Year on Year)



Structure of Costs and Profit by Quarter



Year on Year (vs. 2022 Q2)

Cost of sales ratio: higher due to impact from foreign exchange, etc.

R&D: increase due to investments in research and early development, including start of operations at Chugai Life Science Park Yokohama and progress of development projects

SG&A: increase due to various sales activities

Other operating income (expense): increase in income from disposal of product rights

Operating profit: +24.1 billion JPY, +23.5%

Quarter on Quarter (vs. 2023 Q1)

Cost of sales ratio: improved due to a change in product mix, etc.

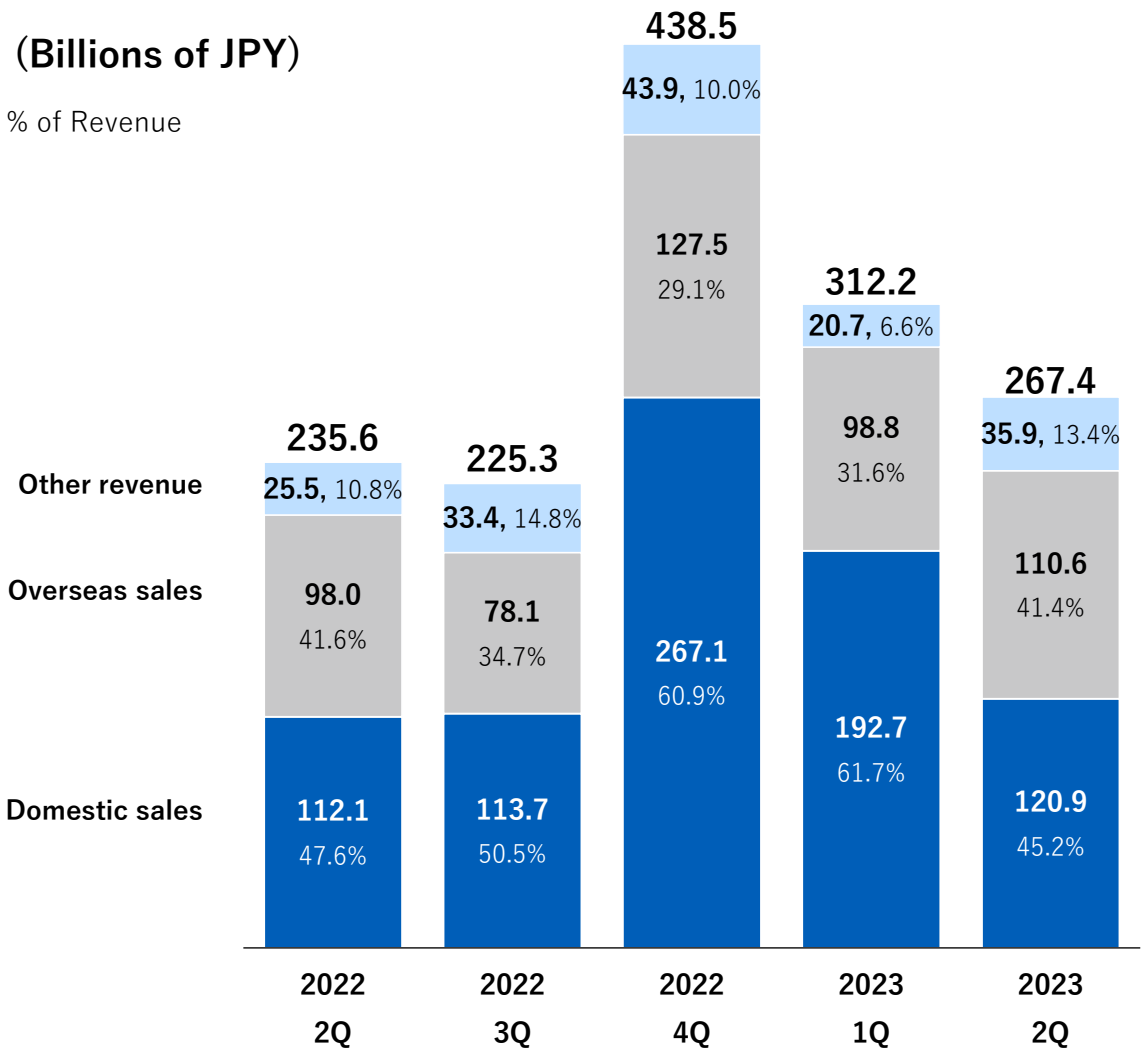
R&D: increase due to progress of development projects, etc.

SG&A: increase due to various sales activities

Other operating income (expense): increase in income from disposal of product rights

Operating profit: +21.2 billion JPY, +20.1%

Structure of Revenue by Quarter



Year on Year (vs. 2022 Q2)

Domestic sales: increase due to growth of new and mainstay products

Overseas sales: significant increase in sales of Hemlibra

Other revenue: increase mainly in milestone incomes

Quarter on Quarter (vs. 2023 Q1)

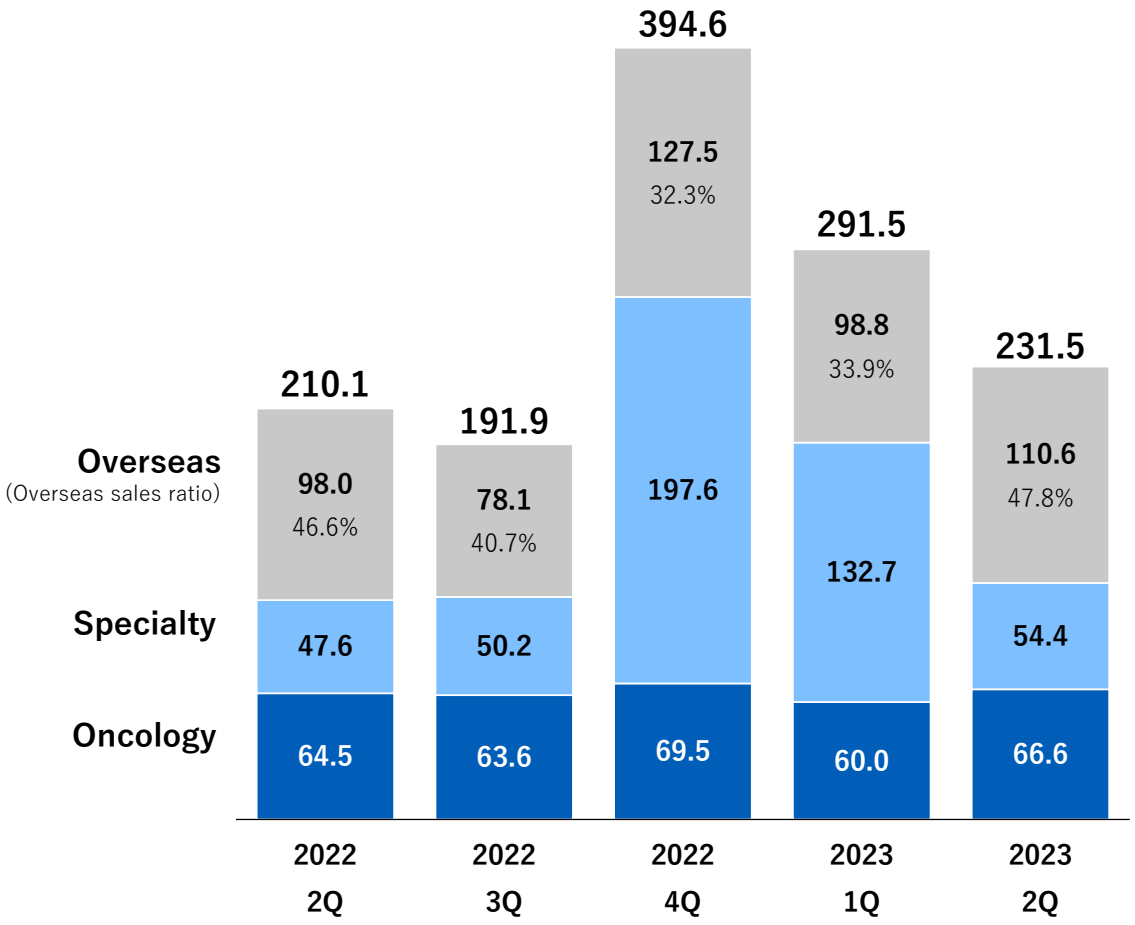
Domestic sales: decrease due to the absence of Ronapreve supplied to the government

Overseas sales: significant increase in sales of Hemlibra

Other revenue: increase in royalty income of Hemlibra and milestone incomes

Structure of Sales by Quarter

(Billions of JPY)



Year on Year (vs. 2022 Q2)

Oncology	Polivy:	+5.8	Tecentriq:	+1.6
	Avastin:	-4.5		
Specialty	Vabysmo:	+2.9	Enspryng:	+2.3
	Hemlibra:	+2.3		
Overseas	Hemlibra:	+11.7	Alecensa:	+5.3
	Actemra:	-4.4		

Quarter on Quarter (vs. 2023 Q1)

Oncology	Polivy:	+1.5	Tecentriq:	+1.5
	Alecensa:	+1.4	Perjeta:	+1.1
Specialty	Ronapreve:	-81.2	Hemlibra:	+2.0
	Enspryng:	+1.5	Actemra:	+1.3
Overseas	Hemlibra:	+12.0	Actemra:	+1.5
	Alecensa:	-2.0		

FY2023 Q2 Consolidated Financial Overview (Core)

P/L Jan – Jun (vs. Forecast)

(Billions of JPY)	Actual 2023 Jan - Jun	Forecast 2023 Jan - Dec	Progress	2022 Progress*
Revenue	**579.7**	**1,070.0**	**54.2%**	**43.2%**
Sales	523.0	920.0	56.8%	43.6%
Domestic	313.6	541.7	57.9%	41.8%
Overseas	209.4	378.3	55.4%	46.5%
Other revenue	56.6	150.0	37.7%	39.8%
Cost of sales	- 242.3	- 405.0	59.8%	40.8%
(cost to sales ratio)	46.3%	44.0%	-	-
Research and development	- 76.5	- 165.0	46.4%	45.8%
Selling, general and administration	- 45.0	- 100.0	45.0%	45.1%
Other operating income (expense)	16.2	15.0	108.0%	100.0%
Operating profit	**232.0**	**415.0**	**55.9%**	**44.6%**
(operating margin)	40.0%	38.8%	-	-
Net income	**171.4**	**306.0**	**56.0%**	**45.5%**
EPS (JPY)	**104.19**	**186.00**	**56.0%**	**45.6%**

Domestic sales
Overall progress mostly in line with forecast
(2023 progress excluding Ronapreve: 50.5%
2022 progress excluding Ronapreve: 47.2%)

Overseas sales
Sales of Hemlibra to Roche exceeding forecast

Other revenue
Progress mostly in line with forecast

Cost of sales
Cost to sales ratio mostly in line with forecast

Research and development expenses
Progress mostly in line with forecast

Selling, general and administration expenses
Progress mostly in line with forecast

Other operating income (expense)
Progress mostly in line with forecast

* Jan - Jun progress versus Jan – Dec actual

Sales Jan – Jun (vs. Forecast)

(Billions of JPY)	Actual 2023 Jan - Jun	Forecast 2023 Jan - Dec	Forecast Progress	2022 Progress *
Sales	**523.0**	**920.0**	**56.8%**	**43.6%**
Domestic	**313.6**	**541.7**	**57.9%**	**41.8%**
Oncology	**126.5**	**253.3**	**49.9%**	**48.0%**
Tecentriq	31.6	67.7	46.7%	46.6%
Avastin	26.2	48.1	54.5%	50.7%
Polivy	15.9	31.6	50.3%	36.1%
Perjeta	16.1	31.0	51.9%	48.3%
Alecensa	14.5	28.2	51.4%	47.4%
Kadcyla	7.7	14.1	54.6%	48.6%
Herceptin	2.5	4.9	51.0%	52.1%
Gazyva	1.7	4.5	37.8%	52.5%
Rituxan	1.9	3.7	51.4%	50.0%
Foundation Medicine	3.7	8.3	44.6%	47.9%
Other	4.6	11.2	41.1%	50.5%

(Billions of JPY)	Actual 2023 Jan - Jun	Forecast 2023 Jan - Dec	Forecast Progress	2022 Progress *
Specialty	**187.1**	**288.4**	**64.9%**	**37.9%**
Ronapreve	81.2	81.2	100.0%	29.8%
Hemlibra	26.7	53.7	49.7%	45.0%
Actemra	21.1	44.3	47.6%	48.1%
Enspryng	10.9	21.6	50.5%	42.5%
Vabysmo	6.7	17.4	38.5%	14.1%
Evrysdi	6.6	14.1	46.8%	42.6%
Mircera	4.2	7.6	55.3%	50.0%
CellCept	3.5	6.7	52.2%	48.1%
Edirol	3.8	5.2	73.1%	53.6%
Other	22.4	36.7	61.0%	50.3%
Overseas	**209.4**	**378.3**	**55.4%**	**46.5%**
Hemlibra	103.9	185.2	56.1%	47.0%
Actemra	65.1	121.4	53.6%	48.6%
Alecensa	31.4	50.4	62.3%	36.0%
Enspryng	1.1	3.8	28.9%	60.7%
Neutrogin	3.9	7.3	53.4%	52.9%
Edirol	0.0	0.5	0.0%	0.0%
Other	3.9	9.7	40.2%	44.6%

* Jan - Jun progress versus Jan – Dec actual

Impact from Foreign Exchange Jan – Jun

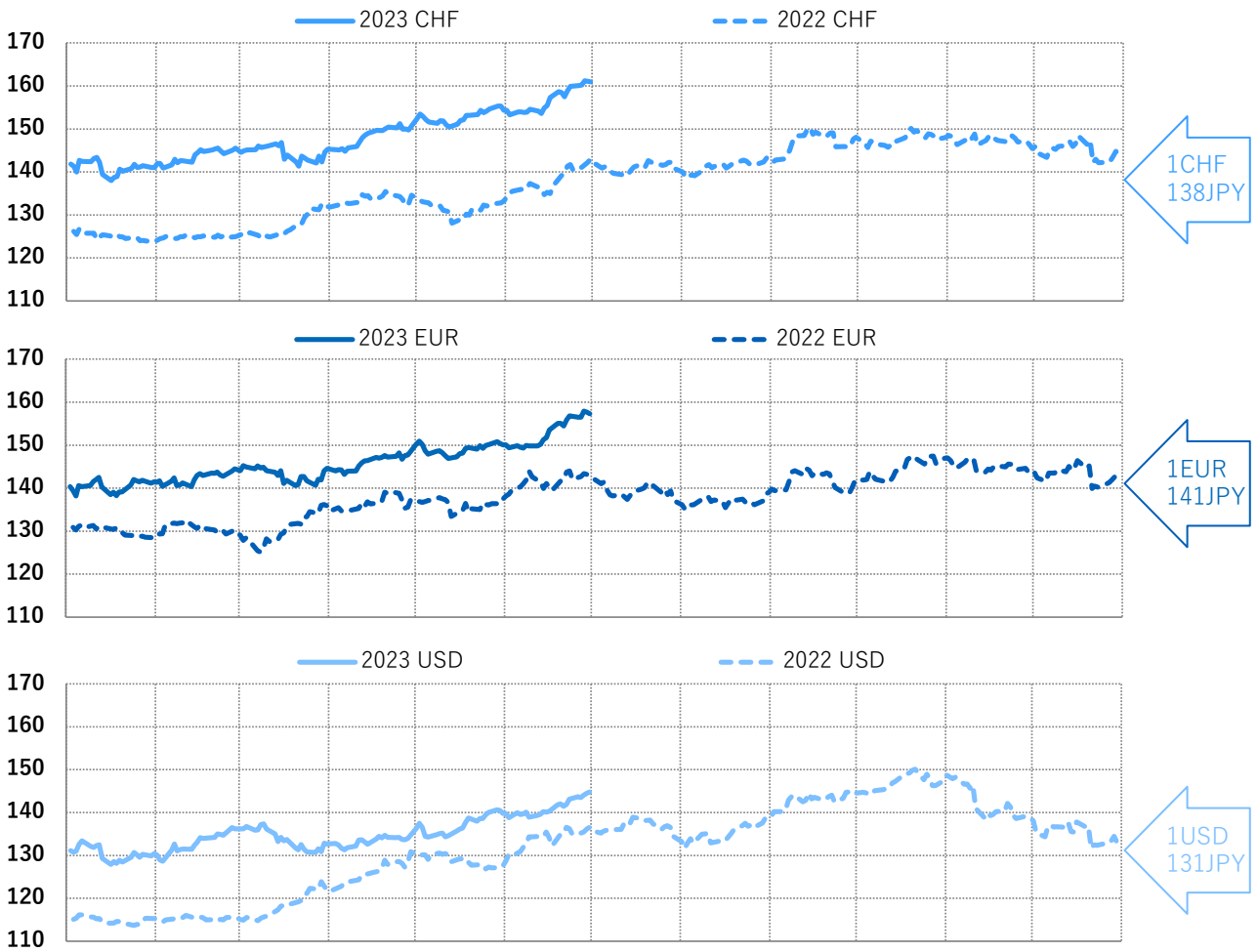
(Billions of JPY)	vs. 2022 Actual rate	vs. 2023 Forecast rate*1
Revenue	**+30.8**	**+2.4**
Sales	+25.8	+2.4
Other revenue	+5.0	+0.0
Cost of sales	**-23.5**	**-0.1**
Other than above*2	**-1.8**	**-0.4**
Operating profit	**+5.4**	**+1.9**

Exchange rate (JPY)	2022 Jan - Jun Actual rate*3	2023 Jan - Jun Actual rate*3
1CHF	122.40	138.30
1EUR	134.47	141.96
1USD	112.73	133.45

*1 Foreign Exchange effect from Half-year Forecast rate(2023)
*2 Total of R&D, SG&A and other operating income (expense)
*3 Weighted average of the exchange rates used to record foreign currency transactions included in categories from revenue to operating profit

Historical exchange rate to the JPY

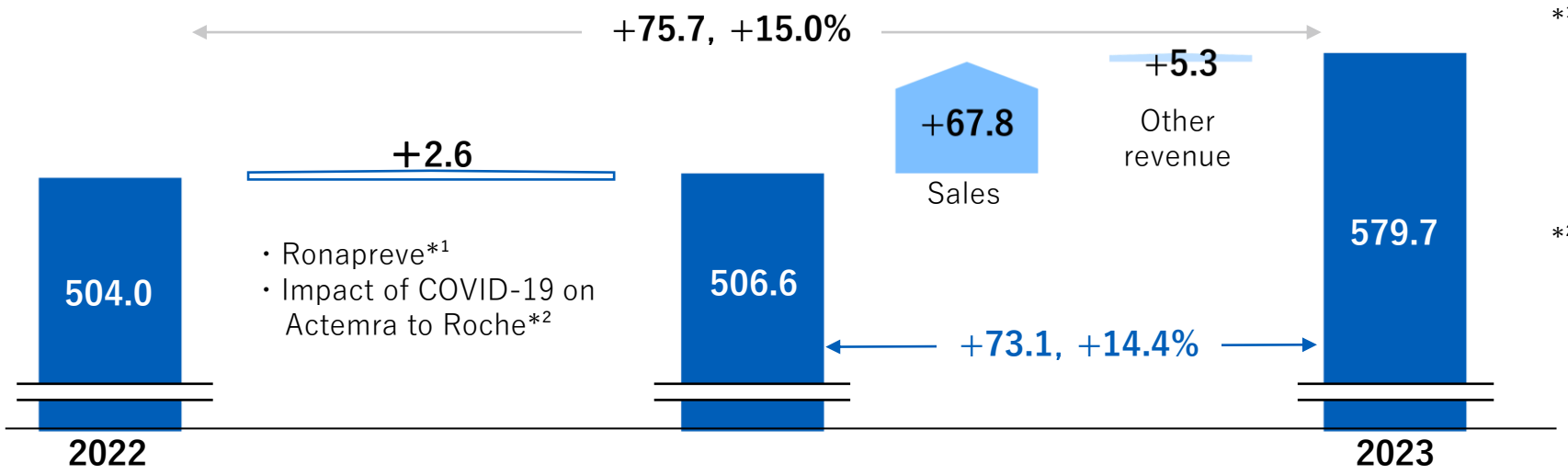
: Full-year Forecast rate(2023)



P/L Analysis Jan – Jun (Year on Year)

＜Revenue＞

(Billions of JPY)



*1Ronapreve sales

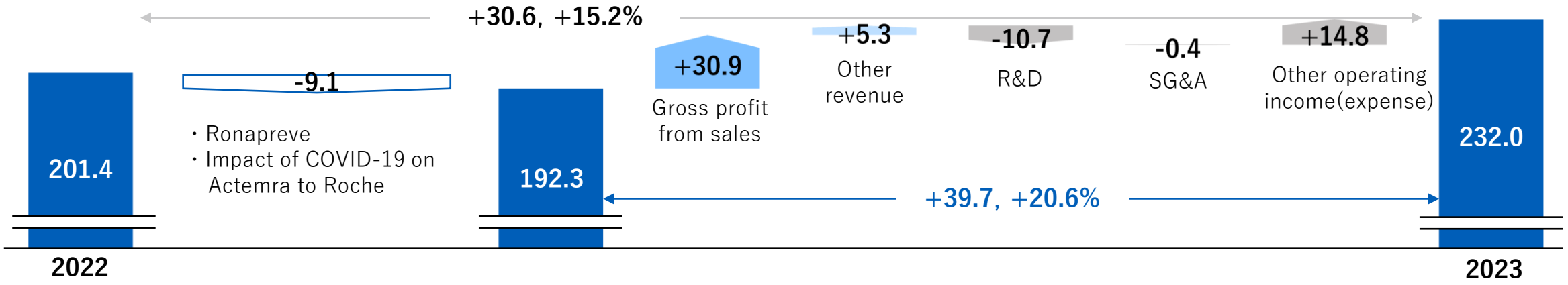
2022 HY	60.8
2023 HY	81.2
Year on Year	+20.4

*2Impact of COVID-19 on Actemra to Roche

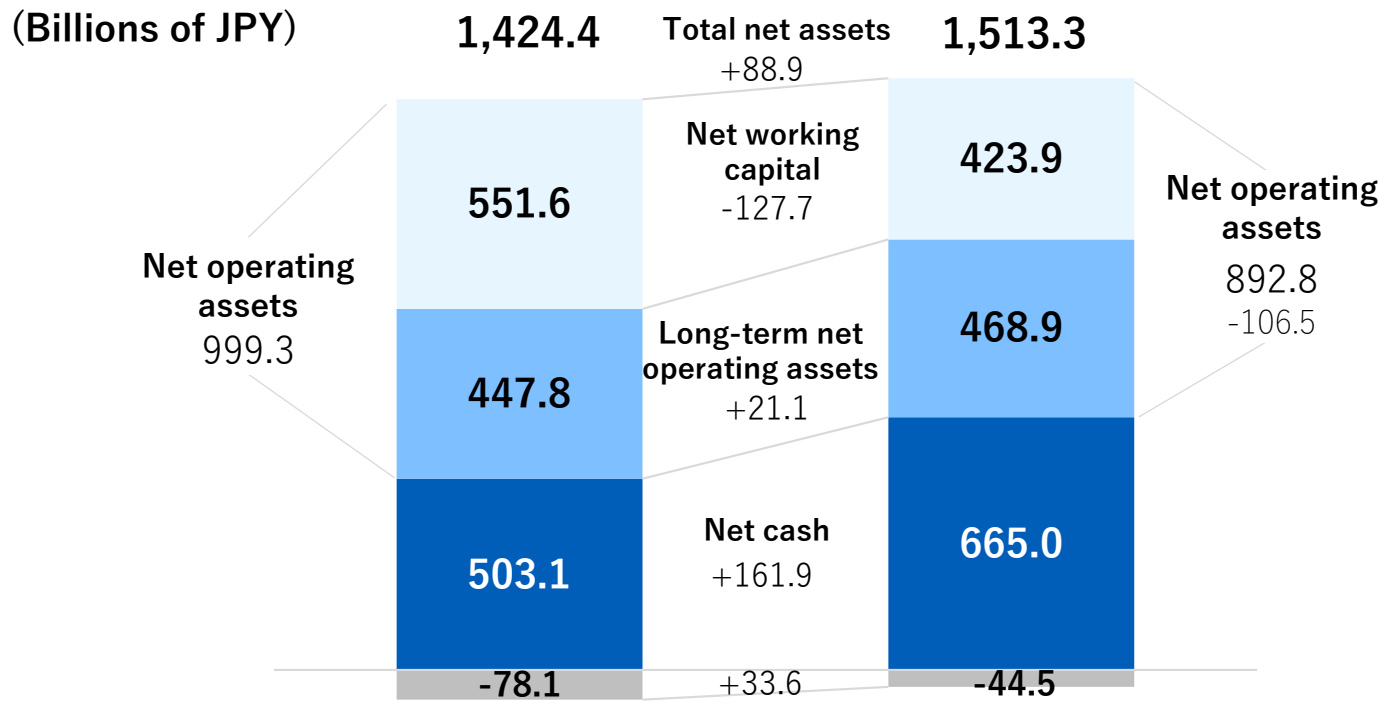
Decrease in export of IV products and royalty and profit-sharing income(ROY&PS) considered as impact of COVID-19

2022 HY	32.7
2023 HY	14.9
Year on Year	-17.8

＜Operating profit＞



Financial Position (vs. 2022 Year End)



	2022 Dec		2023 Jun
Total assets	1,869.8	-38.2	1,831.6
Total liabilities	-445.4	+127.1	-318.3
Total net assets	1,424.4	+88.9	1,513.3
Ratio of equity attributable to Chugai shareholders	76.2%	+6.4%pts	82.6%

Decrease in net working capital

Decrease in trade accounts receivable including Ronapreve

Increase in long-term net operating assets

Increase in property, plant and equipment mainly due to the investment in manufacturing building for active pharmaceutical ingredients(FJ3) at Fujieda Plant

Increase in net cash

(See next slide)

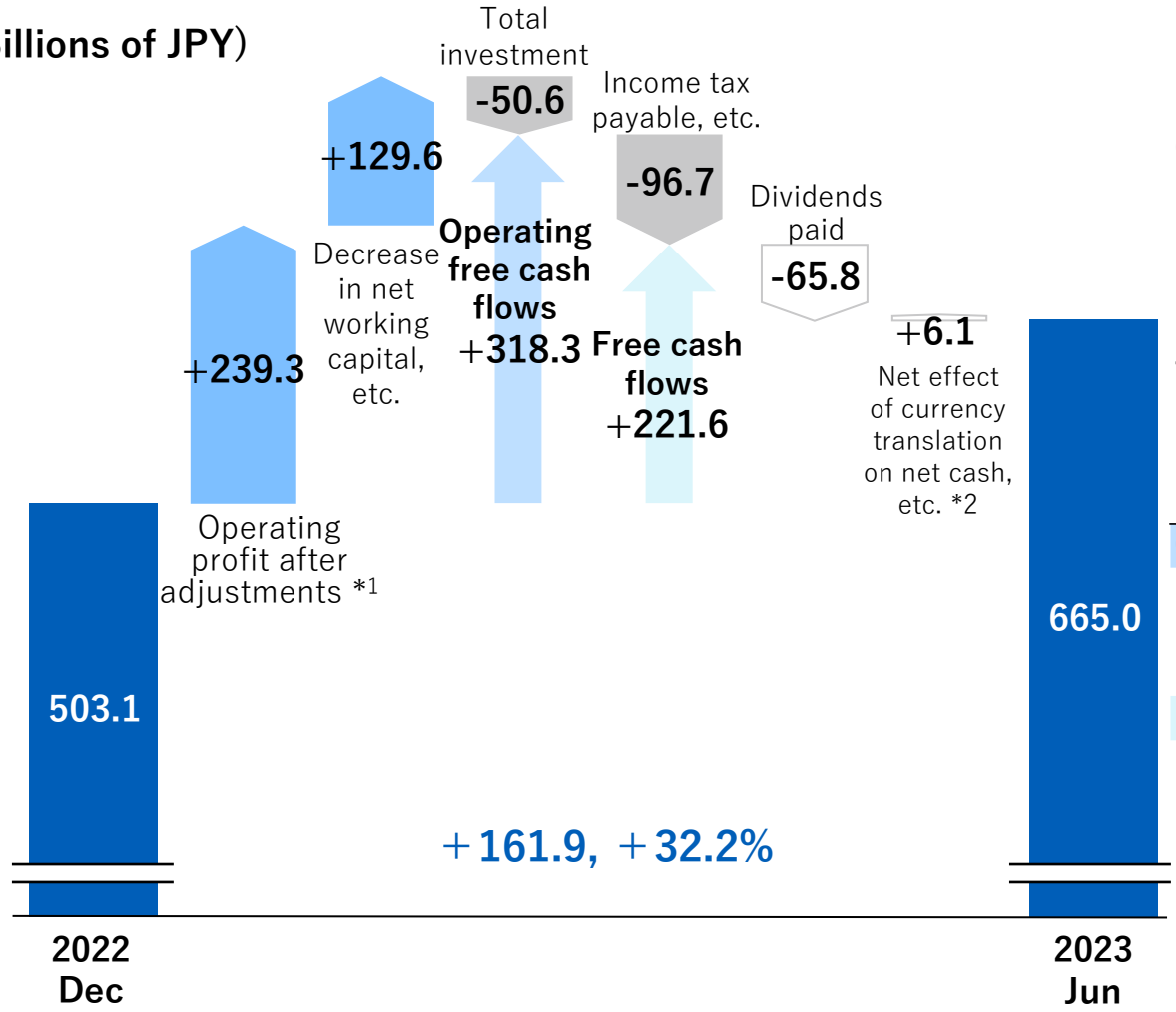
Increase in other non-operating assets – net

Increase mainly due to a decrease in accrued corporate tax

* 1 E.g., deferred income tax assets, accrued corporate tax, etc.

Net Cash (vs. 2022 Year End)

(Billions of JPY)



Operating profit after adjustment *1	**+239.3**
Operating profit *1	+210.9
Depreciation, amortization and impairment *1	+22.4
Decrease in net working capital, etc.	**+129.6**
Trade accounts receivable, accounts payable and inventory of Ronapreve	+107.3
Total investment	**-50.6**
Property, plant and equipment	-45.2
Payment for lease liabilities	-3.9
Intangible assets	-1.4
Operating free cash flows	**+318.3**
Income tax payable, etc.	**-96.7**
Income tax payable	-96.0
Free cash flows	**+221.6**
Dividends paid	**-65.8**
Net effect of currency transaction on net cash, etc. *2	**+6.1**

*1 Including Non-Core (IFRS results)
*2 Net effect of currency translation on net cash, etc. = Transaction in own equity instruments + Purchase of non-controlling interests + Net effect of currency translation on net cash(*3)
*3 Results from using different types of exchange rates when consolidating overseas subsidiaries in financial statements, i.e. net cash using end of period exchange rate and free cash flows using average exchange rate. (Chugai defines this term based on IAS 7 and IAS 21)

Current Status / Plan for Major Investments

		~2022	2023	2024	2025	2026	2027	2028~	Planned investment			Start of investment	Planned completion
									Total amount	Investment to-date	Unit		
Manufacturing	Fujieda plant	FJ3: Manufacture APIs of small and mid-size molecule drugs for late-stage clinical development and early commercial use							55.5	34.1	billion JPY	2021	2024
	Ukima site	UK4: Manufacture bio-APIs for early-stage clinical development							12.1	8.2	billion JPY	2021	2023
	Utsunomiya plant		UT3: Manufacture bio-APIs for middle to later- stage clinical development and early commercial use						37.4	5.0	billion JPY	2023	2026
	Utsunomiya plant		UTA: Manufacture sterile injectables for early commercial use						19.0	1.9	billion JPY	2023	2025
Research and development	CPR	Accelerate creation of clinical candidates utilizing proprietary antibody technologies							758 of which, capital investment: 82	526 74	million SGD million SGD	2012	2026
	Chugai LSP Yokohama	Building of state-of-the-art R&D site to create innovative new drug candidates							128.8 - Land of 43.0 billion JPY excluded	124.3	billion JPY	2019 - Start of operation: Apr. 2023	2022
	IFReC	Funding to IFReC per comprehensive collaboration agreement							10.0	6.3	billion JPY	2017	2027
Environment	Environmental investment		Equipment upgrade to achieve Mid-Term Environmental Goals 2030						107.2 estimated total amount		billion JPY	2022	2032

Overview of Development Pipeline

Tetsuya Yamaguchi

Executive Vice President, Head of Project & Lifecycle Management Unit

Q2 Topics

As of July 27, 2023

Launched	**Hemlibra**	Hemophilia A without inhibitors (Taiwan)	July 2023
Approved	**FoundationOne Liquid CDx**	Capmatinib hydrochloride hydrate: *MET* exon 14 skipping mutation-positive advanced and/or recurrent unresectable NSCLC	May 2023
Filed	**crovalimab/RG6107**	PNH (Japan, EU, U.S.)	June 2023
	Mitchga®	Prurigo nodularis, pruritus associated with atopic dermatitis (pediatric) (Japan)	Q2 2023*
Pipeline entry	**ROSE12**	Solid tumors	P1 study (June 2023)
	RG6179 (anti-IL-6 antibody)	UME	P3 study (June 2023)
Medical conference	**crovalimab/RG6107**	COMMODORE 1/2 studies (PNH): EHA	June 2023
	orforglipron /LY3502970**	Phase 2 study in adults with obesity or overweight: ADA Phase 2 study in adults with type 2 diabetes: ADA	June 2023
	NXT007/RG6512	NXTAGE study (healthy adults, hemophilia A): ISTH	June 2023
Development discontinued	**Tecentriq**	Early breast cancer (adjuvant) / P3 study (IMpassion030 study)	
Other	**Chugai Venture Fund, LLC**	Investment activities for drug discovery targets, drug discovery technologies, and digital technologies that lead to the creation of innovative new drugs (location: Boston area)	To be established by the end of 2023

Letters in orange：in-house projects (global development) **Letters in blue**：in-licensed from Roche (development and distribution in Japan) **Letters in black**：others

* Out-licensed to Maruho in Japan ** Out-licensed to Eli Lilly and Company

Overview of Development Pipeline

2023: Key R&D Milestones

Underlined and bolded are new progress since April 27, 2023

	Product	Indication/Study name	Progress
Projects to be approved	Actemra	Systemic sclerosis with interstitial lung disease (SSc-ILD) (EU)	
	Hemlibra	Moderate hemophilia A (EU)	✓
	crovalimab	PNH (China)	
	RG6264 (PER/HER FDC)	HER 2 positive Breast cancer/Colorectal cancer	
P3/Pivotal readouts	Alecensa	ALINA Study: NSCLC [adjuvant]	
	crovalimab	COMMODORE 1/2 study: PNH	✓
	nemolizumab	ARCADIA 1/2 study: Atopic dermatitis*	✓
	Tecentriq + Avastin	IMbrave050 study: HCC [adjuvant]	✓
	Tecentriq	IMpassion030: eBC [adjuvant]	×
	Tecentriq	IMvoke010 study: HNC [adjuvant]	
	Tecentriq+ tiragolumab	**SKYSCRAPER-01 study: NSCLC [1st line]**	**2023-2024**
	mosunetuzumab+Polivy	SUNMO study**: r/r aNHL	
	delandistrogene moxeparvovec	EMBARK study: Duchenne muscular dystrophy (DMD)	

Letters in orange：in-house projects (development in global) **Letters in blue**：in-licensed from Roche (development and distribution in Japan) **Letters in black**：others

* Out-licensed to Galderma overseas ** Readout expected 2023-2024

ROSE12: Solid Tumors

ROSE12 is a Switch Antibody™ project following STA551. P1 study in solid tumors was started.

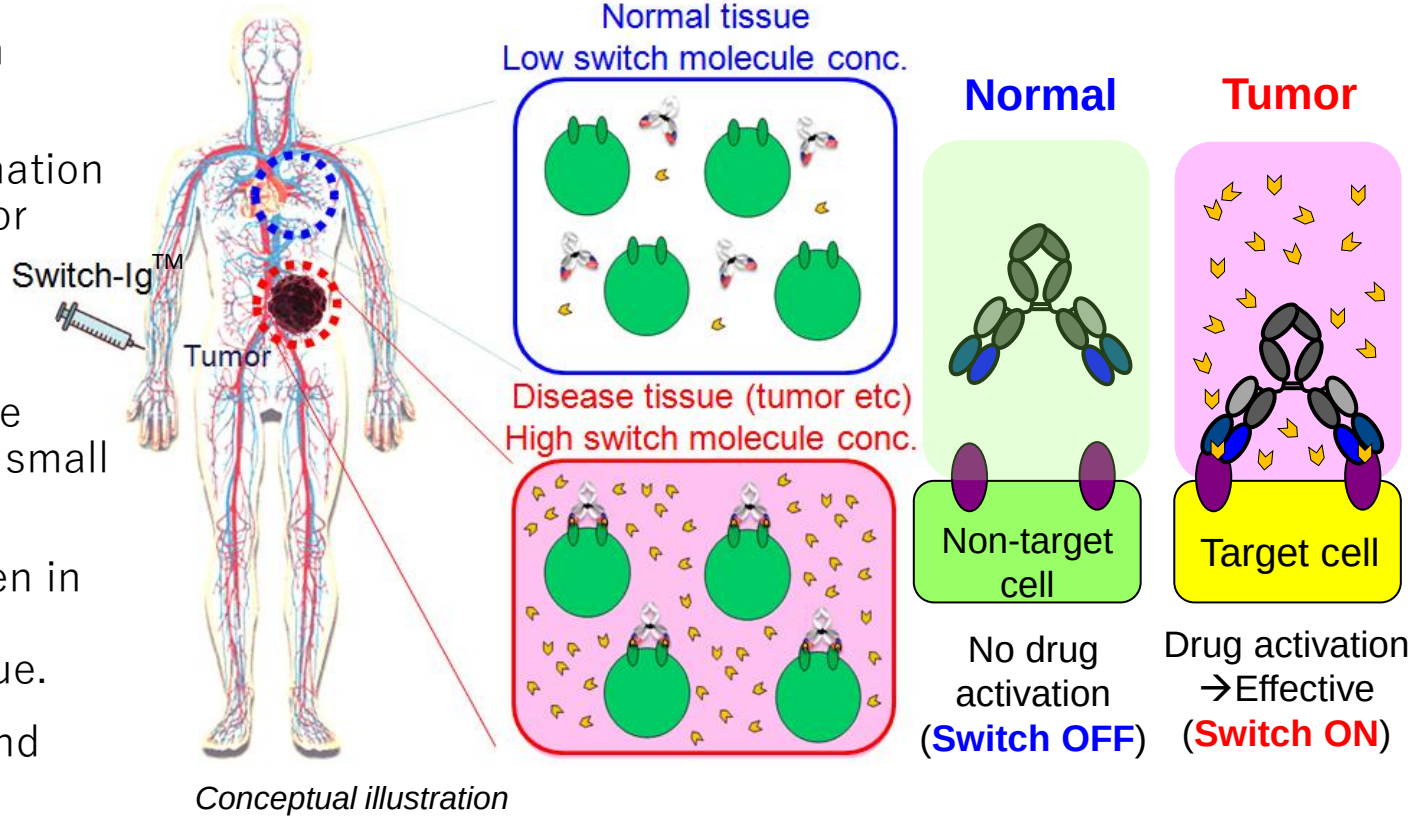
About ROSE12

- ROSE12, like STA551, binds to targets other than tumor antigens and exerts anti-tumor effects.
- P1 study of ROSE 12 monotherapy and in combination with Tecentriq in pateints with locally advanced or metastatic solid tumors was started in June

General characteristic of Switch-Ig™

- Switch Antibody™ binds to the antigen only in the presence of high concentration of tumor specific small molecule metabolite (switch molecule).
- Switch-Ig™ specifically binds to the target antigen in the tumor microenvironment without detectable binding to the antigen in plasma and normal tissue.
- Switch-Ig™ technology enables more effective and safer antibody therapeutics in oncology field.

General image of Switch-Ig™



Conceptual illustration

Source: Slides partly modified from Chugai Information Meeting on Antibody Engineering Technologies(Dec, 2019)

Crovalimab, an Expected New Global In-House Product

The results of Global P3 studies were presented at EHA. Crovalimab was filed for the treatment of PNH in Japan, the U.S. and Europe.

■ Efficacy

- COMMODORE 2 in complement inhibitor–naïve PNH patients met its co-primary endpoints, demonstrating non-inferiority of crovalimab to eculizumab for hemolysis control and transfusion avoidance

	crovalimab (N=134)	eculizumab (N=69)
Hemolysis Control from Week 5 to Week 25 (central LDH ≤1.5×ULN), mean % [95% CI]	79.3 [72.9, 84.5]	79.0 [69.7, 86.0]
Odds Ratio [95% CI] (Non-inferiority margin at the lower limit of 95% CI: 0.2)	1.02 [0.57, 1.82]	
Transfusion Avoidance from baseline to Week 25, n (mean %) [95% CI]	88 (65.7) [56.9, 73.5]	47 (68.1) [55.7, 78.5]
Difference in proportions, % [95% CI] (Non-inferiority margin at the lower limit of 95% CI: 20%)	-2.8 [-15.7, 11.1]	

- Crovalimab is non-inferior to eculizumab for the efficacious secondary endpoint of breakthrough hemolysis and hemoglobin stabilization.
- Clinically meaningful improvement in FACIT-Fatigue scores* occurred in both arms, with an improvement to healthy adult level with crovalimab.

*an increase of ≥5 points from baseline

■ Safety

- COMMODORE 1 and 2 showed that crovalimab is well tolerated in both C5 inhibitor-experienced and –naïve patients with PNH.

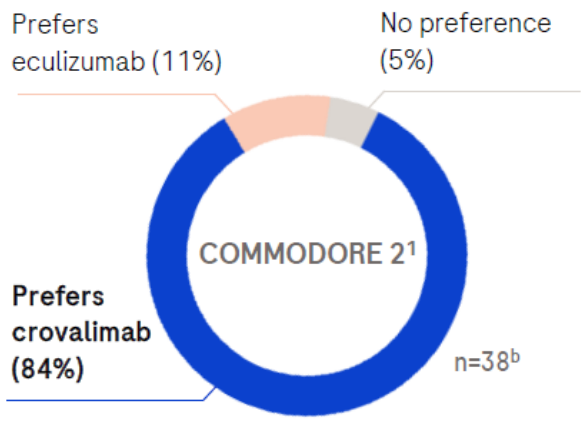
■ In addition to efficacy and safety, crovalimab is expected to decrease the treatment burden and improve the QOL of patients with PNH, by administering sc injection every four weeks during maintenance dosing and reducing dosing time.

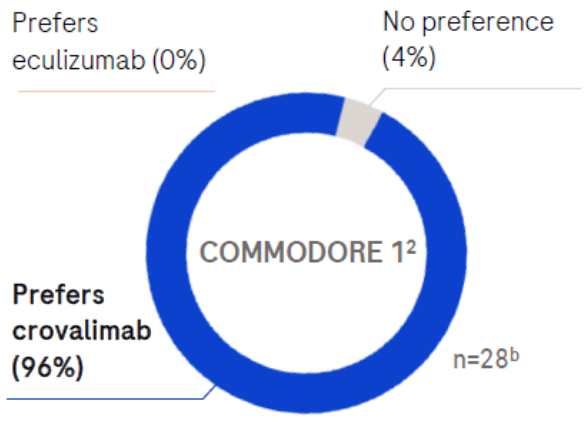
Treatment Preference: Exploratory Analysis

Exploratory analysis of treatment preference in COMMODORE 1 and 2 studies suggested preference for crovalimab

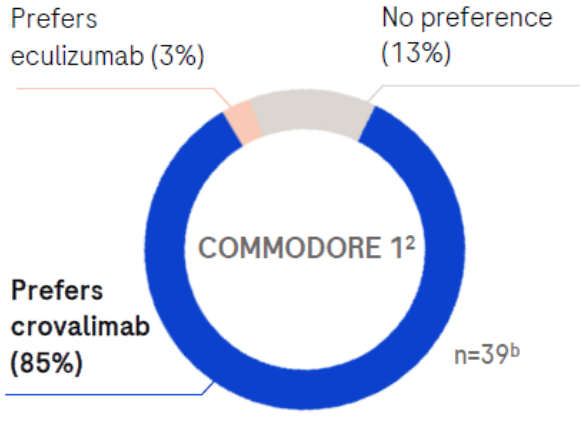
Exploratory analysis of treatment preference in COMMODORE 1 and 2 patients[a]

Patients randomized to eculizumab who switched to crovalimab in the extension period





Patients randomized to crovalimab



Across arms, **the top reasons for crovalimab preference[c]** among the 91 patients who preferred crovalimab included:

Reason for crovalimab preference[c]	
Fewer hospital visits associated with treatment	47/91
The way treatment was given was easier	41/91
Time to administer treatment was shorter	39/91
Better quality of life	30/91

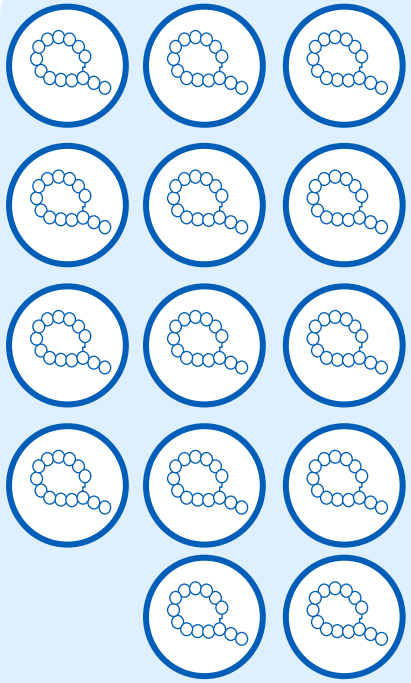
*In COMMODORE 1, patients randomized to either receive crovalimab or eculizumab, were under treatment with complement inhibitors (including eculizumab) prior to the enrollment into the COMMODORE 1 trial.
a Patients were assessed after 17 weeks of crovalimab. b Only patients with available data (having completed the questionnaire) were included in the calculations of percentages.
c Out of 13 possible options. 1. Röth A, et al. EHA 2023 [abstract S181]; 2. Scheinberg P, et al. EHA 2023 [abstract S183].

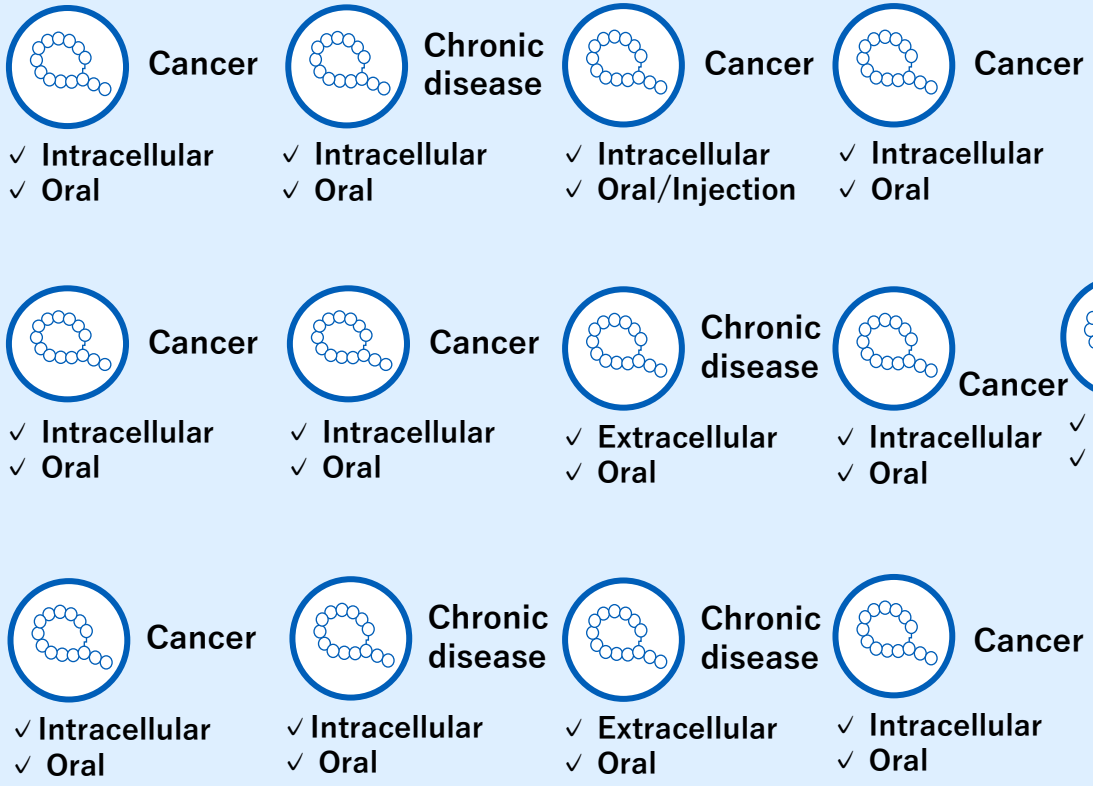
Overview of Development Pipeline

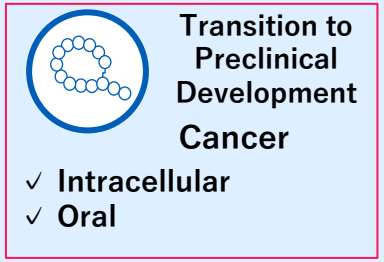
Latest Mid-Size Molecule Research Portfolio

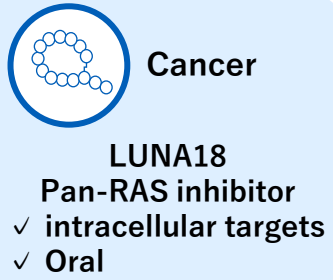
- LUNA18: Absorption (blood transfer) after oral administration has been confirmed. ePoC acquisition will be delayed from 2024 as it takes time to identify maximum tolerated dose.
- Steady progress across mid-size molecule research portfolio. One project transitioned to Preclinical Development phase.

As of July 27, 2023









★ Acquisition of clinical candidate molecules completed

Lead Identification | Lead Optimization | Preclinical Development | Phase 1

Overview of Development Pipeline

Projected Submissions (Post PoC NMEs and Products)

as of July 27, 2023

NME Line extension

in-house

in-licensed (Roche)

Filed		2023	2024	2025	2026 and beyond
crovalimab ★ (SKY59/RG6107) PNH (US)	VABYSMO (RG7716) RVO	TECENTRIQ+AVASTIN (RG7446＋RG435) HCC (adjuvant)	SRP-9001 (RG6356) DMD	TECENTRIQ (RG7446) HNC (adjuvant)	giredestrant (RG6171)) 1L - 3L BC	Vabysmo (RG7716) Angioid streaks	mosunetuzumab (RG7828) 2L FL	GAZYVA (RG7159) Pediatric nephrotic syndrome
crovalimab ★ (SKY59/RG6107) PNH (EU)	RG6264 (FDC, sc) BC/CRC	ALECENSA (AF802/RG7853) NSCLC (adjuvant)	mosunetuzumab (RG7828) 3L FL	TECENTRIQ (RG7446) NSCLC (neoadjuvant)	tiragolumab + TECENTRIQ (RG6058 + RG7446) EC	TECENTRIQ+AVASTIN (RG7446＋RG435) HCC(intermediate stage)	GYM329/RG6237 FSHD*	GAZYVA (RG7159) LN
crovalimab ★ (SKY59/RG6107) PNH (Japan)	ACTEMRA (MRA/RG1569) SSc-ILD (EU)		tiragolumab + TECENTRIQ (RG6058 + RG7446) 1L NSQ NSCLC	AVASTIN (RG435) 1L SCLC + TECENTRIQ	tiragolumab + TECENTRIQ (RG6058 + RG7446) NSCLC (Stage III) ★	ranibizumab(PDS) (RG6321) DME	ENSPRYNG (SA237/RG6168) MOGAD	TECENTRIQ (RG7446) 2L HCC
crovalimab (SKY59/RG6107) PNH (China)	ACTEMRA (MRA/RG1569) CRS induced by cancer treatment		tiragolumab ★ (RG6058) 1L NSCLC + TECENTRIQ	TECENTRIQ (RG7446) eBC (neoadjuvant)	ENSPRYNG (SA237/RG6168) AIE	ranibizumab(PDS) (RG6321) nAMD	ALECENSA (AF802/RG7853) NSCLC (Stage III)	giredestrant (RG6171) 1L BC
			ENSPRYNG (SA237/RG6168) gMG	TECENTRIQ (RG7446) MIBC (adjuvant)	crovalimab (SKY59/RG6107) aHUS	mosunetuzumab+ POLIVY (RG7828+RG7596) r/r aNHL	GYM329/RG6237 SMA* + EVRYSDI	giredestrant (RG6171) BC (adjuvant)
							crovalimab (SKY59/RG6107) SCD* (US/EU)	RG6179 ★ UME

★: new entry ★: changes in submission year *Before obtaining PoC

Appendix

Overview of Development Pipeline

Projects under Development (1/2)

As of July 27, 2023

	Phase I	Phase II	Phase III	Filed
Cancer	**LUNA18** - solid tumors **GC33 / codrituzumab** - HCC **ERY974** - solid tumors **STA551** - solid tumors **SOF10 (RG6440)** - solid tumors **SPYK04** - solid tumors **ALPS12 (RG6524)** - solid tumors **SAIL66** - CLDN6 positive solid tumors **ROSE12** - solid tumors ★ **RG7828 / mosunetuzumab** - FL (3L) **RG7421 / cobimetinib** - solid tumors **RG7802 / cibisatamab** - solid tumors **RG6026 / glofitamab** - hematologic tumors **RG6194 / runimotamab** - solid tumors **RG6330 / KRAS G12C inhibitor** - solid tumors **RG6433 / SHP2 inhibitor** - solid tumors **RG6160 / cevostamab** - r/r MM	**RG6396 / pralsetinib** - NSCLC (2L) - solid tumors	**AF802 (RG7853) / Alecensa** - NSCLC (adjuvant) - NSCLC (stage III)* **RG7446 / Tecentriq** - NSCLC (neoadjuvant) - MIBC (adjuvant) - eBC (neoadjuvant) - HCC (2L) - HNC (adjuvant) - PC (2L) **RG7446 / Tecentriq + RG435 / Avastin** - SCLC (1L) - HCC (adjuvant) - HCC (intermediate stage) **RG6058 / tiragolumab + RG7446 / Tecentriq** - NSCLC (1L) - NSCLC (stage III) - NSQ NSCLC (1L) - EC **RG6171 / giredestrant** - BC (adjuvant) - BC (1L) - BC (1L-3L) **RG7828 / mosunetuzumab** - FL (2L) **RG7828 / mosunetuzumab + RG7596 / Polivy** - r/r aNHL **RG6396 / pralsetinib** - NSCLC (1L)	**RG6264 (PER/HER FDC)** - BC/CRC **MRA(RG1569) / Actemra** - CRS induced by cancer treatment

Letters in orange : in-house projects (development in global) **Letters in blue** : in-licensed from Roche (development and distribution in Japan) * maintenance therapy after chemoradiation

In principle, completion of first dose is regarded as the start of clinical studies in each phase. ★: Projects with advances in stages since April 27, 2023

Overview of Development Pipeline

Projects under Development (2/2)

As of July 27, 2023

	Phase I	Phase II	Phase III	Filed
Immunology	**DONQ52** - Celiac disease **RAY121** - Autoimmune disease **SKY59(RG6107)/ crovalimab** - LN		**RG7159 / Gazyva** - LN - Pediatric nephrotic syndrome	**MRA (RG1569) / Actemra (EU)** - SSc-ILD
Neurology	**RG7935 / prasinezumab** - Parkinson's disease **RG6100 / semorinemab** - Alzheimer's disease **RG6102 / trontinemab** - Alzheimer's disease	**GYM329 (RG6237) + RG7916/ Evrysdi** - SMA (PII/III) - FSHD **RG7906 / ralmitaront** - schizophrenia **RG6042 / tominersen** - Huntington's disease	**SA237 (RG6168) / Enspryng** - gMG - MOGAD - AIE **SRP-9001(RG6356) / delandistrogene moxeparvovec** -DMD *	
Hematology	**NXT007 (RG6512)** - hemophilia A (PI/II)	**SKY59 (RG6107) / crovalimab (US/EU)** - SCD	**SKY59 (RG6107) / crovalimab** - PNH - aHUS	**SKY59 (RG6107) / crovalimab (Japan)** ★ - PNH **SKY59 (RG6107) / crovalimab (China)** - PNH **SKY59 (RG6107) / crovalimab (US, EU)** ★ - PNH
Ophthalmology	**RG6321 / PDS** - nAMD (PI/II) - DME (PI/II)		**RG7716 / Vabysmo** - Angioid streaks **RG6179** - UME ★	**RG7716 / Vabysmo** - RVO
Other	**AMY109** - endometriosis			

Letters in orange：in-house projects (development in global)　**Letters in blue**：in-licensed from Roche (development and distribution in Japan)

In principle, completion of first dose is regarded as the start of clinical studies in each phase.

★: Projects with advances in stages since April 27, 2023　　* Sarepta manages the global study, including Japan

Overview of Development Pipeline

Advances in Major Chugai Originated Projects Out Licensed to 3rd Parties

★: changes since April 27, 2023　　As of July 27, 2023

Generic name/development code	Mode of Action	Licensee	Granted rights to licensee	Indication	Stage	Progress
avutometinib/ VS-6766	RAF/MEK inhibitor	Verastem Oncology	exclusive global license for the manufacturing, development and marketing	Ovarian cancer	global: P2	• US FDA BTD（recurrent LGSOC in combination with defactinib）
				NSCLC	global: P2	—
					global: P1/2	• RAMP 203 trial (in combination with KRAS G12C inhibitor sotorasib) initiated • RAMP 204 trial (in combination with KRAS G12C inhibitor, adagrasib) initiated
nemolizumab	Anti-IL-31 receptor A humanized monoclonal antibody	Global (Galderma) Japan (Maruho)	Galderma exclusive global license for the development and marketing excluding Japan and Taiwan Maruho rights for development and marketing in the skin disease area for the Japanese market	Atopic dermatitis	global: P3	• Two P3 studies met primary endpoints
					Japan: filed ★	• Filed for additional indication for pruritus associated with atopic dermatitis (pediatric) ★
				Prurigo nodularis	global: P3	• US FDA BTD • Primary endpoint was met in the one of two P3 studies
					Japan: filed ★	• Filed for additional indication for prurigo nodularis ★
				CKDaP	global: P2/3	—
orforglipron/ LY3502970 **(previously referred to as OWL833)**	Oral non-peptidic GLP-1 receptor agonist	Eli Lilly and Company	worldwide development and commercialization rights	T2D	global: P3 ★	• In a phase 2 study, orforglipron achieved HbA1c reduction up to 2.1% and 10.1 kg of weight reduction at 26 weeks. The results were published in The Lancet* ★
				Obesity	global: P3 ★	• In the other phase 2 study, orforglipron demonstrated up to 14.7% weight reduction at 36 weeks. The results were published in the New England Journal of Medicine** ★

* Juan PF, et al. Efficacy and safety of oral orforglipron in patients with type 2 diabetes: a multicentre, randomised, dose-response, phase 2 study. *Lancet* 2023.
** Sean W, et al. Daily Oral GLP-1 Receptor Agonist Orforglipron for Adults with Obesity. *NEJM* 2023.

Overview of Development Pipeline

FoundationOne CDx Cancer Genomic Profile -Companion diagnostic indications-

As of July 27, 2023

Alterations	Cancer type	Relevant drugs
Activated *EGFR* gene alterations	NSCLC	afatinib dimaleate, erlotinib hydrochloride, gefitinib, osimertinib mesylate, dacomitinib hydrate
EGFR exon 20 T790M alterations		osimertinib mesylate
ALK fusion genes		alectinib hydrochloride, crizotinib, ceritinib, brigatinib
ROS1 fusion genes		entrectinib
MET exon 14 skipping alterations		capmatinib hydrochloride hydrate
BRAF V600E and V600K alterations	Malignant melanoma	dabrafenib mesylate, trametinib dimethyl sulfoxide, vemurafenib, encorafenib, binimetinib
ERBB2 copy number alterations (HER2 gene amplification positive)	BC	trastuzumab (genetical recombination)
KRAS/NRAS wild-type	CRC	cetuximab (genetical recombination), panitumumab (genetical recombination)
Microsatellite Instability-High		nivolumab (genetical recombination)
Microsatellite Instability-High	Solid tumors	pembrolizumab (genetical recombination)
Tumor Mutational Burden-High		pembrolizumab (genetical recombination)
NTRK1/2/3 fusion gene		entrectinib, larotrectinib sulfate
BRCA1/2 alterations	Ovarian cancer	olaparib
BRCA1/2 alterations	Prostate cancer	olaparib
FGFR2 fusion genes	Biliary tract cancer	pemigatinib

FoundationOne Liquid CDx Cancer Genomic Profile

Companion diagnostic indications

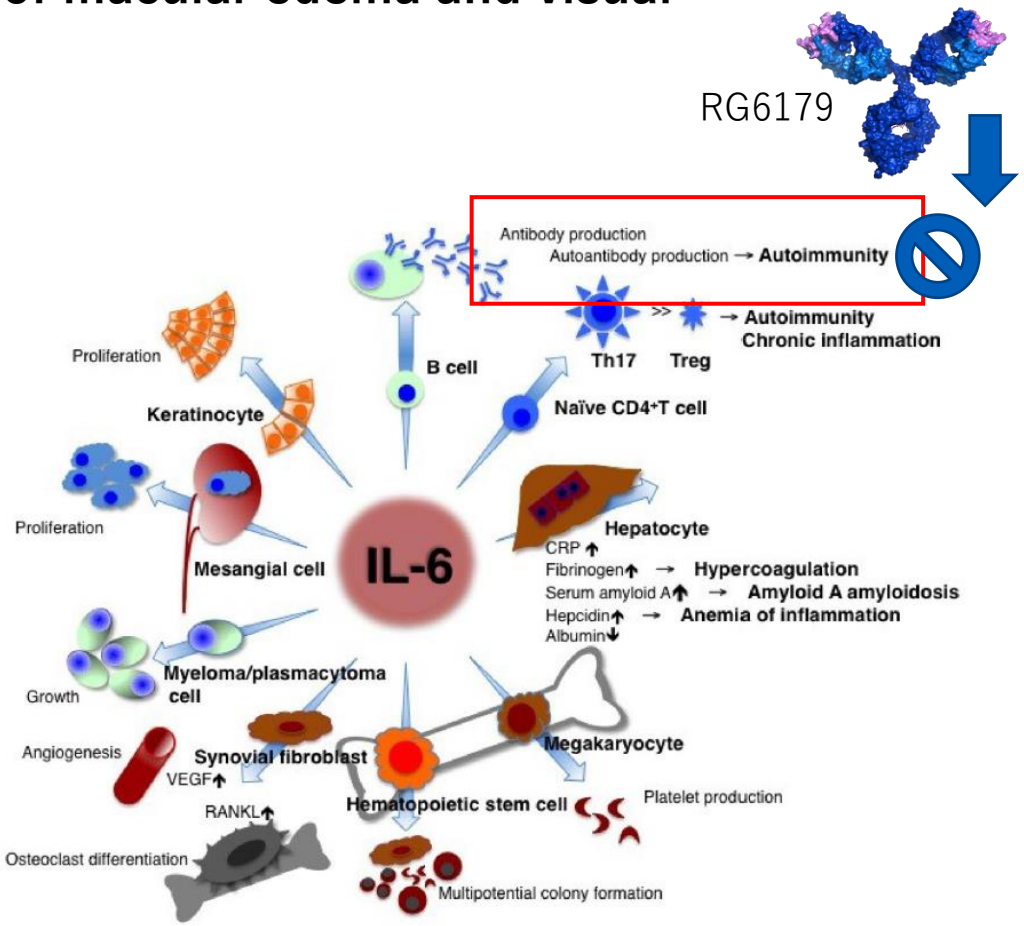
As of July 27, 2023

Alterations	Cancer type	Relevant drugs
Activated *EGFR* gene alterations	Non-small cell lung cancer (NSCLC)	afatinib dimaleate, erlotinib hydrochloride, gefitinib, osimertinib mesylate
EGFR exon 20 T790M alterations		osimertinib mesylate
ALK fusion genes		alectinib hydrochloride, crizotinib, ceritinib
ROS1 fusion genes		entrectinib
MET exon14 skipping alterations		capmatinib hydrochloride hydrate
NTRK1/2/3 fusion gene	Solid tumors	entrectinib
BRCA1/2 alterations	Prostate cancer	olaparib

RG6179 (anti-IL-6 antibody): Noninfectious Uveitic Macular Edema

Reduction of intraocular inflammation and improvement of macular edema and visual acuity are expected via IL-6 signaling inhibition

- Uveitis means a heterogeneous group of diseases in which the uveal tract - the iris, ciliary body, and choroid - is affected, presenting with intraocular inflammation, is found over a wide age range from pediatric to elderly persons. Macular edema is a common and serious complication in uveitis, and sometimes induces visual loss. It is estimated 17 – 34 thousands patients with non-infectious uveitis macular edema should exist in Japan.
- Sub-Tenon's triamcinolone acetonide injection is used for patients with uveitic macular edema, it may induce progression of cataracts or increase intraocular pressure with multiple use*. It is expected that RG6179 administrated with IVT injection should inhibit IL-6 signaling specifically, reduce intraocular inflammation and vascular hyperfiltration and improve macular edema and visual acuity with fewer progression of cataract and increased intraocular pressure compared to steroids.
- RG6179 is engineered on Fc region to increase its systemic clearance. It is expected that risk of systemic side-effects induction should be decreased.
- Preliminary data of phase 1 study (noninfectious uveitic macular edema) indicates that macular edema and visual acuity were improved after IVT administration compared to baseline**. Consequently, global P3 studies have started.



Toshio Tanaka, Tadamitsu Kishimoto, Targeting interleukin-6: all the way to treat autoimmune and inflammatory diseases Int J Biol Sci. 2012;8(9):1227-36

*Uveitis guideline, JJOS 2019,123(6), 635-696
**Sumit Sharma et.al. A novel intravitreal anti-IL-6 monoclonal antibody for uveitic macular edema (UME): preliminary results from the phase 1 DOVETAIL study, Abstract No. 5100, ARVO 2023

Abbreviations

AD	atopic dermatitis
ADA	American Diabetes Association
adj	adjuvant
API	active pharmaceutical ingredient
aHUS	atypical hemolytic uremic syndrome
AIE	autoimmune encephalitis
aNHL	aggressive B-cell non-Hodgkin lymphoma
BC	breast cancer
CPR	Chugai Pharmabody Research
CRC	colorectal cancer
CRS	cytokine release syndrome
DCT	Decentralized Clinical Trial
DMD	duchenne muscular dystrophy
DME	diabetic macular edema
eBC	early breast cancer
EC	esophageal cancer
EHA	European Hematology Association
ePoC	early proof of concept
FDC	fixed-dose combination
FL	follicular lymphoma
FSHD	facioscapulohumeral muscular dystrophy
GLP	Good Laboratory Practice
gMG	generalized myasthenia gravis
HCC	hepatocellular carcinoma
HNC	head and neck carcinoma
IFReC	Immunology Frontier Research Center
ISTH	International Society on Thrombosis and Haemostasis
IV	intravenous
LDH	lactate dehydrogenase

LGSOC	low-grade serous ovarian cancer
LN	lupus nephritis
LSP	Life Science Park
MIBC	muscle-invasive bladder cancer
MM	multiple myeloma
MOGAD	myelin oligodendrocyte glycoprotein antibody–associated disease
nAMD	neovascular age-related macular degeneration
NHI	national health insurance
NME	new molecular entity
NSCLC	non-small cell lung cancer
NSQ	non-squamous
OI	open innovation
PDS	port delivery system with ranibizumab
PN	prurigo nodularis
PNH	paroxysmal nocturnal hemoglobinuria
PS	profit share
QOL	quality of life
r/r	relapsed or refractory
RON	Ronapreve
ROY	royalty
RVO	retinal vein occlusion
sc	subctaneous
SCD	sickle cell disease
SCLC	small cell lung cancer
SMA	spinal muscular atrophy
SSc-ILD	systemic sclerosis with interstitial lung disease
ULN	upper limit of normal
UME	uveitic macular edema
T2D	type 2 diabetes

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