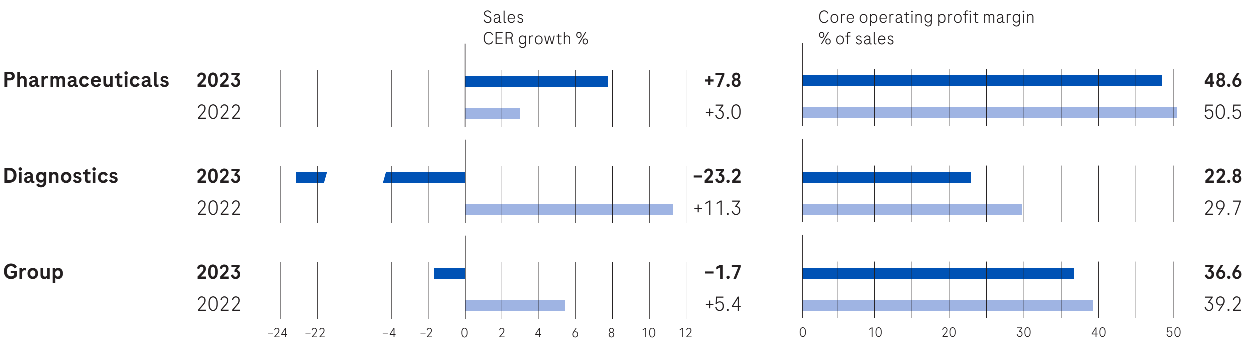
HALF-YEAR REPORT 2023

Finance in Brief

Key interim results



	Six months ended 30 June 2023 (CHF m)	2022 (CHF m)	% change (CHF)	% change (CER)	% of sales (2023)	% of sales (2022)
IFRS results						
Sales	29,779	32,295	−8	−2		
Operating profit	9,764	11,547	−15	−7	32.8	35.8
Net income	7,563	9,161	−17	−9	25.4	28.4
Net income attributable to Roche shareholders	7,137	8,530	−16	−8	24.0	26.4
Diluted EPS (CHF)	8.87	10.54	−16	−6		
Core results						
Research and development	6,449	6,245	+3	+8	21.7	19.3
Core operating profit	10,911	12,668	−14	−6	36.6	39.2
Core EPS (CHF)	10.10	11.76	−14	−5		
Free cash flow						
Operating free cash flow	8,031	9,782	−18	−8	27.0	30.3
Free cash flow	6,128	7,097	−14	−2	20.6	22.0

	30 June 2023 (CHF m)	31 December 2022 (CHF m)	% change (CHF)	% change (CER)
Net debt	(17,877)	(15,584)	+15	+14
Capitalisation	55,730	57,366	−3	+1
– Debt	25,386	25,351	0	+2
– Equity	30,344	32,015	−5	0

CER (Constant Exchange Rates): The percentage changes at Constant Exchange Rates are calculated using simulations by reconsolidating both the 2023 and 2022 results at constant exchange rates (the average rates for the year ended 31 December 2022). For the definition of CER see page 83.

Core results and Core EPS (earnings per share): These exclude non-core items such as global restructuring plans and amortisation and impairment of goodwill and intangible assets. This allows an assessment of both the actual results and the underlying performance of the business. A full income statement for the Group and the operating results of the divisions are shown on both an IFRS and core basis. The core concept is fully described on pages 74–78 and reconciliations between the IFRS and core results are given there.

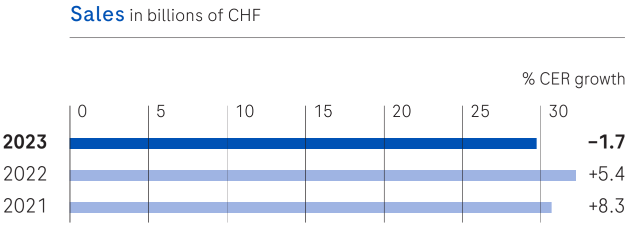
Free cash flow is used to assess the Group's ability to generate the cash required to conduct and maintain its operations. It also indicates the Group's ability to generate cash to finance dividend payments, repay debt and to undertake merger and acquisition activities. The free cash flow concept is used in the internal management of the business. The free cash flow concept is fully described on pages 78–80 and reconciliations between the IFRS cash flow and free cash flow are given there.

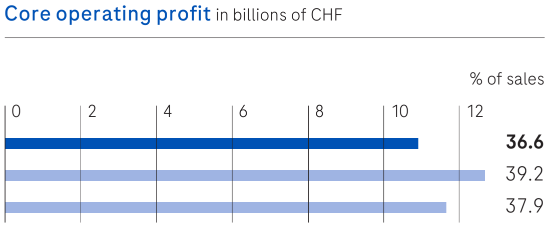
Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

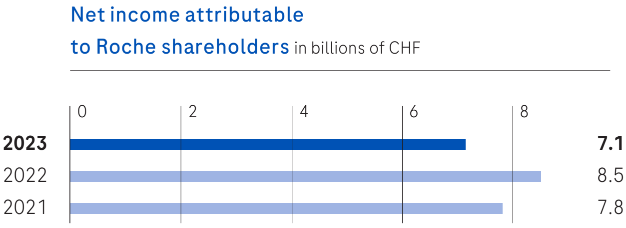
Contents

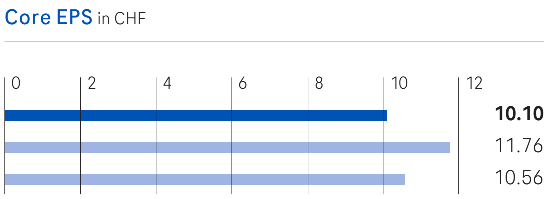
Financial Review

Group results









In the first half of 2023 the Roche Group reported a sales decline of 2% and a core operating profit decline of 6% at CER. IFRS net income decreased by 9% while Core EPS decreased by 5%. The appreciation of the Swiss franc against many currencies had an adverse net impact on the results expressed in Swiss francs compared to constant exchange rates (CER) of 6 percentage points on sales, 8 percentage points on core operating profit and IFRS net income and 9 percentage points on Core EPS.

The 2% sales decline at CER was driven by the 23% fall in sales in the Diagnostics Division following the sharp decline in demand for COVID-19-related tests. In the Pharmaceuticals Division sales were higher by 8% due to the continuing uptake of new medicines, which more than offset the negative impact from biosimilar competition. The core operating profit decline of 6% at CER reflected the Diagnostics Division sales decline, the increase in operating expenses in the Pharmaceuticals Division and also the base effect of the Ultomiris patent settlement income in the first half of 2022.

IFRS net income decreased by 9% and Core EPS by 5% at CER. These decreases were driven by the core operating profit decline. Operating free cash flow was CHF 8.0 billion, a decline of 8% at CER or 18% in CHF, following from the lower operating results. The free cash flow was CHF 6.1 billion, a decrease of 2% at CER or 14% in CHF, as a result of the fall in the operating free cash flow and higher interest payments, partly offset by lower tax payments.

Divisional operating results for the six months ended 30 June 2023

	Pharmaceuticals (CHF m)	Diagnostics (CHF m)	Corporate (CHF m)	Group (CHF m)
Sales	22,681	7,098	–	29,779
Core operating profit	11,018	1,619	(1,726)	10,911
– Margin, % of sales	48.6	22.8	–	36.6
Operating profit	10,085	1,567	(1,888)	9,764
– Margin, % of sales	44.5	22.1	–	32.8
Operating free cash flow	9,562	402	(1,933)	8,031
– Margin, % of sales	42.2	5.7	–	27.0

Divisional operating results – Development of results compared to the six months ended 30 June 2022

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales				
– % change at CER	+8	–23	–	–2
Core operating profit				
– % change at CER	+5	–36	+12	–6
– Margin: percentage point change	–1.5	–5.1	–	–1.6
Operating profit				
– % change at CER	+5	–36	+17	–7
– Margin: percentage point change	–1.1	–4.8	–	–1.9
Operating free cash flow				
– % change at CER	+8	–70	+12	–8
– Margin: percentage point change	–0.1	–11.5	–	–2.0

Sales in the Pharmaceuticals Division were CHF 22.7 billion (2022: CHF 22.3 billion), an increase of 8% at CER (1% in CHF), driven by growing demand for Vabysmo, Ocrevus, Hemlibra, Evrysdi and Phesgo, which together contributed an additional CHF 2.2 billion (CER) of sales. Sales of MabThera/Rituxan, Herceptin and Avastin decreased by a combined CHF 0.6 billion (CER), as the impact of biosimilar competition further slowed down.

The Diagnostics Division reported sales of CHF 7.1 billion, a decline of 23% at CER (29% in CHF) due to lower sales of COVID-19-related tests. The division's base business grew by 6% at CER and across all regions, with immunodiagnostics, particularly cardiac tests, being the main growth driver. The Diagnostics Division's portfolio of COVID-19 tests generated sales of CHF 0.4 billion in the first half of 2023 (2022: CHF 3.1 billion), a decline of 88% at CER.

The Pharmaceuticals Division's core operating profit increased by 5% at CER, which was below the sales increase of 8%, in part due to the CHF 0.7 billion of income from the Ultomiris patent settlement in 2022. Cost of sales increased by 3%, which was also lower than the increase in sales due to a favourable product mix combined with manufacturing efficiencies and lower collaboration and profit-sharing expenses. Research and development costs were CHF 5.6 billion, an increase of 9%. Oncology remained the primary area of research and development and the main driver of the growth. Neuroscience, immunology and ophthalmology also represented significant areas of spending. In research and early-stage development, the increase in costs was mostly driven by investments in computational biology. Investments made in new facilities additionally contributed to the growth in costs. Selling, general and administration costs increased by 7% due to marketing and distribution costs for ongoing launches, especially the rollout of Vabysmo. Other operating income (expense) was CHF 0.7 billion and included gains from the disposal of products.

In the Diagnostics Division core operating profit decreased by 36% at CER to CHF 1.6 billion, driven by the sharp decline of COVID-19-related sales. Cost of sales decreased by 26%, exceeding the 23% decrease in sales because of a favourable mix effect from the lower sales volumes of SARS-CoV-2 Rapid Antigen tests. Research and development costs increased by 2%, with investments in sequencing and in infectious diseases as growth drivers. Selling, general and administration costs decreased by 2% driven by lower distribution costs related to SARS-CoV-2 Rapid Antigen tests.

In the Group results the decrease in costs of sales as a percentage of sales was also driven by a mix effect from the increased sales of the Pharmaceuticals Division and the lower sales of the Diagnostics Division, coupled with the different margins of the two divisions. Group core operating profit was 6% lower in CER (14% in CHF).

The IFRS operating profit increased by 5% (CER) in the Pharmaceuticals Division, in line with the growth in core operating profit, with higher expenses from global restructuring plans offset by lower amortisation and impairment of intangible assets. In the Diagnostics Division IFRS operating profit decreased by 36% (CER), in line with the decline in core operating profit. The 2023 interim results for the Group include CHF 0.6 billion for the amortisation and impairment of intangible assets and CHF 0.7 billion of expenses from global restructuring plans. Group IFRS operating profit was 7% lower in CER (15% in CHF).

Financing costs increased by 68% (CER) to CHF 0.5 billion mainly due to additional interest expenses from newly issued debt as well as increases in interest rates which affected short-term borrowing costs. Other financial income (expense) was a net expense of CHF 0.1 billion, with the major item being net foreign exchange losses. The Group's effective core tax rate increased to 16.9% compared to 16.1% in the first half of 2022. The increase was mainly due to the impact from the resolution of tax disputes in 2022, which reduced the Group's effective core tax rate by 2.4 percentage points in the first half of that year. This increase was in part offset by the lower percentage of core profit contribution coming from tax jurisdictions with tax rates higher than the Group's average tax rate, notably lower profits in Japan driven by the base effect of the Ultomiris patent settlement income in the first half of 2022.

Net income decreased by 9% at CER (17% in CHF) on an IFRS basis to CHF 7.6 billion and decreased by 7% at CER (15% in CHF) on a core basis to CHF 8.6 billion. The amount of net income attributable to non-controlling interests decreased by 25% on an IFRS basis, and by 20% on a core basis, due to the base effect of the Ultomiris patent settlement income at Chugai in 2022.

Operating free cash flow was CHF 8.0 billion, a decrease of 8% at CER (18% in CHF) due to the lower operating results. The free cash flow of CHF 6.1 billion, a decrease of 2% at CER (14% in CHF), was a result of the lower operating free cash flow and higher interest payments, partially offset by lower tax payments.

Income statement

	Six months ended 30 June 2023 (CHF m)	2022 (CHF m)	% change (CHF)	% change (CER)
IFRS results				
Sales	29,779	32,295	-8	-2
Other revenue	837	1,605	-48	-44
Revenue	**30,616**	**33,900**	**-10**	**-4**
Cost of sales	(7,931)	(9,668)	-18	-14
Research and development	(6,918)	(6,516)	+6	+11
Selling, general and administration	(6,850)	(6,600)	+4	+9
Other operating income (expense)	847	431	+97	+101
Operating profit	**9,764**	**11,547**	**-15**	**-7**
Financing costs	(490)	(304)	+61	+68
Other financial income (expense)	(100)	(258)	-61	-50
Profit before taxes	**9,174**	**10,985**	**-16**	**-8**
Income taxes	(1,611)	(1,824)	-12	-3
Net income	**7,563**	**9,161**	**-17**	**-9**
Attributable to				
– Roche shareholders	7,137	8,530	-16	-8
– Non-controlling interests	426	631	-32	-25
EPS – Basic (CHF)	8.93	10.65	-16	-6
EPS – Diluted (CHF)	8.87	10.54	-16	-6
Core results [a]				
Sales	29,779	32,295	-8	-2
Other revenue	837	1,605	-48	-44
Revenue	**30,616**	**33,900**	**-10**	**-4**
Cost of sales	(7,456)	(8,986)	-17	-12
Research and development	(6,449)	(6,245)	+3	+8
Selling, general and administration	(6,505)	(6,416)	+1	+6
Other operating income (expense)	705	415	+70	+73
Operating profit	**10,911**	**12,668**	**-14**	**-6**
Financing costs	(482)	(300)	+61	+68
Other financial income (expense)	(100)	(258)	-61	-50
Profit before taxes	**10,329**	**12,110**	**-15**	**-7**
Income taxes	(1,742)	(1,950)	-11	-2
Net income	**8,587**	**10,160**	**-15**	**-7**
Attributable to				
– Roche shareholders	8,124	9,518	-15	-6
– Non-controlling interests	463	642	-28	-20
Core EPS – Basic (CHF)	10.17	11.89	-14	-5
Core EPS – Diluted (CHF)	10.10	11.76	-14	-5

a) See pages 74–78 for definition of core results and Core EPS.

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

Competition from biosimilar and generic medicines

The introduction of a generic, biosimilar or non-comparable biologic version of the same or a similar medicine usually results in a significant reduction in net sales for the relevant product, as other manufacturers typically offer their versions at lower prices.

MabThera/Rituxan, Herceptin and Avastin. The Group's basic, primary patents for these three products have expired worldwide. Interim sales, including regional breakdowns, for MabThera/Rituxan, Herceptin and Avastin are disclosed in the Pharmaceuticals Division's operating results and these are summarised in the table below. The year-on-year movements were also driven by regular price and volume changes. Biosimilar competition is only one factor in the overall picture.

Total interim MabThera/Rituxan, Herceptin and Avastin sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% divisional sales (2023)	% divisional sales (2022)
United States	966	1,296	–23	4.3	5.8
Europe	336	454	–22	1.5	2.0
Japan	207	308	–24	0.9	1.4
International	1,088	1,380	–12	4.8	6.2
Total sales	**2,597**	**3,438**	**–19**	**11.5**	**15.4**

The first biosimilar versions of Herceptin and Avastin were launched in the US from mid-2019 and the first biosimilar versions of MabThera/Rituxan in late 2019. In Europe the first biosimilar versions of MabThera/Rituxan and Herceptin were launched from mid-2017 and from mid-2018, respectively, and are now marketed in most EU countries. The first biosimilar versions of Avastin came to market in Europe from mid-2020. The first biosimilar versions of MabThera/Rituxan and Herceptin were launched in Japan in 2018. Biosimilar versions of Avastin were launched in Japan in late 2019 in the colorectal cancer indication, in 2020 in the non-small cell lung cancer indication and in 2022 in the breast cancer indication. Sales of these three products in Japan were impacted by government price cuts as well as biosimilar competition. In the International region, biosimilar versions of all three products have been launched in many countries and this, together with the impacts of regular price and volume changes, has led to the decline in sales.

Lucentis. The Group's basic, primary patents have expired in the US. The first biosimilar version of Lucentis with a restricted label came to market in the US at the beginning of the third quarter of 2022. Interim US sales of Lucentis were CHF 299 million (2022: CHF 572 million), a decline of 46% at CER (as reported in US dollars) due to the ongoing switch of patients from Lucentis to Vabysmo, as well as competitive pressure.

Esbriet. Following a negative decision from the US District Court for the District of Delaware in March 2022, the first generic versions of Esbriet came to market in the US in the second quarter of 2022. Interim US sales of Esbriet were CHF 63 million (2022: CHF 313 million), a decline of 79% at CER (as reported in US dollars).

Actemra/RoActemra. The Group's basic, primary patents have expired in the US and EU. Based on publicly available information, the Group currently anticipates that the first biosimilar versions of Actemra/RoActemra could come to market in the US and the EU in the second half of 2023. Global interim sales of Actemra/RoActemra were CHF 1,296 million (2022: CHF 1,455 million), a decline of 6% at CER, driven by lower demand from hospitalised patients with COVID-19.

Mergers and acquisitions

In May 2023, the Group announced plans to exit its legacy Genentech manufacturing facility in Vacaville, California, as part of a broader strategy to evolve its manufacturing capabilities in line with future pipeline requirements. Further details are given in Note 6 to the Interim Financial Statements.

Alliance transactions

In the first half of 2023 in-licensing and alliance transactions resulted in intangible assets of CHF 0.2 billion (2022: CHF 0.1 billion) being recognised.

Global restructuring plans

During the first half of 2023 the Group continued the implementation of various global restructuring plans initiated in prior years.

Global restructuring plans: costs incurred for the six months ended 30 June in millions of CHF

	2023	2022
Global restructuring costs		
– Employee-related costs	236	146
– Site closure costs	279	68
– Divestment of products and businesses	0	0
– Other reorganisation expenses	163	52
Total global restructuring costs	**678**	**266**

The business process transformation to simplify system landscapes and reduce process complexity incurred employee-related costs of CHF 39 million and other reorganisation expenses of CHF 155 million. The transformation is a multi-year cross-divisional programme to drive efficiency gains through system and process optimisation. The manufacturing network strategy review in the Pharmaceuticals Division incurred site closure costs of CHF 167 million mainly related to sites in the US. Chugai initiated an early retirement incentive programme and incurred employee-related costs of CHF 70 million. Further details are given in Note 7 to the Interim Financial Statements.

Impairment of goodwill and intangible assets

The Pharmaceuticals Division recorded impairment charges to intangible assets of CHF 0.3 billion, which related to product intangible assets in development following clinical data assessments. There were no impairments in the Diagnostics Division. Further details are given in Notes 8 and 9 to the Interim Financial Statements.

Legal and environmental cases

Based on the development of the various litigations some of the provisions previously held were released. There was also a reimbursement of a fine imposed in 2020 by the French Competition Authority on the Avastin/Lucentis investigation following a favourable court decision. These legal matters resulted in an income of CHF 221 million. The environmental cases included an increase in provisions of CHF 55 million for environmental matters mainly at the Clarecastle site in Ireland. There were no other significant developments in the first half of 2023. Further details are given in Note 10 to the Interim Financial Statements.

Net income and earnings per share

IFRS net income decreased by 9% at CER while Core EPS decreased by 5%. The base effect of the Ultomiris patent settlement income in 2022 had a dilutive impact, net of tax, of approximately 3 percentage points on the core EPS growth in the first half of 2023. The core basis excludes non-core items such as global restructuring costs, amortisation and impairment of goodwill and intangible assets, legal and environmental cases, and mergers and acquisitions and alliance transactions. The amount of net income attributable to non-controlling interests decreased by 25% on an IFRS basis, and by 20% on a core basis, due to the base effect of the Ultomiris patent settlement income in 2022 at Chugai.

Net income

	Six months ended 30 June 2023 (CHF m)	2022 (CHF m)	% change (CHF)	% change (CER)
IFRS net income	**7,563**	**9,161**	**–17**	**–9**
Reconciling items (net of tax)				
– Global restructuring	544	218	+150	+159
– Intangible asset amortisation	336	426	–21	–19
– Goodwill and intangible asset impairment	208	349	–40	–39
– Mergers and acquisitions and alliance transactions	4	(15)	–	–
– Legal and environmental cases	(99)	(11)	Over +500	Over +500
– Normalisation of equity compensation plan tax benefit	31	32	–3	+2
Core net income	**8,587**	**10,160**	**–15**	**–7**

Supplementary net income and EPS information is given on pages 74 to 78. This includes calculations of Core EPS and reconciles the core results to the Group's published IFRS results.

Financial position

Financial position

	30 June 2023 (CHF m)	31 December 2022 (CHF m)	% change (CHF)	% change (CER)
Pharmaceuticals				
Net working capital	4,051	3,791	+7	+13
Long-term net operating assets	28,223	28,765	–2	+1
Diagnostics				
Net working capital	4,235	3,268	+30	+33
Long-term net operating assets	13,153	13,250	–1	+1
Corporate				
Net working capital	(283)	(337)	–16	–16
Long-term net operating assets	233	182	+28	+30
Net operating assets	**49,612**	**48,919**	**+1**	**+4**
Net debt	(17,877)	(15,584)	+15	+14
Lease liabilities	(1,158)	(1,193)	–3	0
Pensions	(3,377)	(3,604)	–6	–5
Income taxes	2,690	2,908	–7	–2
Other non-operating assets, net	454	569	–20	–24
Total net assets	**30,344**	**32,015**	**–5**	**0**

Compared to the start of the year the Swiss franc appreciated against most currencies, with the Japanese yen and, to a lower extent, the US dollar having a significant effect on the Group's net operating assets. This negative translation effect was partially compensated by the natural hedge from the Group's US dollar-denominated debt. The exchange rates used are given on page 31.

Net working capital increased in both divisions. In the Pharmaceuticals Division, the net liability position for other receivables (payables) decreased as a result of lower accrued royalties. Trade payables decreased due to the payments for the construction of the Yokohama research and development site in Japan. In the Diagnostics Division, net working capital increased driven by the net liability for other receivables (payables), which decreased because of the settlement of year-end accruals. The net pension liability was 5% lower at CER following a positive performance of plan assets.

The increase in net debt was due to dividend payments of CHF 7.8 billion, partly offset by the free cash flow of CHF 6.1 billion. The net tax assets decreased mainly due to income tax expenses exceeding taxes paid. Lease liabilities remained stable as the increase due to the commencement of new lease contracts was offset by lease payments on existing lease contracts.

Free cash flow

Free cash flow

	Six months ended 30 June			
	2023 (CHF m)	2022 (CHF m)	% change (CHF)	% change (CER)
Pharmaceuticals	9,562	9,638	–1	+8
Diagnostics	402	1,902	–79	–70
Corporate	(1,933)	(1,758)	+10	+12
Operating free cash flow	**8,031**	**9,782**	**–18**	**–8**
Treasury activities	(333)	(203)	+64	+74
Taxes paid	(1,570)	(2,482)	–37	–33
Free cash flow	**6,128**	**7,097**	**–14**	**–2**

See pages 78–80 for definition of free cash flow.

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. These changes have a consequential impact on the divisional free cash flow, although total Group free cash flow is unaffected. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

The Group's operating free cash flow for the first six months of 2023 was CHF 8.0 billion, a decrease of 8% at CER or 18% in CHF, due to the lower operating results. The cash effect of the increase in net working capital of CHF 1.8 billion, driven by the settlement of payables and year-end accruals, was lower than in the first half of 2022. The free cash flow of CHF 6.1 billion, a decrease of 2% at CER or 14% in CHF, was a result of the fall in the operating free cash flow and higher interest payments, partly offset by lower tax payments.

Pharmaceuticals operating results

Pharmaceuticals Division interim operating results

	2023 (CHF m)	2022 (CHF m)	% change (CHF)	% change (CER)
IFRS results				
Sales	22,681	22,347	+1	+8
Other revenue	806	1,580	-49	-45
Revenue	**23,487**	**23,927**	**-2**	**+4**
Cost of sales	(4,457)	(4,851)	-8	-3
Research and development	(6,065)	(5,667)	+7	+12
Selling, general and administration	(3,588)	(3,468)	+3	+9
Other operating income (expense)	708	390	+82	+85
Operating profit	**10,085**	**10,331**	**-2**	**+5**
– Margin, % of sales	44.5	46.2	-1.7	-1.1
Core results [a]				
Sales	22,681	22,347	+1	+8
Other revenue	806	1,580	-49	-45
Revenue	**23,487**	**23,927**	**-2**	**+4**
Cost of sales	(4,107)	(4,252)	-3	+3
Research and development	(5,617)	(5,402)	+4	+9
Selling, general and administration	(3,444)	(3,382)	+2	+7
Other operating income (expense)	699	398	+76	+79
Core operating profit	**11,018**	**11,289**	**-2**	**+5**
– Margin, % of sales	48.6	50.5	-1.9	-1.5
Financial position				
Net working capital	4,051	3,791	+7	+13
Long-term net operating assets	28,223	28,765	-2	+1
Net operating assets	**32,274**	**32,556**	**-1**	**+2**
Free cash flow [b]				
Operating free cash flow	9,562	9,638	-1	+8
– Margin, % of sales	42.2	43.1	-0.9	-0.1

a) See pages 74–78 for definition of core results.
b) See pages 78–80 for definition of free cash flow.

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

Sales overview

Pharmaceuticals Division – Interim sales by therapeutic area

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
Oncology	9,775	10,086	+4	43.1	45.1
Neuroscience	4,229	3,750	+18	18.6	16.8
Immunology	3,095	3,752	-13	13.6	16.8
Haemophilia A	2,087	1,826	+20	9.2	8.2
Ophthalmology [a]	1,265	695	+89	5.6	3.1
Infectious diseases	819	810	+13	3.6	3.6
Other therapeutic areas [a]	1,411	1,428	+5	6.3	6.4
Total sales	**22,681**	**22,347**	**+8**	**100**	**100**

a) In 2023 sales of the ophthalmology therapeutic area included sales of Luxturna. These were previously shown as part of other therapeutic areas. The comparative information for 2022 has been restated accordingly. Interim sales of Luxturna for 2022 were CHF 12 million.

Sales in the Pharmaceuticals Division were CHF 22.7 billion (2022: CHF 22.3 billion), an increase of 8% at CER, driven by growing demand for Vabysmo, Ocrevus, Hemlibra, Evrysdi and Phesgo, which together contributed an additional CHF 2.2 billion (CER) of sales. Sales of MabThera/Rituxan, Herceptin and Avastin decreased by a combined CHF 0.6 billion or 19% (CER), as the impact of biosimilar competition further slowed down.

Vabysmo was a major growth driver in the first half of 2023 with sales of CHF 1.0 billion mainly in the US. Sales of Ocrevus continued to grow, with a sales increase of 15% to CHF 3.2 billion. Hemlibra reported further uptake in the US, across major European markets and the International region, with sales of CHF 2.1 billion, an increase of 20%. The uptake of Evrysdi continued across all regions mainly in Europe with total sales reaching CHF 0.7 billion, an increase of 48%. Phesgo sales grew by 69% to CHF 0.5 billion in all regions where launched.

Sales in the oncology therapeutic area increased by 4%, mainly driven by Phesgo, Tecentriq, Polivy and Perjeta, partially offset by the biosimilar competition for MabThera/Rituxan, Herceptin and Avastin as described above. Phesgo continued to show a considerable uptake in Europe and the US, with total sales increasing by 69% to CHF 0.5 billion. Tecentriq sales grew by 12%, with higher demand mainly in the US. Polivy sales increased across all regions, notably in Japan. Perjeta sales grew in the US and in the International region, especially in Brazil and in China, partially offset by a decline in sales in Europe. Gazyva/Gazyvaro sales grew in the US. Sales of Alecensa grew across all regions, with the US and China being the main drivers.

Sales in immunology decreased by 13%, with sales of Actemra/RoActemra falling by 6% due to lower demand from hospitalised patients with COVID-19. Xolair sales in the US were 4% higher due to steady growth in the chronic spontaneous urticaria indication, while Esbriet sales fell by 73% driven by generic competition. Sales in neuroscience grew by 18% mainly due to Ocrevus and Evrysdi. In the infectious diseases therapeutic area, Ronapreve sales increased by 2% due to sales in Japan. Sales in ophthalmology significantly increased driven by the growth in Vabysmo sales, partially offset by the 46% decrease in Lucentis sales in the US due to competitive pressure and patients switching to Vabysmo. In other therapeutic areas, sales of Activase/TNKase were 15% higher, given the market normalisation after the unwinding of temporary stockpiling in the US by distributors and customers at the end of 2021 which impacted the sales of the first half of 2022.

Product sales

Pharmaceuticals Division – Interim sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
Oncology					
Perjeta	2,082	2,061	+9	9.2	9.2
Tecentriq	1,853	1,758	+12	8.2	7.9
Kadcyla	1,001	1,074	0	4.4	4.8
Herceptin	878	1,179	-19	3.9	5.3
Avastin	837	1,142	-21	3.7	5.1
Alecensa	758	745	+10	3.3	3.3
MabThera/Rituxan[a)]	683	868	-17	3.0	3.9
Phesgo	517	325	+69	2.3	1.5
Gazyva/Gazyvaro	402	349	+22	1.8	1.6
Polivy	353	177	+114	1.6	0.8
Erivedge	122	131	0	0.5	0.6
Others	289	277	+13	1.2	1.1
Total Oncology	**9,775**	**10,086**	**+4**	**43.1**	**45.1**
Neuroscience					
Ocrevus	3,200	2,910	+15	14.1	13.0
Evrysdi	705	500	+48	3.1	2.2
Madopar	185	189	+5	0.8	0.8
Enspryng	120	84	+56	0.5	0.4
Others	19	67	-71	0.1	0.4
Total Neuroscience	**4,229**	**3,750**	**+18**	**18.6**	**16.8**
Immunology					
Actemra/RoActemra	1,296	1,455	-6	5.7	6.5
Xolair	1,031	1,025	+4	4.5	4.6
Pulmozyme	238	279	-10	1.0	1.2
CellCept	201	270	-18	0.9	1.2
MabThera/Rituxan[a)]	199	249	-16	0.9	1.1
Esbriet	119	457	-73	0.5	2.0
Others	11	17	-27	0.1	0.2
Total Immunology	**3,095**	**3,752**	**-13**	**13.6**	**16.8**
Haemophilia A					
Hemlibra	2,087	1,826	+20	9.2	8.2
Total Haemophilia A	**2,087**	**1,826**	**+20**	**9.2**	**8.2**
Ophthalmology[b)]					
Vabysmo	957	109	Over +500	4.2	0.5
Lucentis	299	572	-46	1.3	2.6
Others	9	14	-28	0.1	0.0
Total Ophthalmology	**1,265**	**695**	**+89**	**5.6**	**3.1**
Infectious diseases					
Ronapreve	550	609	+2	2.4	2.7
Others	269	201	+45	1.2	0.9
Total Infectious diseases	**819**	**810**	**+13**	**3.6**	**3.6**

Pharmaceuticals Division – Interim sales *(continued)*

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
Other therapeutic areas[b]					
Activase/TNKase	621	559	+15	2.7	2.5
Mircera	198	191	+11	0.9	0.9
Others	592	678	–5	2.7	3.0
Total other therapeutic areas	**1,411**	**1,428**	**+5**	**6.3**	**6.4**
Total sales	**22,681**	**22,347**	**+8**	**100**	**100**

a) Total MabThera/Rituxan sales of CHF 882 million (2022: CHF 1,117 million) split between oncology and immunology franchises.
b) In 2023 sales of the ophthalmology therapeutic area included sales of Luxturna. These were previously shown as part of other therapeutic areas. The comparative information for 2022 has been restated accordingly. Interim sales of Luxturna for 2022 were CHF 12 million.

Ocrevus. For relapsing forms of multiple sclerosis (RMS) and primary progressive multiple sclerosis (PPMS).

Ocrevus interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	2,346	2,140	+13	73.3	73.5
Europe	584	539	+13	18.3	18.5
International	270	231	+28	8.4	8.0
Total sales	**3,200**	**2,910**	**+15**	**100**	**100**

There was continuously growing demand in both indications primarily driven by the US, with the growth coming from both new and returning patients. Elsewhere, Ocrevus continued to show high uptake where launched, notably in Italy and Germany.

HER2 franchise (Perjeta, Herceptin, Kadcyla and Phesgo). For HER2-positive breast cancer and HER2-positive metastatic (advanced) gastric cancer (Herceptin only).

Perjeta interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	763	740	+7	36.6	35.9
Europe	413	457	–5	19.8	22.2
Japan	109	120	+3	5.2	5.8
International	797	744	+20	38.4	36.1
Total sales	**2,082**	**2,061**	**+9**	**100**	**100**

Herceptin interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	176	263	–31	20.0	22.3
Europe	183	233	–17	20.8	19.8
Japan	17	28	–32	1.9	2.4
International	502	655	–14	57.3	55.5
Total sales	**878**	**1,179**	**–19**	**100**	**100**

Kadcyla interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	386	415	–4	38.6	38.6
Europe	298	350	–10	29.8	32.6
Japan	52	68	–13	5.2	6.3
International	265	241	+24	26.4	22.5
Total sales	**1,001**	**1,074**	**0**	**100**	**100**

Phesgo interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	209	138	+57	40.4	42.5
Europe	240	163	+57	46.4	50.2
International	68	24	+216	13.2	7.3
Total sales	**517**	**325**	**+69**	**100**	**100**

Sales in the HER2 franchise increased by 4% at CER to CHF 4.5 billion. Sales of Perjeta grew by 9%, with the International region, notably Brazil and China, and the US being the key drivers. This was partly offset by a decline in sales in Europe following the launch of Phesgo. Herceptin sales were 19% lower as a result of biosimilar erosion. Sales of Kadcyla were stable, with sales growth in China being offset by a sales decline in Europe and the US. Phesgo sales showed a considerable uptake in the US and Europe, due to continued switching of patients to Phesgo as the treatment preferred over Perjeta and Herceptin.

Hemlibra. For haemophilia A.

Hemlibra interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	1,247	1,098	+18	59.8	60.1
Europe	419	360	+22	20.1	19.7
Japan	192	180	+21	9.2	9.9
International	229	188	+34	10.9	10.3
Total sales	**2,087**	**1,826**	**+20**	**100**	**100**

Sales growth continued, especially in the US in the non-inhibitor segment. In Europe and the International region sales grew across major markets, while sales in Japan increased due to further market penetration.

Tecentriq. For advanced bladder cancer, advanced lung cancer, initial therapy of non-squamous non-small cell lung cancer (NSCLC), extensive-stage small cell lung cancer (SCLC), PD-L1-positive triple-negative breast cancer (TNBC) and unresectable or metastatic hepatocellular carcinoma (HCC).

Tecentriq interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	1,000	951	+9	54.0	54.1
Europe	398	383	+9	21.5	21.8
Japan	214	218	+11	11.5	12.4
International	241	206	+28	13.0	11.7
Total sales	**1,853**	**1,758**	**+12**	**100**	**100**

Sales increased by 12% with growth in all regions. In the US, sales were higher driven by the new indications for NSCLC and HCC. In Europe the growth was mainly driven by the SCLC and TNBC indications, notably in Italy. In Japan, sales increased by 11% due to accelerated growth in the NSCLC adjuvant indication. In the International region China was the key growth driver.

Actemra/RoActemra. For rheumatoid arthritis, forms of juvenile idiopathic arthritis, giant cell arteritis, CAR T-cell-induced severe or life-threatening cytokine release syndrome and COVID-19.

Actemra/RoActemra interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	574	664	-11	44.3	45.6
Europe	383	420	-4	29.6	28.9
Japan	157	174	+3	12.1	12.0
International	182	197	+1	14.0	13.5
Total sales	**1,296**	**1,455**	**-6**	**100**	**100**

Sales decreased by 6%, mainly in the US and Europe, driven by lower demand from hospitalised patients with severe COVID-19.

Avastin. For advanced colorectal, breast, lung, kidney, cervical and ovarian cancer, relapsed glioblastoma and liver cancer in combination with Tecentriq.

Avastin interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	256	342	-23	30.6	29.9
Europe	57	116	-48	6.8	10.2
Japan	177	263	-23	21.1	23.0
International	347	421	-10	41.5	36.9
Total sales	**837**	**1,142**	**-21**	**100**	**100**

Sales decreased due to the continuing impact of biosimilar competition.

MabThera/Rituxan. For non-Hodgkin lymphoma (NHL), chronic lymphocytic leukaemia (CLL), follicular lymphoma (FL) and pemphigus vulgaris (PV), rheumatoid arthritis (RA) as well as certain types of antineutrophil cytoplasmic antibody (ANCA)-associated vasculitis.

MabThera/Rituxan interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	534	691	-20	60.5	61.9
Europe	96	105	-4	10.9	9.4
Japan	13	17	-14	1.5	1.5
International	239	304	-13	27.1	27.2
Total sales	**882**	**1,117**	**-17**	**100**	**100**

Sales were 17% lower due to biosimilar erosion across all regions. Sales in the US decreased by 20%, with a decline in both the oncology and immunology segments.

Xolair. For moderate to severe persistent allergic asthma (AA) and chronic spontaneous urticaria (CSU).

Xolair interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	1,031	1,025	+4	100	100
Total sales	**1,031**	**1,025**	**+4**	**100**	**100**

Sales increased by 4% driven by growth in the chronic spontaneous urticaria indication. Xolair remains a market leader in the larger allergic asthma indication.

Vabysmo. For neovascular or 'wet' age-related macular degeneration (nAMD) and diabetic macular oedema (DME).

Vabysmo interim regional sales

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	788	101	Over +500	82.3	92.7
Europe	103	0	Over +500	10.8	0.0
Japan	46	7	Over +500	4.8	6.4
International	20	1	Over +500	2.1	0.9
Total sales	**957**	**109**	**Over +500**	**100**	**100**

Sales in the US showed a strong uptake following approval in January 2022 and there was continued growth of market share in nAMD and DME, driven by new patients and patients switching from existing treatment options. In Europe sales showed a strong uptake, notably in the UK and Germany.

Activase/TNKase. For acute ischaemic stroke (AIS) and acute myocardial infarction (AMI). Sales were 15% higher mainly due to business normalisation after the temporary stockpiling in the US by distributors and customers at the end of 2021 which impacted the sales in the first half of 2022.

Alecensa. For ALK-positive non-small cell lung cancer (NSCLC). The global uptake continued with a 10% increase in sales. The US and China were the main drivers of the growth.

Esbriet. For idiopathic pulmonary fibrosis (IPF). Sales declined by 73% driven by generic competition. In the US, the first generic versions were launched in the second quarter of 2022.

Evrysdi. For spinal muscular atrophy (SMA). Sales were 48% higher, driven by the uptake across all regions, with Europe and the International region being the key growth drivers.

Lucentis. For neovascular or 'wet' age-related macular degeneration (nAMD), macular oedema following retinal vein occlusion (RVO), diabetic macular oedema (DME) and diabetic retinopathy (DR). Sales in the US decreased by 46%, due to the ongoing switch of patients from Lucentis to Vabysmo and competitive pressure.

Ronapreve. For the treatment of recently diagnosed high-risk patients with mild to moderate COVID-19. Sales of Ronapreve increased by 2% in the first half of 2023 due to sales in Japan.

Pharmaceuticals Division – Interim sales by region

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
United States	11,743	11,363	+7	51.8	50.8
Europe	4,105	4,104	+5	18.1	18.4
Japan	2,210	2,202	+14	9.7	9.9
International	4,623	4,678	+9	20.4	20.9
– *of which China*	*1,505*	*1,618*	*+3*	*6.6*	*7.2*
Total sales	**22,681**	**22,347**	**+8**	**100**	**100**

United States. Sales grew by 7% with the increased sales of Vabysmo, Ocrevus, Hemlibra, Tecentriq and Activase/TNKase, partially offset by a combined 23% fall in MabThera/Rituxan, Herceptin and Avastin sales and also by lower sales of Lucentis and Esbriet. Vabysmo, which was launched in early 2022, achieved CHF 0.8 billion of sales. Ocrevus sales increased by 13% and were driven by both new and returning patients. Hemlibra continued to show growth in the non-inhibitor segment with increased sales of 18%. Tecentriq sales increased by 9% due to growth in new indications. Activase/TNKase sales increased by 15% mainly due to business normalisation after the temporary stockpiling impact as described above. Lucentis sales decreased due to competitive pressure and patients switching to Vabysmo while Actemra/RoActemra sales decreased by 11% mostly due to lower demand from hospitalised patients with COVID-19.

Europe. Sales increased by 5% mainly driven by the launch of Vabysmo and uptake of Evrysdi, Phesgo, Hemlibra and Ocrevus, partially offset by a combined sales decline of 22% for MabThera/Rituxan, Herceptin and Avastin, lower sales of Esbriet and no sales of Ronapreve in 2023. Vabysmo sales amounted to CHF 103 million and growth was mainly driven by sales in the UK and Germany. There was a sales growth of 66% of Evrysdi, with the main drivers being Italy, Germany and France. The high uptake of Phesgo resulted in a 57% sales growth, with Romania, France and Italy being the key drivers. The Hemlibra sales growth of 22% was driven by France and Germany. Ocrevus sales increased by 13% due to continued uptake across major markets, notably in Italy.

Japan. Sales increased by 14%, mainly as a result of Ronapreve sales, supported by sales growth for Polivy, Vabysmo and Hemlibra. These compensated for a combined 24% fall in sales of MabThera/Rituxan, Herceptin and Avastin arising from biosimilar competition and government price cuts. Price cuts in Japan had an impact across the portfolio.

International. Sales increased by 9%, led by Perjeta, Evrysdi, Ocrevus, Hemlibra and Kadcyla. Sales in China increased by 3% mainly driven by Tamiflu, Perjeta, Xofluza, Actemra/RoActemra and Polivy, partially offset by biosimilar erosion for MabThera/Rituxan, Herceptin and Avastin and lower sales of CellCept.

Operating results

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

Pharmaceuticals Division – Other revenue for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Royalty income	395	471	−14
Profit-share income	336	343	+1
Other income from collaboration and out-licensing agreements	71	762	−89
Other	4	4	+1
Total – IFRS and Core basis	**806**	**1,580**	**−45**

Other revenue decreased by 45% at CER. Royalty income was 14% lower, mainly due to lower Lucentis royalties following a decline in sales outside the US. Profit-share income remained stable as the increase in income from the US sales of Venclexta/Venclyxto was offset by lower income from the fall in sales of Xolair outside the US and from the Ronapreve profit-sharing agreement with Regeneron. Other income from collaboration and out-licensing agreements decreased significantly due to the Ultomiris patent settlement income in 2022.

Pharmaceuticals Division – Cost of sales for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Manufacturing cost of goods sold and period costs	(2,393)	(2,542)	+1
Royalty expenses	(816)	(734)	+17
Collaboration and profit-sharing agreements	(873)	(946)	−3
Amortisation of commercial software intangible assets	(2)	(1)	+20
Impairment of property, plant and equipment and right-of-use assets	(23)	(29)	−19
Cost of sales – Core basis	**(4,107)**	**(4,252)**	**+3**
Global restructuring plans	(228)	(49)	+370
Amortisation of intangible assets	(122)	(214)	−41
Impairment of intangible assets	0	(336)	−100
Total – IFRS basis	**(4,457)**	**(4,851)**	**−3**

Core costs increased by 3% at CER which was lower than the increase in sales due to a favourable product mix combined with manufacturing efficiencies. As a percentage of sales, cost of sales decreased by 1.0 percentage points to 18.0%. Royalty expenses were 17% higher driven by increased sales of certain royalty-bearing products, notably Ocrevus and Evrysdi. Collaboration and profit-sharing expenses decreased by 3% mainly due to lower sales of MabThera/Rituxan in the US.

The costs of global restructuring plans were higher due to the manufacturing network strategy review mainly affecting the US sites. The decrease in amortisation charges of intangible assets was primarily attributable to the impairments recorded in 2022 which reduced the overall asset value. There were no impairments of intangible assets in the first half of 2023 while there was a charge in 2022 for the intangible asset relating to Flatiron's technology.

Pharmaceuticals Division – Research and development for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Research and development – Core basis	**(5,617)**	**(5,402)**	**+9**
Global restructuring plans	(37)	(17)	+152
Amortisation of intangible assets	(151)	(161)	–4
Impairment of intangible assets	(260)	(87)	+209
Total – IFRS basis	**(6,065)**	**(5,667)**	**+12**

Core costs increased by 9% at CER and, as a percentage of sales, increased by 0.6 percentage points to 24.8%. Oncology remained the primary area of research and development and the main driver of the growth. Neuroscience, immunology and ophthalmology also represented significant areas of spending. The increase in spending was mainly driven by a study for giredestrant, a next-generation selective oestrogen receptor degrader for people with hormone receptor-positive HER2-negative breast cancer, and a study for delandistrogene moxeparvovec, a gene therapy developed in partnership with Sarepta Therapeutics for people with Duchenne muscular dystrophy (DMD) with a confirmed mutation in the DMD gene. This was partially offset by decreased spend in studies of some molecules, notably for gantenerumab following the negative trial readout in November 2022. In research and early-stage development, the increase in costs was mostly driven by investments in computational biology. Investments made in new facilities additionally contributed to the increased costs, including the Clinical Supply Center in South San Francisco, US, and the Chugai Life Science Park in Yokohama, Japan. Both facilities started operation in the second half of 2022.

Global restructuring plan expenses included the portfolio prioritisation programme and the Chugai early retirement incentive programme. Impairment charges for intangible assets of CHF 0.3 billion related to assets in development following clinical data assessments.

Pharmaceuticals Division – Selling, general and administration for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Marketing and distribution	(2,779)	(2,722)	+8
Administration	(535)	(586)	–4
Business taxes and capital taxes	(77)	(67)	+26
Other general items	(53)	(7)	Over +500
Selling, general and administration – Core basis	**(3,444)**	**(3,382)**	**+7**
Global restructuring plans	(139)	(79)	+91
Amortisation of intangible assets	(5)	(7)	–18
Total – IFRS basis	**(3,588)**	**(3,468)**	**+9**

Core costs increased by 7% at CER, and as a percentage of sales increased by 0.1 percentage points to 15.3%. Marketing and distribution costs increased by 8% reflecting the investments in ongoing launches, especially the rollout of Vabysmo together with Ocrevus and Polivy. The lower administration costs were a result of several organisational changes, with some functions no longer being reported under administration, and additionally due to lower consulting costs. Business taxes and capital taxes increased due to the relatively low US excise tax in the first half of 2022, while the higher costs in other general items included costs for the transformation of the Basel headquarters site in Switzerland.

Costs for global restructuring plans related to sales affiliate initiatives, business process transformations and the Chugai early retirement incentive programme.

Pharmaceuticals Division – Other operating income (expense) for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Gains (losses) on disposal of products	585	338	+76
Gains (losses) on disposal of property, plant and equipment and right-of-use assets	8	8	+17
Pensions – past service costs	0	0	–
Other income and expense	106	52	+107
Other operating income (expense) – Core basis	**699**	**398**	**+79**
Global restructuring plans	(2)	(18)	–93
Mergers and acquisitions and alliance transactions	4	(4)	–
Legal and environmental cases	7	14	–52
Total – IFRS basis	**708**	**390**	**+85**

Core other operating income (expense) increased by 79% at CER driven by higher gains on disposal of products. Major items were the sale of rights for Rocephin in China for CHF 262 million and the sale of rights for Xeloda in China and Japan for CHF 234 million. For the same period in 2022, the gains on disposal of products included the sale of global rights for Valcyte for CHF 185 million and the sale of global rights for Xeloda excluding China and Japan for CHF 150 million.

Legal and environmental cases income recorded in 2023 included the reimbursement of a fine imposed in 2020 by the French Competition Authority on the Avastin/Lucentis investigation following a favourable court decision. This was largely offset by the increase in provisions for environmental matters at the Clarecastle site in Ireland.

Roche Pharmaceuticals and Chugai subdivisional operating results

Pharmaceuticals subdivisional interim operating results in millions of CHF

	Roche Pharmaceuticals		Chugai		Pharmaceuticals Division	
	2023	2022	2023	2022	2023	2022
Sales						
– External customers	20,471	20,145	2,210	2,202	22,681	22,347
– Within division	1,174	1,249	1,330	1,277	2,504	2,526
Core operating profit	9,143	9,089	1,593	2,280	11,018	11,289
– Margin, % of sales to external customers	44.7	45.1	72.1	103.5	48.6	50.5
Operating profit	8,342	8,172	1,461	2,239	10,085	10,331
– Margin, % of sales to external customers	40.8	40.6	66.1	101.7	44.5	46.2
Operating free cash flow	7,408	7,520	2,178	2,137	9,562	9,638
– Margin, % of sales to external customers	36.2	37.3	98.6	97.0	42.2	43.1

The Pharmaceuticals Division's total core operating profit and operating profit both include the elimination of plus CHF 282 million of unrealised intercompany gains between Roche Pharmaceuticals and Chugai (2022: minus CHF 80 million).

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

The appreciation of the Swiss franc against the Japanese yen had an adverse impact of approximately 8 percentage points on the Chugai core results when expressed in Swiss francs for the Group's consolidated results. At CER (as reported in Japanese yen), sales by Chugai to external customers increased by 14%, driven by sales of Ronapreve, while sales within the division increased by 18% due to higher sales of Alecensa and Hemlibra by Chugai to Roche Pharmaceuticals. Chugai's core operating profit decreased by 22% due to the income from the Ultomiris patent settlement in 2022. This was partially offset by higher gross profit from sales to external customers and within the division. Operating free cash flow at Chugai increased by 14% mainly from the payment for the Ronapreve sales recorded in December 2022.

Financial position

Pharmaceuticals Division – Net operating assets

	30 June 2023 (CHF m)	31 Dec. 2022 (CHF m)	% change (CHF)	% change (CER)	Movement: Transactions (CHF m)	Movement: CTA and other (CHF m)
Trade receivables	8,270	8,617	–4	0	(25)	(322)
Inventories	5,075	5,259	–3	0	13	(197)
Trade payables	(2,007)	(2,363)	–15	–12	292	64
Net trade working capital	**11,338**	**11,513**	**–2**	**+2**	**280**	**(455)**
Other receivables (payables)	(7,287)	(7,722)	–6	–3	250	185
Net working capital	**4,051**	**3,791**	**+7**	**+13**	**530**	**(270)**
Property, plant and equipment	15,488	15,788	–2	+1	163	(463)
Right-of-use assets	800	845	–5	–2	(20)	(25)
Goodwill and intangible assets	13,072	13,676	–4	–2	(317)	(287)
Provisions	(1,983)	(2,392)	–17	–16	381	28
Other long-term assets, net	846	848	0	+4	29	(31)
Long-term net operating assets	**28,223**	**28,765**	**–2**	**+1**	**236**	**(778)**
Net operating assets	**32,274**	**32,556**	**–1**	**+2**	**766**	**(1,048)**

The absolute amount of the movement between the 30 June 2023 and 31 December 2022 consolidated balances reported in Swiss francs is split between actual 2023 transactions (translated at average rates for 2022) and the currency translation adjustment (CTA) that arises on consolidation. The 2023 transactions include non-cash movements and therefore the movements in this table are not the same as the amounts shown in the operating free cash flow (which only includes the cash movements). A full consolidated balance sheet is given on page 44 of the Interim Financial Statements, and a reconciliation between that balance sheet and the information given above is on page 82.

Currency translation effects on balance sheet amounts. Compared to the start of the year the Swiss franc appreciated against the Japanese yen, and to a lesser extent against the US dollar, which had a significant negative effect on the net operating assets of the Pharmaceuticals Division. The exchange rates used are given on page 31.

Net working capital. Trade receivables remained stable as the receipt of cash from Ronapreve sales in Japan in December 2022 was offset by higher receivables from extended payment terms for certain products in the US. The decrease in trade payables of 12% included payments for the construction of the Yokohama research and development site in Japan. The net liability position for other receivables (payables) decreased due to lower accrued royalties to Regeneron.

Long-term net operating assets. Property, plant and equipment increased by 1% as additions for manufacturing investments and site developments were largely offset by depreciation expenses. Conversely, intangible assets decreased as the amortisation and impairment charges more than offset the additions. Provisions decreased due to the release of certain previously recorded positions.

Free cash flow

Pharmaceuticals Division – Operating free cash flow for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CHF)	% change (CER)
Operating profit	**10,085**	**10,331**	**–2**	**+5**
Depreciation, amortisation and impairment	1,322	1,608	–18	–15
Provisions	(390)	(212)	+84	+88
Equity compensation plans	294	248	+19	+22
Other	196	33	+494	Over +500
Operating profit cash adjustments	**1,422**	**1,677**	**–15**	**–12**
Operating profit, net of operating cash adjustments	**11,507**	**12,008**	**–4**	**+3**
(Increase) decrease in net working capital	(638)	(958)	–33	–38
Investments in property, plant and equipment	(979)	(959)	+2	+8
Principal portion of lease liabilities paid	(110)	(118)	–7	–1
Investments in intangible assets	(218)	(335)	–35	–32
Operating free cash flow	**9,562**	**9,638**	**–1**	**+8**
– as % of sales	42.2	43.1	–0.9	–0.1

See pages 78–80 for definition of free cash flow and a detailed breakdown.

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. These changes have a consequential impact on the divisional free cash flow, although total Group free cash flow is unaffected. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

The Pharmaceuticals Division's operating free cash flow increased by 8% at CER (decrease of 1% in CHF) to CHF 9.6 billion. The cash generation of the business, measured by the operating profit, net of operating cash adjustments, increased by 3%. This was below the 5% increase in core operating profit due to lower amortisation and impairment charges of intangible assets. Net working capital absorbed an additional CHF 638 million of cash, largely driven by lower payables, for the reasons described above in the 'Financial position' section. Capital expenditure was higher, driven by manufacturing investments in the US, Japan, Switzerland and Germany as well as site developments in Switzerland and in the US. Investments in intangible assets were lower compared to the interim period of 2022.

Diagnostics operating results

Diagnostics Division interim operating results

	2023 (CHF m)	2022 (CHF m)	% change (CHF)	% change (CER)
IFRS results				
Sales	7,098	9,948	–29	–23
Other revenue	31	25	+24	+29
Revenue	**7,129**	**9,973**	**–29**	**–23**
Cost of sales	(3,474)	(4,817)	–28	–24
Research and development	(853)	(849)	0	+4
Selling, general and administration	(1,381)	(1,489)	–7	–1
Other operating income (expense)	146	41	+256	+267
Operating profit	**1,567**	**2,859**	**–45**	**–36**
– Margin, % of sales	22.1	28.7	–6.6	–4.8
Core results [a]				
Sales	7,098	9,948	–29	–23
Other revenue	31	25	+24	+29
Revenue	**7,129**	**9,973**	**–29**	**–23**
Cost of sales	(3,349)	(4,734)	–29	–26
Research and development	(832)	(843)	–1	+2
Selling, general and administration	(1,342)	(1,465)	–8	–2
Other operating income (expense)	13	22	–41	–35
Core operating profit	**1,619**	**2,953**	**–45**	**–36**
– Margin, % of sales	22.8	29.7	–6.9	–5.1
Financial position				
Net working capital	4,235	3,268	+30	+33
Long-term net operating assets	13,153	13,250	–1	+1
Net operating assets	**17,388**	**16,518**	**+5**	**+8**
Free cash flow [b]				
Operating free cash flow	402	1,902	–79	–70
– Margin, % of sales	5.7	19.1	–13.4	–11.5

a) See pages 74–78 for definition of core results.
b) See pages 78–80 for definition of free cash flow.

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

Sales

The Diagnostics Division reported sales of CHF 7.1 billion, a decline of 23% at CER. Sales of COVID-19-related products decreased to CHF 0.4 billion in the first half of 2023 from CHF 3.1 billion in the same period last year, when demand was exceptionally high. This was partially compensated by growth in the division's base business, which increased by 6% at CER and across all regions, with immunodiagnostics, particularly cardiac tests, being the main growth drivers.

Diagnostics Division – Interim sales by customer area

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
Core Lab	3,935	3,875	+10	55.4	38.9
Molecular Lab	1,118	1,980	–40	15.8	19.9
Diabetes Care	723	832	–5	10.2	8.4
Pathology Lab	687	652	+12	9.7	6.6
Point of Care	635	2,609	–74	8.9	26.2
Total sales	**7,098**	**9,948**	**–23**	**100**	**100**

Core Lab. This customer area focuses on central labs and provides diagnostics solutions in the areas of immunoassays, clinical chemistry and custom biotech. Sales increased by 10% due to the 11% growth in immunodiagnostics products, such as cardiac and oncology tests, and the 10% growth in the clinical chemistry business. The largest contributions to the sales growth came from the Asia-Pacific and EMEA regions, which grew by 15% and 8%, respectively.

Molecular Lab. This customer area focuses on molecular labs and provides diagnostics solutions for the detection and monitoring of pathogens, donor screening, sexual health and genomics. Sales declined by 40% due to lower COVID-19-related sales for SARS-CoV-2 assays on the cobas 6800/8800 systems.

Diabetes Care. This customer area provides diagnostics solutions for patients and healthcare professionals enabling integrated personalised diabetes management. Sales decreased by 5% driven by the continued contraction of the blood glucose monitoring market in major European markets, due to people switching to continuous glucose monitoring systems.

Pathology Lab. This customer area focuses on pathology labs and provides diagnostics solutions for tissue biopsies and companion diagnostics. These are targeted diagnostics to aid in the choice of specific therapies for each patient. Sales increased by 12% and across all regions due to growth in the advanced staining business and the companion diagnostics business.

Point of Care. This customer area provides diagnostics solutions immediately at the point of care such as in emergency rooms, general practitioners' practices, and directly with patients and includes the SARS-CoV-2 Rapid Antigen tests and blood gas and electrolyte (BGE) tests. Lower sales of the SARS-CoV-2 Rapid Antigen test were the main driver of the 74% sales decrease.

Diagnostics Division – Interim sales by region

	2023 (CHF m)	2022 (CHF m)	% change (CER)	% of sales (2023)	% of sales (2022)
Europe, Middle East and Africa (EMEA)	2,456	3,350	–22	34.6	33.4
North America	1,940	2,868	–30	27.3	29.0
– *of which US*	*1,745*	*2,511*	*–28*	*24.6*	*25.2*
Asia-Pacific	2,205	3,171	–23	31.1	32.0
– *of which China*	*1,289*	*1,298*	*+10*	*18.2*	*13.0*
Latin America	497	559	0	7.0	5.6
Total sales	**7,098**	**9,948**	**–23**	**100**	**100**

The decline in sales across regions is primarily due to the sharp decline in demand for COVID-19 tests. This was partly offset by growth in the immunoassay business, notably in the Asia-Pacific and EMEA regions.

Operating results

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

Diagnostics Division – Other revenue for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Royalty income	21	21	+2
Profit-share income	0	0	–
Other income from collaboration and out-licensing agreements	0	0	–
Other	10	4	+193
Total – IFRS and Core basis	**31**	**25**	**+29**

Other revenue increased by 29% at CER driven by income from the US collaboration with Pfizer to help patients who test positive for COVID-19 to navigate risks, symptoms, testing and treatment options.

Diagnostics Division – Cost of sales for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Manufacturing cost of goods sold and period costs	(3,276)	(4,664)	–26
Royalty expenses	(70)	(70)	0
Amortisation of commercial software intangible assets	(1)	(2)	–29
Impairment of property, plant and equipment and right-of-use assets	(2)	2	–
Cost of sales – Core basis	**(3,349)**	**(4,734)**	**–26**
Global restructuring plans	(59)	(11)	Over +500
Amortisation of intangible assets	(66)	(72)	–5
Total – IFRS basis	**(3,474)**	**(4,817)**	**–24**

Core cost of sales decreased by 26% at CER due to lower sales volumes of COVID-19-related products. The decrease was higher than the sales decline of 23% because of a favourable product mix from lower sales volumes of SARS-CoV-2 Rapid Antigen tests. As a percentage of sales, the core cost of sales ratio decreased by 0.4 percentage points to 47.2%. Global restructuring plan costs were mainly employee-related expenses.

Diagnostics Division – Research and development for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Research and development – Core basis	**(832)**	**(843)**	**+2**
Global restructuring plans	(17)	(2)	Over +500
Amortisation of intangible assets	(4)	(4)	0
Total – IFRS basis	**(853)**	**(849)**	**+4**

Core costs increased by 2% at CER with projects in sequencing and infectious diseases as growth drivers. Digital solutions and sequencing represented significant areas of spending. In addition, investments continued in mass spectrometry and diabetes solutions. As a percentage of sales, research and development core costs increased to 11.7% from 8.5%.

Diagnostics Division – Selling, general and administration for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Marketing and distribution	(1,160)	(1,260)	–2
Administration	(185)	(203)	–5
Business taxes and capital taxes	(10)	(10)	+13
Other general items	13	8	+50
Selling, general and administration – Core basis	**(1,342)**	**(1,465)**	**–2**
Global restructuring plans	(29)	(14)	+112
Amortisation of intangible assets	(10)	(10)	+1
Total – IFRS basis	**(1,381)**	**(1,489)**	**–1**

Core selling, general and administration costs decreased by 2% at CER. Marketing and distribution costs were also 2% lower following a drop in distribution costs related to SARS-CoV-2 Rapid Antigen tests. Administration costs decreased by 5% because of lower expenses for general management. On a core basis, selling, general and administration costs as a percentage of sales increased to 18.9% compared to 14.7% in the same period last year. Costs for global restructuring plans were mainly employee-related expenses for strategy plans.

Diagnostics Division – Other operating income (expense) for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Gains (losses) on disposal of products	0	0	–
Gains (losses) on disposal of property, plant and equipment and right-of-use assets	1	1	–56
Pensions – past service costs	0	0	–
Other income and expense	12	21	–33
Other operating income (expense) – Core basis	**13**	**22**	**–35**
Global restructuring plans	(5)	(1)	Over +500
Mergers and acquisitions and alliance transactions	(5)	21	–
Legal and environmental cases	143	(1)	–
Total – IFRS basis	**146**	**41**	**+267**

Core other operating income (expense) decreased by 35% at CER. Mergers and acquisitions and alliance transaction costs in 2022 included income of CHF 27 million from the release of contingent consideration provisions. The income from legal and environmental cases in 2023 is due to the reversal of legal provisions.

Financial position

Diagnostics Division – Net operating assets

	30 June 2023 (CHF m)	31 Dec. 2022 (CHF m)	% change (CHF)	% change (CER)	Movement: Transactions (CHF m)	Movement: CTA and other (CHF m)
Trade receivables	2,934	3,108	–6	–1	(52)	(122)
Inventories	3,421	3,346	+2	+4	116	(41)
Trade payables	(993)	(1,282)	–23	–21	269	20
Net trade working capital	**5,362**	**5,172**	**+4**	**+7**	**333**	**(143)**
Other receivables (payables)	(1,127)	(1,904)	–41	–40	747	30
Net working capital	**4,235**	**3,268**	**+30**	**+33**	**1,080**	**(113)**
Property, plant and equipment	6,991	7,016	0	+2	109	(134)
Right-of-use assets	261	239	+9	+12	30	(8)
Goodwill and intangible assets	6,621	6,829	–3	–1	(66)	(142)
Provisions	(664)	(832)	–20	–19	154	14
Other long-term assets, net	(56)	(2)	Over +500	Over +500	(59)	5
Long-term net operating assets	**13,153**	**13,250**	**–1**	**+1**	**168**	**(265)**
Net operating assets	**17,388**	**16,518**	**+5**	**+8**	**1,248**	**(378)**

The absolute amount of the movement between the 30 June 2023 and 31 December 2022 consolidated balances reported in Swiss francs is split between actual 2023 transactions (translated at average rates for 2022) and the currency translation adjustment (CTA) that arises on consolidation. The 2023 transactions include non-cash movements and therefore the movements in this table are not the same as the amounts shown in the operating free cash flow (which only includes the cash movements). A full consolidated balance sheet is given on page 44 of the Interim Financial Statements, and a reconciliation between that balance sheet and the information given above is on page 82.

Currency translation effects on balance sheet amounts. Compared to the start of the year the Swiss franc appreciated against the US dollar and the Chinese renminbi. This had a negative translation effect on the net operating assets of the Diagnostics Division. The Diagnostics Division does not have a significant net asset position in Japanese yen and so the appreciation of the Swiss franc against the Japanese yen had only a minor impact. The exchange rates used are given on page 31.

Net working capital. The increase in net working capital was driven by a lower net liability for other receivables (payables) from the settlement of year-end accruals, notably employee-related accruals. The 1% decrease in trade receivables was due to the lower demand for COVID-19-related tests partly offset by the base effect from higher collections towards the end of 2022. Inventories increased by 4% driven by increased stock levels of instruments pending installation following the ongoing recovery from a supply backlog in 2022. Trade payables decreased by 21% from the payment of the relatively high balances at the end of 2022.

Long-term net operating assets. Property, plant and equipment increased as a result of instrument placements as well as site investments in Germany and the US. Goodwill and intangible assets decreased due to the regular amortisation charges. Provisions were lower following a release of legal provisions.

Free cash flow

Diagnostics Division – Operating free cash flow for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CHF)	% change (CER)
Operating profit	**1,567**	**2,859**	**–45**	**–36**
Depreciation, amortisation and impairment	690	708	–3	+3
Provisions	(135)	(101)	+34	+39
Equity compensation plans	51	42	+21	+26
Other	130	119	+9	+14
Operating profit cash adjustments	**736**	**768**	**–4**	**+1**
Operating profit, net of operating cash adjustments	**2,303**	**3,627**	**–37**	**–28**
(Increase) decrease in net working capital	(1,114)	(971)	+15	+22
Investments in property, plant and equipment	(713)	(687)	+4	+10
Principal portion of lease liabilities paid	(58)	(61)	–5	+2
Investments in intangible assets	(16)	(6)	+167	+173
Operating free cash flow	**402**	**1,902**	**–79**	**–70**
– as % of sales	5.7	19.1	–13.4	–11.5

See pages 78–80 for definition of free cash flow and a detailed breakdown.

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. These changes have a consequential impact on the divisional free cash flow, although total Group free cash flow is unaffected. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

The operating free cash flow of the Diagnostics Division decreased by 70% at CER (79% in CHF) driven by the operating results of the business and the increased net working capital. The cash generation of the business, measured by the operating profit, net of operating cash adjustments, decreased by 28% compared to the 36% decrease in the core operating profit because of higher non-cash expenses. Net working capital absorbed CHF 1.1 billion of cash in the first half of 2023 which was attributable to the settlement of year-end payables and accruals as well as the increased inventories as described above in the 'Financial position' section. Capital expenditure increased due to instrument placements as well as site investments in Germany and the US.

Corporate operating results

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

Corporate – Selling, general and administration for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Administration	(1,711)	(1,565)	+11
Business taxes and capital taxes	(8)	(4)	+90
Other general items	0	0	–
Selling, general and administration – Core basis	**(1,719)**	**(1,569)**	**+11**
Global restructuring plans	(162)	(74)	+121
Total – IFRS basis	**(1,881)**	**(1,643)**	**+16**

Selling, general and administration costs increased by 11% at CER on a core basis. Administration costs were higher due to increased project costs and internal demand for informatics, procurement and human resources. Total costs on an IFRS basis increased by 16% due to a higher level of restructuring activities mainly due to the business process transformation to simplify system landscapes and reduce process complexity.

Corporate – Other operating income (expense) for the six months ended 30 June

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Pensions – past service costs	0	0	–
Other income and expense	(7)	(5)	+44
Other operating income (expense) – Core basis	**(7)**	**(5)**	**+43**
Global restructuring plans	0	(1)	–
Legal and environmental cases	0	6	–100
Total – IFRS basis	**(7)**	**0**	**–**

Corporate interim financial position and free cash flow

	2023 (CHF m)	2022 (CHF m)	% change (CER)
Financial position			
Net working capital	(283)	(337)	–16
Long-term net operating assets	233	182	+30
Net operating assets	**(50)**	**(155)**	**–70**
Free cash flow			
Operating free cash flow	(1,933)	(1,758)	+12

The change in net operating assets came from a shift of net working capital and property, plant and equipment for functions with global accountability such as informatics, human resources and finance from the Pharmaceuticals and Diagnostics Divisions. As a consequence of these transfers, the operating free cash flow showed an increased outflow mainly due to higher administration costs, partially offset by higher payables.

Foreign exchange impact on operating results

The Group's exposure to movements in foreign currencies affecting its operating results, as expressed in Swiss francs, is summarised by the following key figures and comments.

Growth (reported in Swiss francs and at CER) for the six months ended 30 June 2023

	% change (CHF)	% change (CER)
Pharmaceuticals Division		
Sales	+1	+8
Core operating profit	–2	+5
Operating free cash flow	–1	+8
Diagnostics Division		
Sales	–29	–23
Core operating profit	–45	–36
Operating free cash flow	–79	–70
Group		
Sales	–8	–2
Core operating profit	–14	–6
Operating free cash flow	–18	–8

Exchange rates against the Swiss franc

	30 June 2023	Average to 30 June 2023	31 December 2022	Average to 30 June 2022
1 USD	0.90	0.91	0.92	0.94
1 EUR	0.98	0.99	0.98	1.03
100 JPY	0.62	0.68	0.69	0.77

The results expressed in Swiss francs were negatively impacted by the appreciation of the Swiss franc against many currencies. The sensitivity of Group sales and core operating profit to a 1% change in average foreign currency exchange rates against the Swiss franc during the first half of 2023 is shown in the table below.

Currency sensitivities for the six months ended 30 June 2023

Impact of 1% increase in average exchange rate versus the Swiss franc	Sales (CHF m)	Core operating profit (CHF m)
US dollar	140	47
Euro	44	18
Japanese yen	25	27
All other currencies	81	45

Treasury and taxation results

Treasury and taxation interim results

	2023 (CHF m)	2022 (CHF m)	% change (CHF)	% change (CER)
IFRS results				
Operating profit	9,764	11,547	–15	–7
Financing costs	(490)	(304)	+61	+68
Other financial income (expense)	(100)	(258)	–61	–50
Profit before taxes	**9,174**	**10,985**	**–16**	**–8**
Income taxes	(1,611)	(1,824)	–12	–3
Net income	**7,563**	**9,161**	**–17**	**–9**
Attributable to				
– Roche shareholders	7,137	8,530	–16	–8
– Non-controlling interests	426	631	–32	–25
Core results [a]				
Operating profit	10,911	12,668	–14	–6
Financing costs	(482)	(300)	+61	+68
Other financial income (expense)	(100)	(258)	–61	–50
Profit before taxes	**10,329**	**12,110**	**–15**	**–7**
Income taxes	(1,742)	(1,950)	–11	–2
Net income	**8,587**	**10,160**	**–15**	**–7**
Attributable to				
– Roche shareholders	8,124	9,518	–15	–6
– Non-controlling interests	463	642	–28	–20
Financial position				
Net debt	(17,877)	(15,584)	+15	+14
Lease liabilities	(1,158)	(1,193)	–3	0
Pensions	(3,377)	(3,604)	–6	–5
Income taxes	2,690	2,908	–7	–2
Equity investments	619	671	–8	–9
Derivatives, net	(374)	(459)	–19	–9
Collateral, net	55	180	–69	–69
Interest payable	(168)	(140)	+20	+22
Associated companies and other, net	322	317	+2	+6
Total net assets (liabilities)	**(19,268)**	**(16,904)**	**+14**	**+13**
Free cash flow [b]				
Treasury activities	(333)	(203)	+64	+74
Taxes paid	(1,570)	(2,482)	–37	–33
Total	**(1,903)**	**(2,685)**	**–29**	**–25**

a) See pages 74–78 for definition of core results.
b) See pages 78–80 for definition of free cash flow.

Financing costs

Core financing costs were CHF 482 million, an increase of 68% at CER compared to the first half of 2022. Interest expenses on debt increased by 66% at CER to CHF 393 million due to the issuance of new debt as well as an increase in interest rates which affected short-term borrowing costs. A full analysis of financing costs is given in Note 4 to the Interim Financial Statements.

Other financial income (expense)

Core other financial income (expense) was a net expense of CHF 100 million compared to a net expense of CHF 258 million in the first half of 2022. Income from equity securities, which reflects the fair value changes in the Roche Venture Fund investments as well as gains or losses realised upon sale of those investments, was a gain of CHF 34 million compared to a loss of CHF 117 million in the first half of 2022. The net foreign exchange results, which reflect hedging costs and gains and losses on unhedged positions, were net losses of CHF 139 million (2022: net losses of CHF 54 million). A full analysis of other financial income (expense) is given in Note 4 to the Interim Financial Statements.

Income taxes

The Group's effective core tax rate increased by 0.8 percentage points to 16.9% in the first half of 2023. The increase was mainly due to the impact from the resolution of tax disputes in the prior year, which reduced the Group's effective core tax rate by 2.4 percentage points in the first half of 2022. This increase was in part offset by the lower percentage of core profit contribution coming from tax jurisdictions with tax rates higher than the Group's average tax rate, notably lower profits in Japan due to the base effect of the Ultomiris patent settlement income in the first half of 2022.

The IFRS effective tax rate increased to 17.6% compared to 16.6% in the first half of 2022 mainly due to the core impacts mentioned above.

Further details are given in Note 5 to the Interim Financial Statements.

Analysis of the Group's effective tax rate for the six months ended 30 June

			2023			2022
	Profit before tax (CHF m)	Income taxes (CHF m)	Tax rate (%)	Profit before tax (CHF m)	Income taxes (CHF m)	Tax rate (%)
Group's effective tax rate – Core basis	**10,329**	**(1,742)**	**16.9**	**12,110**	**(1,950)**	**16.1**
Global restructuring plans	(678)	134	19.8	(266)	48	18.0
Goodwill and intangible assets	(618)	74	12.0	(891)	116	13.0
Mergers and acquisitions and alliance transactions	(4)	0	–	15	0	–
Legal and environmental cases	145	(46)	31.7	17	(6)	35.3
Normalisation of equity compensation plan tax benefit	0	(31)	–	0	(32)	–
Group's effective tax rate – IFRS basis	**9,174**	**(1,611)**	**17.6**	**10,985**	**(1,824)**	**16.6**

Financial position

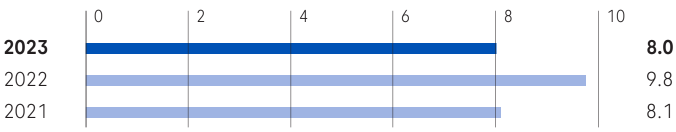
The increase in net debt was due to dividend payments of CHF 7.8 billion, partly offset by the free cash flow of CHF 6.1 billion. Lease liabilities remained stable as the increase due to new lease contracts was offset by payments on existing lease contracts. The net pension liability was lower following a positive performance of plan assets. The net tax assets decreased due to the income tax expenses exceeding taxes paid. At 30 June 2023 the Group held equity investments with a market value of CHF 0.6 billion, which consist mostly of holdings in biotechnology and other pharmaceuticals companies which were acquired as part of licensing transactions and scientific collaborations or as investments of the Roche Venture Fund. The net derivative liabilities increased to CHF 0.4 billion as a result of interest rate and exchange rate movements in the first half of 2023.

Free cash flow

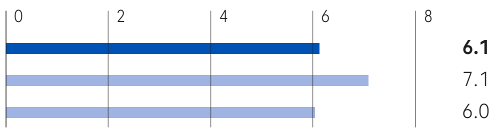
The net cash outflow from treasury activities was CHF 0.3 billion compared to an outflow of CHF 0.2 billion in the first half of 2022. This was mainly due to higher interest payments following increases in interest rates. Total taxes paid in the first half of 2023 were down by 33% at CER, mainly due to the US Internal Revenue Service providing a tax payment extension, which deferred the provisional 2023 US federal tax payments into the second half of 2023.

Cash flows and net debt

Operating free cash flow in billions of CHF



Free cash flow in billions of CHF



Free cash flow for the six months ended 30 June

	Pharmaceuticals (CHF m)	Diagnostics (CHF m)	Corporate (CHF m)	Group (CHF m)
2023				
Operating profit – IFRS basis	10,085	1,567	(1,888)	9,764
Operating profit cash adjustments	1,422	736	61	2,219
Operating profit, net of operating cash adjustments	**11,507**	**2,303**	**(1,827)**	**11,983**
(Increase) decrease in net working capital	(638)	(1,114)	(52)	(1,804)
Investments in property, plant and equipment	(979)	(713)	(48)	(1,740)
Principal portion of lease liabilities paid	(110)	(58)	(6)	(174)
Investments in intangible assets	(218)	(16)	0	(234)
Operating free cash flow	**9,562**	**402**	**(1,933)**	**8,031**
Treasury activities				(333)
Taxes paid				(1,570)
Free cash flow				**6,128**
2022				
Operating profit – IFRS basis	10,331	2,859	(1,643)	11,547
Operating profit cash adjustments	1,677	768	54	2,499
Operating profit, net of operating cash adjustments	**12,008**	**3,627**	**(1,589)**	**14,046**
(Increase) decrease in net working capital	(958)	(971)	(123)	(2,052)
Investments in property, plant and equipment	(959)	(687)	(39)	(1,685)
Principal portion of lease liabilities paid	(118)	(61)	(7)	(186)
Investments in intangible assets	(335)	(6)	0	(341)
Operating free cash flow	**9,638**	**1,902**	**(1,758)**	**9,782**
Treasury activities				(203)
Taxes paid				(2,482)
Free cash flow				**7,097**

See pages 78–80 for definition of free cash flow and a detailed breakdown.

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. These changes have a consequential impact on the divisional free cash flow, although total Group free cash flow is unaffected. The comparative information for 2022 has been restated accordingly. Details are given on page 40.

Operating free cash flow was CHF 8.0 billion, a decrease of 8% at CER or 18% in CHF, due to the lower operating results. The cash effect of the increase in net working capital of CHF 1.8 billion, driven by the settlement of payables and year-end accruals, was lower than in the first half of 2022, while capital expenditure of CHF 1.7 billion was at a similar level. The free cash flow was CHF 6.1 billion, a decrease of 2% at CER or 14% in CHF. This was a result of the lower operating free cash flow and the higher interest payments, partly offset by the lower tax payments.

Net debt – Movement in carrying value in millions of CHF

At 1 January 2023	
Cash and cash equivalents	4,991
Marketable securities	4,776
Long-term debt	(21,391)
Short-term debt	(3,960)
Net debt at beginning of period	**(15,584)**
Change in net debt during interim period 2023	
Free cash flow	6,128
Dividend payments	(7,789)
Transactions in own equity instruments	(633)
Mergers and acquisitions, net of divestments of subsidiaries	(19)
Hedging and collateral arrangements	139
Currency translation, fair value and other movements	(119)
Change in net debt	**(2,293)**
At 30 June 2023	
Cash and cash equivalents	3,720
Marketable securities	3,789
Long-term debt	(20,345)
Short-term debt	(5,041)
Net debt at end of period	**(17,877)**

Net debt – Currency profile in millions of CHF

	Cash and marketable securities		Debt	
	30 June 2023	31 December 2022	30 June 2023	31 December 2022
US dollar	1,329	1,284	(18,205)	(18,707)
Euro	959	1,580	(2,182)	(1,606)
Swiss franc	909	2,985	(4,521)	(4,517)
Japanese yen	3,655	3,114	0	0
Other	657	804	(478)	(521)
Total	**7,509**	**9,767**	**(25,386)**	**(25,351)**

The net debt position of the Group at 30 June 2023 was CHF 17.9 billion, an increase of CHF 2.3 billion from 31 December 2022. The increase during the first half of 2023 was due to CHF 7.8 billion for the annual dividend payments, which exceeded the free cash flow of CHF 6.1 billion. Transactions in own equity instruments related to purchases in connection with the Group's equity compensation plans.

Pensions and other post-employment benefits

Funding status and balance sheet position in millions of CHF

	30 June 2023	31 December 2022
Funded plans		
– Fair value of plan assets	17,027	16,598
– Defined benefit obligation	(15,067)	(14,733)
Over (under) funding	**1,960**	**1,865**
Unfunded plans		
– Defined benefit obligation	(3,879)	(4,001)
Total funding status	**(1,919)**	**(2,136)**
Limit on asset recognition	(1,516)	(1,526)
Reimbursement rights	58	58
Net recognised asset (liability)	**(3,377)**	**(3,604)**

Overall the funding status on an IFRS basis of the Group's funded defined benefit plans remained stable at 113% compared to the start of the year. The increase in the fair value of plan assets was offset by an increase in the defined benefit obligation due to lower discount rates in Switzerland compared to the end of 2022. The limit on asset recognition remained stable. The funding status of the pension funds is monitored by the local pension fund governance bodies as well as being closely reviewed at a Group level.

The unfunded plans are mainly those in the Group's German affiliates, where the fully reserved pension obligations are invested in the local affiliate's operations. The unfunded liabilities for these plans decreased during the first half of 2023 due to a lower inflation rate in the eurozone.

Further information on the Group's pensions and other post-employment benefits is given in Note 26 to the 2022 Annual Financial Statements.

Debt

On 27 February 2023 the Group completed an offering of EUR 1,250 million of fixed rate notes issued in two tranches with coupons between 3.204% and 3.355% and maturing between August 2029 and February 2035.

On the due date of 27 February 2023 the Group redeemed notes with an outstanding amount of EUR 650 million. The effective interest rate of these notes was 0.63%. The cash outflow was CHF 645 million and there was no gain or loss recorded on the redemption.

The Group received total aggregate net proceeds of CHF 593 million from the issuance and redemption of these notes. Further details are given in Note 11 to the Interim Financial Statements.

Bonds and notes: nominal amounts at 30 June 2023 by contractual maturity

	US dollar (USD m)	Euro (EUR m)	Pound sterling (GBP m)	Swiss franc (CHF m)	Total[a] (USD m)	Total[a] (CHF m)
2023	1,140	0	77	0	1,237	**1,113**
2024	2,689	0	0	750	3,523	**3,169**
2025	2,256	1,000	0	500	3,898	**3,506**
2026	1,650	0	0	425	2,123	**1,909**
2027	2,100	0	0	825	3,017	**2,714**
2028–2032	4,650	750	0	1,750	7,411	**6,665**
2033 and beyond	4,054	500	0	300	4,931	**4,435**
Total	**18,539**	**2,250**	**77**	**4,550**	**26,140**	**23,511**

a) Total translated at 30 June 2023 exchange rates.

The Group plans to meet its debt obligations using existing liquid funds as well as cash generated from business operations. In the full year 2022 the free cash flow was CHF 13.0 billion, which included the cash generated from operations, as well as payment of interest and tax. In the first half of 2023 the free cash flow was CHF 6.1 billion.

For short-term financing requirements, the Group has a commercial paper program in the US under which it can issue up to USD 7.5 billion of unsecured commercial paper notes and has committed credit lines of USD 7.5 billion available as back-stop lines. Commercial paper notes totalling USD 1.9 billion were outstanding as of 30 June 2023 (31 December 2022: USD 1.9 billion). For longer-term financing the Group maintains high long-term investment-grade credit ratings of AA by Standard & Poor's, Aa2 by Moody's and AA by Fitch which should facilitate efficient access to international capital markets.

Further information on the Group's debt is given in Note 11 to the Interim Financial Statements and Note 21 to the 2022 Annual Financial Statements.

Financial risks

As at 30 June 2023 the Group has a net debt position of CHF 17.9 billion (31 December 2022: CHF 15.6 billion). The financial assets of the Group are managed in a conservative way with the objective to meet the Group's financial obligations at all times.

Asset allocation. Liquid funds are either held as cash or are invested in high-quality, investment-grade fixed income securities with an investment horizon to meet those liquidity requirements.

Cash and marketable securities

	30 June 2023 (CHF m)	30 June 2023 (% of total)	31 December 2022 (CHF m)	31 December 2022 (% of total)
Cash and cash equivalents	3,720	50	4,991	51
Money market instruments	3,202	42	4,192	43
Debt securities	586	8	583	6
Equity securities	1	0	1	0
Total cash and marketable securities	**7,509**	**100**	**9,767**	**100**

Credit risk. Credit risk arises from the possibility that counterparties to transactions may default on their obligations causing financial losses for the Group. The rating profile of the Group's CHF 7.5 billion of cash and fixed income securities remained high with 92% being invested in the A–AAA range. The Group has signed netting and collateral agreements with the counterparties in order to mitigate counterparty risk on derivative positions. Bad debt expenses and overdue receivables remained at a relatively low level.

Liquidity risk. Liquidity risk arises through a surplus of financial obligations over available financial assets due. The Group's approach to liquidity risk is to maintain sufficient readily available reserves in order to meet its liquidity requirements at any point in time. In addition to the current liquidity position, the Group has cash generation ability. Those future cash flows will be used to repay debt instruments in the coming years. Free cash flow was CHF 6.1 billion as compared to CHF 7.1 billion in the first half of 2022.

The Roche Group continues to enjoy high long-term investment-grade credit ratings of AA by Standard & Poor's, Aa2 by Moody's and AA by Fitch. At the same time Roche is rated at the highest available short-term ratings by those agencies. In the event of financing requirements, the credit ratings of the Roche Group should permit efficient access to international capital markets, including the commercial paper market. The Group has committed credit lines with various financial institutions totalling USD 7.5 billion available as back-stop lines for the commercial paper program. As at 30 June 2023 no debt has been drawn under these credit lines.

Market risk. Market risk arises from changing market prices of the Group's financial assets or financial liabilities. The exposures are predominantly related to changes in interest rates, foreign exchange rates and equity prices. The Group uses the Value-at-Risk (VaR) method to assess the impact of market risk on its financial instruments. VaR data indicates the value range within which a given financial instrument will fluctuate with a pre-set probability as a result of movements in market prices.

Interest rate risk. Interest rate risk arises from movements in interest rates which could affect the Group's financial result or the value of the Group equity. The Group may use interest rate derivatives to manage its interest-rate-related exposure and financial result.

Further information on financial risk management and financial risks and the VaR methodology is included in Note 31 to the 2022 Annual Financial Statements.

International Financial Reporting Standards

The Roche Group has been using International Financial Reporting Standards (IFRS) to report its consolidated results since 1990. In 2023 the Group implemented various minor amendments to existing standards and interpretations which have no material impact on the Group's overall results and financial position.

See Note 1 to the Interim Financial Statements for further details.

Presentational and cost allocation changes

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. This has been done to improve external comparability and to reflect changes in the internal reporting for functions with global accountability.

- The income statement now presents 'Selling, general and administration' costs, which is created from merging 'Marketing and distribution' costs and 'General and administration' costs.
- The income statement now presents 'Other revenue' in place of 'Royalties and other operating income'.
- The income statement now presents 'Other operating income (expense)' for non-revenue income and for expenses that do not fall into the regular functional costs.
- Allocations from functions with global accountability such as informatics, human resources and finance are no longer made to the Pharmaceuticals and Diagnostics Divisions.

These changes have no impact on sales, operating profit, net income and earnings per share of the Group as a whole, for both the IFRS and core basis. There is no change to the core results concept. The cost allocation changes will reduce costs allocated to divisions and increase divisional margins by around 4.0 to 5.0 percentage points on a core basis, based on the shape of the business at 1 January 2023. These changes have a consequential impact on the divisional free cash flow, although total Group free cash flow is unaffected.

Comparative information for 2022 has been restated, and a reconciliation to the previously published results is provided in Note 1 to the Interim Financial Statements and on pages 74 to 78 for the core results.

Roche Group Interim Consolidated Financial Statements

The Interim Consolidated Financial Statements have been reviewed by the Group's auditor and their review report is presented on page 73.

Roche Group consolidated income statement for the six months ended 30 June 2023 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales [2, 3]	22,681	7,098	–	29,779
Other revenue [2, 3]	806	31	–	837
Revenue [2, 3]	**23,487**	**7,129**	**–**	**30,616**
Cost of sales	(4,457)	(3,474)	–	(7,931)
Research and development [2]	(6,065)	(853)	–	(6,918)
Selling, general and administration	(3,588)	(1,381)	(1,881)	(6,850)
Other operating income (expense)	708	146	(7)	847
Operating profit [2]	**10,085**	**1,567**	**(1,888)**	**9,764**
Financing costs [4]				(490)
Other financial income (expense) [4]				(100)
Profit before taxes				**9,174**
Income taxes [5]				(1,611)
Net income				**7,563**
Attributable to				
– Roche shareholders				7,137
– Non-controlling interests				426
Earnings per share and non-voting equity security [14]				
Basic (CHF)				8.93
Diluted (CHF)				8.87

Roche Group consolidated income statement for the six months ended 30 June 2022 (restated)[a)] in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales[2, 3]	22,347	9,948	–	32,295
Other revenue[2, 3]	1,580	25	–	1,605
Revenue[2, 3]	**23,927**	**9,973**	**–**	**33,900**
Cost of sales	(4,851)	(4,817)	–	(9,668)
Research and development[2]	(5,667)	(849)	–	(6,516)
Selling, general and administration	(3,468)	(1,489)	(1,643)	(6,600)
Other operating income (expense)	390	41	0	431
Operating profit[2]	**10,331**	**2,859**	**(1,643)**	**11,547**
Financing costs[4]				(304)
Other financial income (expense)[4]				(258)
Profit before taxes				**10,985**
Income taxes[5]				(1,824)
Net income				**9,161**
Attributable to				
– Roche shareholders				8,530
– Non-controlling interests				631
Earnings per share and non-voting equity security[14]				
Basic (CHF)				10.65
Diluted (CHF)				10.54

a) Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. Details and a reconciliation to the previously published income statement are disclosed in Note 1.

Roche Group consolidated statement of comprehensive income in millions of CHF

	Six months ended 30 June 2023	2022
Net income recognised in income statement	**7,563**	**9,161**
Other comprehensive income (OCI)		
Remeasurements of defined benefit plans	131	949
Fair value changes on equity investments at fair value through OCI	(25)	(68)
Items that will never be reclassified to the income statement	**106**	**881**
Fair value changes on debt investments at fair value through OCI	3	(24)
Cash flow hedges	(65)	(125)
Currency translation of foreign operations	(1,242)	(1,117)
Items that are or may be reclassified to the income statement	**(1,304)**	**(1,266)**
Other comprehensive income, net of tax	**(1,198)**	**(385)**
Total comprehensive income	**6,365**	**8,776**
Attributable to		
– Roche shareholders	6,387	8,653
– Non-controlling interests	(22)	123
Total	**6,365**	**8,776**

Roche Group consolidated balance sheet in millions of CHF

	30 June 2023	31 December 2022
Non-current assets		
Property, plant and equipment	22,792	23,075
Right-of-use assets	1,103	1,133
Goodwill [8]	10,564	10,820
Intangible assets [9]	9,129	9,685
Deferred tax assets	6,667	6,427
Defined benefit plan assets	1,026	957
Other non-current assets	2,113	2,238
Total non-current assets	**53,394**	**54,335**
Current assets		
Inventories	8,496	8,605
Accounts receivable	11,089	11,606
Current income tax assets	270	313
Other current assets	3,612	3,525
Marketable securities	3,789	4,776
Cash and cash equivalents	3,720	4,991
Total current assets	**30,976**	**33,816**
Total assets	**84,370**	**88,151**
Non-current liabilities		
Long-term debt [11]	(20,345)	(21,391)
Deferred tax liabilities	(671)	(645)
Defined benefit plan liabilities	(4,403)	(4,561)
Provisions [10]	(1,217)	(1,111)
Other non-current liabilities	(1,182)	(1,189)
Total non-current liabilities	**(27,818)**	**(28,897)**
Current liabilities		
Short-term debt [11]	(5,041)	(3,960)
Current income tax liabilities	(3,576)	(3,187)
Provisions [10]	(1,547)	(2,248)
Accounts payable	(4,055)	(4,556)
Other current liabilities	(11,989)	(13,288)
Total current liabilities	**(26,208)**	**(27,239)**
Total liabilities	**(54,026)**	**(56,136)**
Total net assets	**30,344**	**32,015**
Equity		
Capital and reserves attributable to Roche shareholders	26,515	27,992
Equity attributable to non-controlling interests	3,829	4,023
Total equity	**30,344**	**32,015**

Roche Group consolidated statement of cash flows in millions of CHF

	Six months ended 30 June 2023	2022 (restated)[a]
Cash flows from operating activities		
Cash generated from operations [15]	12,091	14,522
(Increase) decrease in net working capital	(1,804)	(2,052)
Payments made for defined benefit plans	(314)	(290)
Utilisation of provisions	(505)	(527)
Other operating cash flows	0	0
Income taxes paid	(1,570)	(2,482)
Total cash flows from operating activities	**7,898**	**9,171**
Cash flows from investing activities		
Purchase of property, plant and equipment	(1,740)	(1,685)
Purchase of intangible assets	(234)	(341)
Disposal of property, plant and equipment	33	38
Disposal of products	585	338
Business combinations [6]	0	0
Asset acquisitions [6]	0	(41)
Interest received (paid) and dividends received on marketable securities and other investments	57	2
Sales of equity securities and debt securities	65	101
Purchases of equity securities and debt securities	(82)	(132)
Sales (purchases) of money market instruments and time accounts over three months, net	782	3,547
Other investing cash flows	52	(16)
Total cash flows from investing activities	**(482)**	**1,811**
Cash flows from financing activities		
Proceeds from issue of bonds and notes [11]	1,238	7,642
Redemption and repurchase of bonds and notes [11]	(645)	0
Increase (decrease) in commercial paper [11]	(41)	1,802
Increase (decrease) in other debt [11]	(19)	(13,527)
Hedging and collateral arrangements	139	(534)
Interest paid	(368)	(228)
Principal portion of lease liabilities paid	(174)	(186)
Dividends paid [15]	(7,789)	(7,672)
Equity-settled equity compensation plans, net of transactions in own equity	(633)	(611)
Other financing cash flows	(1)	(1)
Total cash flows from financing activities	**(8,293)**	**(13,315)**
Net effect of currency translation on cash and cash equivalents	(394)	(202)
Increase (decrease) in cash and cash equivalents	**(1,271)**	**(2,535)**
Cash and cash equivalents at beginning of period	4,991	6,850
Cash and cash equivalents at end of period	**3,720**	**4,315**

a) Effective 1 January 2023, certain line items in the statement of cash flows for the six months ended 30 June 2022 have been reclassified following certain presentational changes the Group made. Details and a reconciliation to the previously published statement of cash flows are disclosed in Note 1.

Roche Group consolidated statement of changes in equity in millions of CHF

	Share capital	Retained earnings	Fair value reserves	Hedging reserves	Translation reserves	Total	Non-controlling interests	Total equity
Six months ended 30 June 2022								
At 1 January 2022	160	34,161	(60)	(60)	(9,712)	24,489	3,856	28,345
Net income recognised in income statement	–	8,530	–	–	–	8,530	631	9,161
Net change in fair value – financial assets at fair value through OCI	–	0	(92)	–	–	(92)	0	(92)
Cash flow hedges	–	–	–	(76)	–	(76)	(49)	(125)
Currency translation of foreign operations	–	–	1	10	(669)	(658)	(459)	(1,117)
Remeasurements of defined benefit plans	–	949	–	–	–	949	0	949
Total comprehensive income	**–**	**9,479**	**(91)**	**(66)**	**(669)**	**8,653**	**123**	**8,776**
Dividends	–	(7,446)	–	–	–	(7,446)	(225)	(7,671)
Share capital reduction	(53)	53	–	–	–	–	–	–
Equity compensation plans, net of transactions in own equity	–	(505)	–	–	–	(505)	1	(504)
Changes in non-controlling interests	–	(2)	–	–	–	(2)	2	–
At 30 June 2022	**107**	**35,740**	**(151)**	**(126)**	**(10,381)**	**25,189**	**3,757**	**28,946**
Six months ended 30 June 2023								
At 1 January 2023	107	38,937	(59)	(92)	(10,901)	27,992	4,023	32,015
Net income recognised in income statement	–	7,137	–	–	–	7,137	426	7,563
Net change in fair value – financial assets at fair value through OCI	–	(8)	(14)	–	–	(22)	0	(22)
Cash flow hedges	–	–	–	(40)	–	(40)	(25)	(65)
Currency translation of foreign operations	–	–	1	10	(830)	(819)	(423)	(1,242)
Remeasurements of defined benefit plans	–	131	–	–	–	131	0	131
Total comprehensive income	**–**	**7,260**	**(13)**	**(30)**	**(830)**	**6,387**	**(22)**	**6,365**
Dividends	–	(7,590)	–	–	–	(7,590)	(173)	(7,763)
Equity compensation plans, net of transactions in own equity	–	(274)	–	–	–	(274)	1	(273)
Changes in non-controlling interests	–	0	–	–	–	0	0	–
At 30 June 2023	**107**	**38,333**	**(72)**	**(122)**	**(11,731)**	**26,515**	**3,829**	**30,344**

Notes to the Roche Group Interim Consolidated Financial Statements

1. Accounting policies

Basis of preparation

These financial statements are the unaudited condensed interim consolidated financial statements (hereafter 'the Interim Financial Statements') of Roche Holding Ltd, a company registered in Switzerland, and its subsidiaries (hereafter 'the Group') for the six months ended 30 June 2023 (hereafter 'the interim period'). These Interim Financial Statements should be read in conjunction with the consolidated financial statements for the year ended 31 December 2022 (hereafter 'the Annual Financial Statements'), as they provide an update of previously reported information. They were approved for issue by the Board of Directors on 25 July 2023.

Statement of compliance

The Interim Financial Statements have been prepared in accordance with IAS 34 'Interim Financial Reporting'. They do not include all of the information required for a complete set of IFRS financial statements. However, selected explanatory notes are included to explain events and transactions that are significant to an understanding of the changes in the Group since the Annual Financial Statements.

Management judgements and estimates

The preparation of the Interim Financial Statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of revenues, expenses, assets, liabilities and related disclosures. If in the future such estimates and assumptions, which are based on management's best judgement at the date of the Interim Financial Statements, deviate from the actual circumstances, the original estimates and assumptions will be modified as appropriate in the period in which the circumstances change. The significant judgements made by management in applying the Group's accounting policies and the key sources of estimation uncertainty are the same as those applied in the Annual Financial Statements.

Seasonality

The Group operates in industries where significant seasonal or cyclical variations in total sales are not experienced during the financial year.

Accounting policies

Except as described below, the accounting policies applied in these Interim Financial Statements are the same as those applied in the Annual Financial Statements. Changes in accounting policies will also be reflected in the Group's Consolidated Financial Statements for the year ending 31 December 2023.

Changes in accounting policies

In 2023 the Group has implemented various minor amendments to existing standards and interpretations, which have no material impact on the Group's overall results and financial position. In addition, the Group has adopted the amendments to IAS 12 'Income Taxes' relating to 'International Tax Reform – Pillar Two Model Rules' issued by the International Accounting Standards Board (IASB) in May 2023. The Group has applied the exception to recognising and disclosing information about deferred tax assets and liabilities related to Pillar Two income taxes.

Presentational and cost allocation changes

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. This has been done to improve external comparability and to reflect changes in the internal reporting for functions with global accountability.

- The income statement now presents 'Selling, general and administration' costs, which is created from merging 'Marketing and distribution' costs and 'General and administration' costs.
- The income statement now presents 'Other revenue' in place of 'Royalties and other operating income'. Other revenue mainly includes royalty income, profit-share income, other income from collaboration and out-licensing agreements and interest income from finance leases.
- The income statement now presents 'Other operating income (expense)' for non-revenue income and for expenses that do not fall into the regular functional costs. Amongst others, it includes income from disposal of product rights.
- Allocations from functions with global accountability such as informatics, human resources and finance are no longer made to the Pharmaceuticals and Diagnostics Divisions.

These changes have no impact on sales, operating profit, net income and earnings per share and non-voting equity security of the Group as a whole. The cost allocation changes will reduce costs allocated to divisions.

Comparative 2022 information has been restated, and a reconciliation to the previously published results is provided below.

Restated Roche Group consolidated income statement (selected items) in millions of CHF

	Six months ended 30 June 2022			
	As originally published	Presentational changes	Cost allocation changes	Restated
Group				
Sales	32,295	–	–	32,295
Royalty and other operating income – until 2022	1,943	(1,943)	–	–
Other revenue – new from 2023	–	1,605	–	1,605
Cost of sales	(9,987)	–	319	(9,668)
Marketing and distribution – until 2022	(4,485)	4,485	–	–
Research and development	(6,899)	–	383	(6,516)
General and administration – until 2022	(1,320)	1,320	–	–
Selling, general and administration – new from 2023	–	(5,898)	(702)	(6,600)
Other operating income (expense) – new from 2023	–	431	–	431
Operating profit	**11,547**	**–**	**–**	**11,547**
Pharmaceuticals				
Sales	22,347	–	–	22,347
Royalty and other operating income – until 2022	1,918	(1,918)	–	–
Other revenue – new from 2023	–	1,580	–	1,580
Cost of sales	(5,029)	–	178	(4,851)
Marketing and distribution – until 2022	(3,112)	3,112	–	–
Research and development	(5,994)	–	327	(5,667)
General and administration – until 2022	(770)	770	–	–
Selling, general and administration – new from 2023	–	(3,934)	466	(3,468)
Other operating income (expense) – new from 2023	–	390	–	390
Operating profit	**9,360**	**–**	**971**	**10,331**
Diagnostics				
Sales	9,948	–	–	9,948
Royalty and other operating income – until 2022	25	(25)	–	–
Other revenue – new from 2023	–	25	–	25
Cost of sales	(4,958)	–	141	(4,817)
Marketing and distribution – until 2022	(1,373)	1,373	–	–
Research and development	(905)	–	56	(849)
General and administration – until 2022	(271)	271	–	–
Selling, general and administration – new from 2023	–	(1,685)	196	(1,489)
Other operating income (expense) – new from 2023	–	41	–	41
Operating profit	**2,466**	**–**	**393**	**2,859**
Corporate				
General and administration – until 2022	(279)	279	–	–
Selling, general and administration – new from 2023	–	(279)	(1,364)	(1,643)
Other operating income (expense) – new from 2023	–	0	–	0
Operating profit	**(279)**	**–**	**(1,364)**	**(1,643)**

Consequently, the income from the disposal of products is included in the cash flows from investing activities. Comparative 2022 information has been restated, and a reconciliation to the previously published statement of cash flows is provided below.

Restated Roche Group consolidated statement of cash flows (selected items) in millions of CHF

	Six months ended 30 June 2022		
	As originally published	Presentational changes	Restated
Disposal of products – until 2022	338	(338)	–
Total cash flows from operating activities	**9,509**	**(338)**	**9,171**
Disposal of products – new from 2023	–	338	338
Total cash flows from investing activities	**1,473**	**338**	**1,811**

Future new and revised standards

The Group is currently assessing the potential impacts of the various new and revised standards and interpretations that will be mandatory from 1 January 2024 which the Group has not yet applied. Based on the analysis to date, the Group does not anticipate that these will have a material impact on the Group's overall results and financial position. The Group is also assessing other new and revised standards which are not mandatory until after 2024.

2. Operating segment information

The Group has two divisions, Pharmaceuticals and Diagnostics. Revenues are primarily generated from the sale of prescription pharmaceutical products and diagnostic instruments, reagents and consumables, respectively. Both divisions also derive revenues from the sale or licensing of products or technology to third parties. Residual operating activities from divested businesses and certain global activities are reported as 'Corporate'. These include the Corporate Executive Committee and global Group functions for communications, human resources, finance (including treasury and taxes), legal, safety and environmental services. Subdivisional information is also presented for the Roche Pharmaceuticals and Chugai operating segments within the Pharmaceuticals Division.

Divisional information in millions of CHF

Six months ended 30 June	Pharmaceuticals 2023	2022	Diagnostics 2023	2022	Corporate 2023	2022	Group 2023	2022
Revenue from external customers								
Sales	22,681	22,347	7,098	9,948	–	–	29,779	32,295
Other revenue	806	1,580	31	25	–	–	837	1,605
Total	**23,487**	**23,927**	**7,129**	**9,973**	**–**	**–**	**30,616**	**33,900**
Revenue from other operating segments								
Sales	–	–	7	9	–	–	7	9
Other revenue	–	–	–	–	–	–	–	–
Elimination of interdivisional revenue							(7)	(9)
Total	**–**	**–**	**7**	**9**	**–**	**–**	**–**	**–**
Segment results								
Operating profit	10,085	10,331	1,567	2,859	(1,888)	(1,643)	9,764	11,547
Capital expenditure								
Business combinations	0	0	0	0	–	–	0	0
Asset acquisitions	0	0	0	41	–	–	0	41
Additions to property, plant and equipment	922	760	701	681	49	39	1,672	1,480
Additions to right-of-use assets	103	94	97	61	3	4	203	159
Additions to intangible assets	222	112	16	6	–	–	238	118
Total	**1,247**	**966**	**814**	**789**	**52**	**43**	**2,113**	**1,798**
Research and development								
Research and development costs	6,065	5,667	853	849	–	–	6,918	6,516
Other segment information								
Depreciation of property, plant and equipment	654	665	540	562	34	28	1,228	1,255
Depreciation of right-of-use assets	95	108	60	59	6	7	161	174
Amortisation of intangible assets	280	383	81	88	–	–	361	471
Impairment (reversal) of property, plant and equipment	31	29	9	(1)	0	0	40	28
Impairment of right-of-use assets	2	0	0	0	0	0	2	0
Impairment of goodwill	0	0	0	0	–	–	0	0
Impairment of intangible assets	260	423	0	0	–	–	260	423
Equity compensation plan expenses	294	253	51	46	38	36	383	335

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. Details and a reconciliation to the previously published income statement are disclosed in Note 1.

Pharmaceuticals subdivisional information in millions of CHF

	Roche Pharmaceuticals		Chugai		Pharmaceuticals Division	
Six months ended 30 June	2023	2022	2023	2022	2023	2022
Revenue from external customers						
Sales	20,471	20,145	2,210	2,202	22,681	22,347
Other revenue	753	843	53	737	806	1,580
Total	**21,224**	**20,988**	**2,263**	**2,939**	**23,487**	**23,927**
Revenue from other operating segments						
Sales	1,174	1,249	1,330	1,277	2,504	2,526
Other revenue	22	30	355	399	377	429
Elimination of income within division					(2,881)	(2,955)
Total	**1,196**	**1,279**	**1,685**	**1,676**	**–**	**–**
Segment results						
Operating profit	8,342	8,172	1,461	2,239	9,803	10,411
Elimination of results within division					282	(80)
Operating profit	**8,342**	**8,172**	**1,461**	**2,239**	**10,085**	**10,331**
Capital expenditure						
Business combinations	0	0	0	0	0	0
Asset acquisitions	0	0	0	0	0	0
Additions to property, plant and equipment	668	548	254	212	922	760
Additions to right-of-use assets	82	74	21	20	103	94
Additions to intangible assets	221	89	1	23	222	112
Total	**971**	**711**	**276**	**255**	**1,247**	**966**
Research and development						
Research and development costs	5,489	5,153	589	532	6,078	5,685
Elimination of costs within division					(13)	(18)
Total	**5,489**	**5,153**	**589**	**532**	**6,065**	**5,667**
Other segment information						
Depreciation of property, plant and equipment	569	581	85	84	654	665
Depreciation of right-of-use assets	79	90	16	18	95	108
Amortisation of intangible assets	274	377	6	6	280	383
Impairment (reversal) of property, plant and equipment	23	29	8	0	31	29
Impairment of right-of-use assets	2	0	0	0	2	0
Impairment of goodwill	0	0	0	0	0	0
Impairment of intangible assets	239	423	21	0	260	423
Equity compensation plan expenses	293	251	1	2	294	253

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. Details and a reconciliation to the previously published income statement are disclosed in Note 1.

Net assets in millions of CHF

	Assets 30 June 2023	Assets 31 December 2022	Liabilities 30 June 2023	Liabilities 31 December 2022	Net assets 30 June 2023	Net assets 31 December 2022
Net operating assets						
Pharmaceuticals	45,638	47,292	(13,364)	(14,736)	32,274	32,556
Diagnostics	21,355	21,593	(3,967)	(5,075)	17,388	16,518
Corporate	592	445	(642)	(600)	(50)	(155)
Total	**67,585**	**69,330**	**(17,973)**	**(20,411)**	**49,612**	**48,919**
Current income tax net assets (liabilities)					(3,306)	(2,874)
Deferred tax net assets (liabilities)					5,996	5,782
Defined benefit plan net assets (liabilities)					(3,377)	(3,604)
Lease liabilities					(1,158)	(1,193)
Marketable securities					3,789	4,776
Cash and cash equivalents					3,720	4,991
Debt					(25,386)	(25,351)
Other net assets (liabilities)					454	569
Total net assets					**30,344**	**32,015**

Net operating assets – Pharmaceuticals subdivisional information in millions of CHF

	Assets 30 June 2023	Assets 31 December 2022	Liabilities 30 June 2023	Liabilities 31 December 2022	Net assets 30 June 2023	Net assets 31 December 2022
Roche Pharmaceuticals	42,187	43,036	(13,649)	(15,217)	28,538	27,819
Chugai	6,619	8,890	(1,025)	(1,910)	5,594	6,980
Elimination within division	(3,168)	(4,634)	1,310	2,391	(1,858)	(2,243)
Pharmaceuticals Division	**45,638**	**47,292**	**(13,364)**	**(14,736)**	**32,274**	**32,556**

3. Revenue

Disaggregated revenue information

Disaggregation of revenue in millions of CHF

	Six months ended 30 June 2023 Revenue from contracts with customers	Six months ended 30 June 2023 Revenue from other sources	Six months ended 30 June 2023 Total	Six months ended 30 June 2022 Revenue from contracts with customers	Six months ended 30 June 2022 Revenue from other sources	Six months ended 30 June 2022 Total
Pharmaceuticals Division						
Sales by therapeutic area						
Oncology	9,775	–	9,775	10,086	–	10,086
Neuroscience	4,229	–	4,229	3,750	–	3,750
Immunology	3,095	–	3,095	3,752	–	3,752
Haemophilia A	2,087	–	2,087	1,826	–	1,826
Ophthalmology[a)]	1,265	–	1,265	695	–	695
Infectious diseases	819	–	819	810	–	810
Other therapeutic areas[a)]	1,411	–	1,411	1,428	–	1,428
Sales	**22,681**	**–**	**22,681**	**22,347**	**–**	**22,347**
Royalty income	266	129	395	351	120	471
Profit-share income	0	336	336	0	343	343
Other income from collaboration and out-licensing agreements	71	0	71	762	0	762
Other	4	0	4	4	0	4
Other revenue	**341**	**465**	**806**	**1,117**	**463**	**1,580**
Diagnostics Division						
Sales by customer area						
Core Lab	3,669	266	3,935	3,576	299	3,875
Molecular Lab	1,068	50	1,118	1,919	61	1,980
Diabetes Care	722	1	723	831	1	832
Pathology Lab	649	38	687	611	41	652
Point of Care	620	15	635	2,601	8	2,609
Sales	**6,728**	**370**	**7,098**	**9,538**	**410**	**9,948**
Royalty income	21	0	21	21	0	21
Profit-share income	0	0	0	0	0	0
Other income from collaboration and out-licensing agreements	0	0	0	0	0	0
Other	7	3	10	1	3	4
Other revenue	**28**	**3**	**31**	**22**	**3**	**25**
Total	**29,778**	**838**	**30,616**	**33,024**	**876**	**33,900**

a) In 2023 sales of the ophthalmology therapeutic area included sales of Luxturna. These were previously shown as part of other therapeutic areas. The comparative information for 2022 has been restated accordingly. Sales of Luxturna for the six months ended 30 June 2022 were CHF 12 million.

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. Details and a reconciliation to the previously published income statement are disclosed in Note 1.

Revenue from other sources primarily relates to lease revenue and collaboration revenue for which the counterparty is not considered a customer, such as income from profit-sharing arrangements.

Gross-to-net sales reconciliation for the Pharmaceuticals Division

The gross-to-net sales reconciliation for the Pharmaceuticals Division is shown in the table below. The companies in the Diagnostics Division have similar reconciling items, but at much lower amounts.

Pharmaceuticals Division sales gross-to-net reconciliation in millions of CHF

	Six months ended 30 June	
	2023	2022
Gross sales	29,078	27,940
Government and regulatory mandatory price reductions	(3,357)	(3,053)
Contractual price reductions	(2,358)	(1,965)
Cash discounts	(159)	(143)
Customer returns reserves	(143)	(146)
Others	(380)	(286)
Net sales	**22,681**	**22,347**

Government and regulatory mandatory price reductions. These consist of mandatory price reductions. The major elements are the 340B Drug Discount Program, Medicaid and other plans in the US, which totalled USD 2.8 billion equivalent to CHF 2.5 billion (six months ended 30 June 2022: USD 2.5 billion equivalent to CHF 2.4 billion).

Contractual price reductions. These include rebates and chargebacks that are the result of contractual agreements that are primarily volume based and performance based.

Cash discounts. These include credits offered to wholesalers for remitting payment on their purchases within contractually defined incentive periods.

Customer returns reserves. These are allowances established for expected product returns.

Sales reductions that are expected to be withheld by the customer upon settlement, such as contractual price reductions and cash discounts, are recorded in the balance sheet as a deduction from trade receivables. Sales reductions that are separately payable to customers, governmental health authorities or healthcare regulatory authorities are recorded in the balance sheet as accrued liabilities. Provisions for sales returns are recorded in the balance sheet as other provisions.

4. Net financial expense

Financing costs in millions of CHF

	Six months ended 30 June 2023	2022
Interest expense	(393)	(248)
Amortisation of debt discount [11]	(4)	(2)
Fair value loss on treasury locks designated as cash flow hedges – transferred from OCI	(1)	(1)
Net gains (losses) on redemption and repurchase of bonds and notes [11]	0	0
Discount unwind	(8)	(4)
Net interest cost of defined benefit plans	(76)	(41)
Interest expenses on lease liabilities	(8)	(8)
Total financing costs	**(490)**	**(304)**

Other financial income (expense) in millions of CHF

	Six months ended 30 June 2023	2022
Net gains (losses) on equity investments/securities at fair value through profit or loss	34	(117)
Net income (expense) from equity investments/securities	**34**	**(117)**
Interest income (expense) from debt securities at fair value through OCI and at amortised cost	66	4
Net gains (losses) on sale of debt securities at fair value through OCI	0	0
Net gains (losses) on debt investments/securities at fair value through profit or loss	3	(11)
Net interest income (expense) and income from debt investments/securities	**69**	**(7)**
Net foreign exchange gains (losses)	(273)	584
Net gains (losses) on foreign currency derivatives	134	(638)
Foreign exchange gains (losses)	**(139)**	**(54)**
Gains (losses) on net monetary position in hyperinflationary economies	(48)	(20)
Net other financial income (expense)	(2)	(43)
Associates	(14)	(17)
Total other financial income (expense)	**(100)**	**(258)**

Net financial expense in millions of CHF

	Six months ended 30 June 2023	2022
Financing costs	(490)	(304)
Other financial income (expense)	(100)	(258)
Net financial expense	**(590)**	**(562)**
Financial result from treasury management	(500)	(504)
Financial result from pension management	(76)	(41)
Associates	(14)	(17)
Net financial expense	**(590)**	**(562)**

5. Income taxes

Income tax expense is recognised based upon management's best estimate of the weighted average annual income tax rate expected for the full financial year multiplied by the pre-tax income for the six months ended 30 June 2023.

Income tax expenses in millions of CHF

	Six months ended 30 June 2023	2022
Current income taxes	(2,112)	(2,641)
Deferred taxes	501	817
Total income tax (expense)	**(1,611)**	**(1,824)**

The Group's effective tax rate for the six months ended 30 June 2023 increased to 17.6% (six months ended 30 June 2022: 16.6%). The increase was mainly due to the impact from the resolution of tax disputes during the six months ended 30 June 2022. This increase was in part offset by the lower percentage of profit contribution coming from tax jurisdictions with tax rates higher than the Group's average tax rate, notably lower profits in Japan due to the base effect of the Ultomiris patent settlement income during the six months ended 30 June 2022.

6. Mergers and acquisitions

Other developments

In May 2023, the Group announced plans to exit its legacy Genentech manufacturing facility in Vacaville, California, as part of a broader strategy to evolve its manufacturing capabilities in line with future pipeline requirements.

Business combinations – 2023

The Group did not complete any business combinations during the six months ended 30 June 2023.

Business combinations – 2022

The Group did not complete any business combinations during the six months ended 30 June 2022.

Cash flows from business combinations

Business combinations: net cash outflows in millions of CHF

	Six months ended 30 June 2023			Six months ended 30 June 2022		
	Pharmaceuticals	Diagnostics	Total	Pharmaceuticals	Diagnostics	Total
Cash consideration paid	0	0	0	0	0	0
Deferred consideration paid	0	0	0	0	0	0
Contingent consideration paid	0	0	0	0	0	0
Cash in acquired company	0	0	0	0	0	0
Total net cash outflows	**0**	**0**	**0**	**0**	**0**	**0**

Asset acquisitions – 2023

The Group did not complete any asset acquisitions during the six months ended 30 June 2023.

Asset acquisitions – 2022

The Group did not complete any asset acquisitions during the six months ended 30 June 2022.

Cash flows from asset acquisitions

Asset acquisitions: net cash outflows in millions of CHF

	Six months ended 30 June 2023			Six months ended 30 June 2022		
	Pharmaceuticals	Diagnostics	Total	Pharmaceuticals	Diagnostics	Total
Cash consideration paid	0	0	0	0	0	0
Cash in acquired company	0	0	0	0	0	0
Contingent payments related to previous acquisitions	0	0	0	0	(41)	(41)
Total net cash outflows	**0**	**0**	**0**	**0**	**(41)**	**(41)**

For asset acquisitions previously closed, during the six months ended 30 June 2023 the Group did not record any additions to product intangible assets related to contingent payments for the achievement of performance-related milestones (six months ended 30 June 2022: CHF 41 million).

7. Global restructuring plans

During the six months ended 30 June 2023 the Group continued the implementation of various global restructuring plans initiated in prior years.

Global restructuring plans: costs incurred in millions of CHF

	Six months ended 30 June 2023	2022
Global restructuring costs		
– Employee-related costs	236	146
– Site closure costs	279	68
– Divestment of products and businesses	0	0
– Other reorganisation expenses	163	52
Total global restructuring costs	**678**	**266**
Additional costs		
– Impairment of goodwill	0	0
– Impairment of intangible assets	0	0
– Legal and environmental cases	0	(1)
Total costs	**678**	**265**

The business process transformation to simplify system landscapes and reduce process complexity incurred employee-related costs of CHF 39 million and other reorganisation expenses of CHF 155 million. The transformation is a multi-year cross-divisional programme to drive efficiency gains. The manufacturing network strategy review in the Pharmaceuticals Division incurred site closure costs of CHF 167 million mainly related to sites in the US. Chugai initiated an early retirement incentive programme and incurred employee-related costs of CHF 70 million.

Global restructuring plans: summary of costs incurred in millions of CHF

	Six months ended 30 June 2023	2022
Termination costs	174	(17)
Defined benefit plans	0	0
Other employee-related costs	62	163
Total employee-related costs	**236**	**146**
Impairment of property, plant and equipment and right-of-use assets	18	0
Accelerated depreciation of property, plant and equipment and right-of-use assets	35	40
(Gains) losses on disposal of property, plant and equipment and right-of-use assets	9	0
Other site closure costs	217	28
Total site closure costs	**279**	**68**
Divestment of products and businesses		
– (Gains) losses on divestment of subsidiaries	0	0
– Other (gains) losses on divestment of products and businesses	0	0
Total costs on divestment of products and businesses	**0**	**0**
Other reorganisation expenses	163	52
Total global restructuring costs	**678**	**266**
Additional costs		
– Impairment of goodwill	0	0
– Impairment of intangible assets	0	0
– Legal and environmental cases	0	(1)
Total costs	**678**	**265**

Global restructuring plans: classification of costs in millions of CHF

	Six months ended 30 June 2023			Six months ended 30 June 2022		
	Depreciation, amortisation and impairment	Other	Total	Depreciation, amortisation and impairment	Other	Total
Cost of sales						
– Pharmaceuticals	26	202	228	22	27	49
– Diagnostics	8	51	59	0	11	11
Research and development						
– Pharmaceuticals	14	23	37	10	7	17
– Diagnostics	0	17	17	1	1	2
Selling, general and administration						
– Pharmaceuticals	5	134	139	7	72	79
– Diagnostics	0	29	29	0	14	14
– Corporate	0	162	162	0	74	74
Other operating income (expense)						
– Pharmaceuticals	0	2	2	0	17	17
– Diagnostics	0	5	5	0	1	1
– Corporate	0	0	0	0	1	1
Total costs	**53**	**625**	**678**	**40**	**225**	**265**
Total by operating segment						
– Roche Pharmaceuticals	40	262	302	28	100	128
– Chugai	5	99	104	11	23	34
– Diagnostics	8	102	110	1	27	28
– Corporate	0	162	162	0	75	75
Total costs	**53**	**625**	**678**	**40**	**225**	**265**

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. Details and a reconciliation to the previously published income statement are disclosed in Note 1.

8. Goodwill

Goodwill: movements in carrying value of assets in millions of CHF

Six months ended 30 June 2023	
At 1 January 2023	10,820
Currency translation effects	(256)
At 30 June 2023	**10,564**
Allocated by operating segment	
Roche Pharmaceuticals	5,591
Chugai	69
Diagnostics	4,904
Total Group	**10,564**

Impairment charges – 2023

There were no impairments of goodwill during the six months ended 30 June 2023.

Impairment charges – 2022

There were no impairments of goodwill during the six months ended 30 June 2022.

9. Intangible assets

Intangible assets: movements in carrying value of assets in millions of CHF

	Product intangibles: in use	Product intangibles: not available for use	Other intangibles	Total
Six months ended 30 June 2023				
At 1 January 2023	4,070	4,979	636	9,685
Additions	54	137	47	238
Transfers	1	(1)	0	–
Amortisation charge	(310)	–	(51)	(361)
Impairment charge	(7)	(253)	0	(260)
Currency translation effects	(81)	(79)	(13)	(173)
At 30 June 2023	**3,727**	**4,783**	**619**	**9,129**
Allocated by operating segment				
Roche Pharmaceuticals	2,459	4,402	520	7,381
Chugai	5	18	8	31
Diagnostics	1,263	363	91	1,717
Total Group	**3,727**	**4,783**	**619**	**9,129**

Classification of intangible asset amortisation and impairment expenses in millions of CHF

	Amortisation		Impairment	
Six months ended 30 June	2023	2022	2023	2022
Cost of sales				
– Pharmaceuticals	(124)	(215)	0	(336)
– Diagnostics	(67)	(74)	0	0
Research and development				
– Pharmaceuticals	(151)	(161)	(260)	(87)
– Diagnostics	(4)	(4)	0	0
Selling, general and administration				
– Pharmaceuticals	(5)	(7)	0	0
– Diagnostics	(10)	(10)	0	0
Total	**(361)**	**(471)**	**(260)**	**(423)**

Impairment charges – 2023

Pharmaceuticals Division. Impairment charges totalling CHF 260 million were recorded. The major items related to:

- A charge of CHF 87 million following a delay in clinical trials and revised sales expectations of a compound purchased separately. The asset concerned, which was not yet being amortised, was fully written down.
- A charge of CHF 82 million following a clinical data assessment and the decision to stop part of the development of a compound with an alliance partner. The asset concerned, which was not yet being amortised, was fully written down.
- A charge of CHF 65 million following a clinical data assessment and the decision to stop part of the development of a compound with an alliance partner. The asset concerned, which was not yet being amortised, was written down to its estimated recoverable amount of CHF 141 million.

Impairment charges – 2022

Pharmaceuticals Division. Impairment charges totalling CHF 423 million were recorded. The major items related to:

- A charge of CHF 336 million for the partial impairment of the product intangible asset relating to the technology acquired as part of the Flatiron acquisition. The impairment was a result of reduced sales expectations. The asset concerned was written down to its estimated recoverable amount of CHF 61 million. The intangible asset continues to be amortised over its remaining estimated useful life of ten years.
- A charge of CHF 86 million following a clinical data assessment and the decision to stop the development of NLRP3 inhibitors, acquired as part of the Jecure Therapeutics acquisition. The asset concerned, which was not yet being amortised, was fully written down.

10. Provisions and contingent liabilities

Provisions in millions of CHF

	30 June 2023	31 December 2022
Legal provisions	141	316
Environmental provisions	410	374
Restructuring provisions	768	844
Contingent consideration provisions [16]	99	103
Other provisions	1,346	1,722
Total provisions	**2,764**	**3,359**
Current	1,547	2,248
Non-current	1,217	1,111
Total provisions	**2,764**	**3,359**

During the six months ended 30 June 2023 CHF 505 million of provisions were utilised (six months ended 30 June 2022: CHF 527 million), which are included in the cash flow from operating activities and mainly related to the utilisation of restructuring and other provisions.

As part of the regular review of litigation and environmental matters, management has reassessed the provisions recorded for certain matters. Based on the development of the various litigations, notably the Meso case, some of the provisions previously held were released which resulted in an income of CHF 162 million for the six months ended 30 June 2023. In addition, a fine of CHF 59 million imposed by the French Competition Authority on the Avastin/Lucentis investigation in 2020 was reimbursed following a favourable court decision. There was an increase in environmental provisions of CHF 55 million, mainly for the environmental remediation at the Clarecastle site, Ireland. These were the major elements in the expenses for legal and environmental cases for the six months ended 30 June 2023, which show a net income of CHF 150 million included in other operating income (expense) (six months ended 30 June 2022: net income of CHF 19 million).

Other than as described below, no significant changes in the Group's contingent liabilities for legal cases have occurred since the approval of the Annual Financial Statements by the Board of Directors.

Avastin/Lucentis investigations. On 14 February 2013 the Italian Antitrust Authority ('AGCM') announced an investigation to determine whether Roche, Genentech and Novartis had entered into an agreement to restrict competition in the Italian market for drugs, with reference in particular to Avastin (marketed by Roche) and Lucentis (marketed by Novartis). Avastin and Lucentis are two different drugs that were developed and approved for different therapeutic purposes and contain different active pharmaceutical ingredients. On 5 March 2014 the AGCM issued a verdict that alleges that Roche and Novartis colluded to artificially differentiate Avastin and Lucentis in order to foster the sales of Lucentis in Italy. The AGCM fined Roche EUR 90.5 million and Novartis EUR 92 million. Roche appealed the AGCM verdict to the Tribunale Amministrativo Regionale del Lazio ('TAR'). On 2 December 2014 the TAR upheld the decision by the AGCM. Roche appealed the verdict of the TAR to the Consiglio di Stato. In July 2014 Roche paid the EUR 90.5 million fine under protest to avoid additional penalty fees. On 23 January 2018 the European Court of Justice rendered its decision on five questions which had been referred to the European Court of Justice by the Consiglio di Stato. On 15 July 2019 the Consiglio di Stato issued the final verdict on the case and upheld the verdicts of both the AGCM and the TAR. Roche filed an appeal with the Corte Suprema di Cassazione, which was rejected on 5 October 2021. In addition, Roche filed a motion for revocation with the Consiglio di Stato, which was rejected on 8 May 2023. This matter is now concluded. On 24 January 2019 the French Competition Authority ('FCA') issued a Statement of Objections against Roche, Genentech and Novartis regarding anti-competitive practices concerning the commercialisation of Avastin and Lucentis in France. The FCA alleges that Roche, Genentech and Novartis abused their collective dominant position on the French market for the treatment of wet age-related macular degeneration between 2008 and 2013. On 9 September 2020 the FCA issued a decision finding that Roche, Genentech and Novartis had infringed competition law, and imposed a fine of EUR 60 million against Roche and Genentech. Roche and Genentech appealed this decision. In January 2021 the fine was paid under protest to avoid additional penalty fees. On 16 February 2023 the Paris Court of Appeal issued its ruling in the Group's favour. As a result, the FCA reimbursed the fine in March 2023 and an income of EUR 60 million was recorded in other operating income (expense) during the six months ended 30 June 2023. In March 2023 the FCA appealed this decision. In September 2021 Roche received an administrative fine letter from the Turkish Competition Authority ('TCA'). In its investigation the TCA alleges that Roche and Novartis entered into a cartel aiming at preventing off-label applications of Avastin in order to foster on-label applications of Lucentis. In October 2021 the fine of Turkish lira 85 million was paid under protest to avoid additional penalty fees. Roche filed an appeal against the decision. On 30 January 2023 the Ankara Administrative Court issued its ruling in the Group's favour. As a result, the TCA reimbursed the fine and an income of Turkish lira 85 million was recorded in other operating income (expense) during the six months ended 30 June 2023. In April 2023 the TCA appealed this decision. In addition, the Group is challenging policies and regulations allowing off-label/unlicensed use and reimbursement for economic reasons in various countries. The Group is vigorously defending itself in these matters. The outcome of these matters cannot be determined at this time.

Meso litigation. The litigation related to the lawsuit filed by Roche Diagnostics Corporation ('Roche') against Meso Scale Diagnostics, LLC ('Meso') is described in Note 20 to the Annual Financial Statements. On 7 March 2023 the parties agreed to a settlement that resolved all the disputes between them. On 27 March 2023 the court approved the joint stipulation for dismissal of the case. The matter is now concluded.

Iraqi Ministry of Health. The litigation related to the Iraqi Ministry of Health is described in Note 20 to the Annual Financial Statements. The defendants' motions for en banc review were denied on 2 February 2023. On 1 March 2023 the Federal District Court granted defendants' motion for a temporary partial stay pending the US Supreme Court's decision on a related matter. On 18 May 2023 the US Supreme Court reversed the decision in the related matter, clarifying the law under the Anti-Terrorism Act. On 30 June 2023 defendants filed a petition for certiorari to the US Supreme Court on the merits asking the US Supreme Court to grant, vacate and remand for further proceedings as a result of another of its recent decisions on the Anti-Terrorism Act. The Group is vigorously defending itself in this matter. The outcome of this matter cannot be determined at this time.

Tamiflu Qui tam litigation. In 2019 Roche Holding Ltd ('Roche Holding'), Hoffmann-La Roche, Inc. ('HLR') and Genentech, Inc. ('Genentech') were served with a lawsuit filed by a relator in the US District Court for the District of Maryland under the qui tam (whistleblower) provisions of the False Claims Act. The lawsuit was originally filed under seal years earlier on behalf of the US government and various US state governments. The lawsuit alleges certain improper conduct by the Group with respect to sales of Tamiflu to the US government and various US state governments. The US Department of Justice declined to intervene in the lawsuit. On 17 January 2020 the Group filed a motion to dismiss. On 28 September 2020 the plaintiff dismissed the complaint as to Roche Holding and Genentech and the District Court denied HLR's motion for summary judgment. On 4 November 2022 the US Department of Justice filed a motion to dismiss the claim. The motion was stayed pending a decision from the US Supreme Court on a related matter. This decision was issued in June 2023. On 12 July 2023 the whistleblower filed a stipulation of voluntary dismissal of all his claims, including all of those asserted on behalf of the US government and various US state governments. The stipulation was approved by the US District Court for the District of Maryland on 13 July 2023. The matter is now concluded.

Novartis litigation related to Cabilly royalties. The litigation related to the lawsuit filed by Novartis Vaccines and Diagnostics, Inc. and Novartis Pharma AG (collectively 'Novartis') against Genentech, Inc. ('Genentech') is described in Note 20 to the Annual Financial Statements. On 2 May 2023 the court dismissed with prejudice Novartis' state-law claims seeking a refund for royalties paid under the parties' Cabilly licence. The court found that the claims are foreclosed by the federal patent bar and declined Novartis' request for leave to amend the complaint, finding that any amendment would be futile. The court denied Genentech's motion to dismiss with respect to Novartis' claim for a declaratory judgment that it did not owe royalties for Cosentyx and Ilaris manufactured in, or imported into, the US prior to patent expiry but sold after patent expiry.

University of Pennsylvania litigation. The litigation related to the patent litigation action filed by the University of Pennsylvania against Genentech, Inc. ('Genentech') is described in Note 20 to the Annual Financial Statements. The University of Pennsylvania filed a motion to amend its complaint to add wilfulness back in, which was granted by the court on 5 May 2023. The University of Pennsylvania filed a first amended complaint on 17 May 2023. A jury trial is scheduled for September 2024. The Group is vigorously defending itself in this matter. The outcome of this matter cannot be determined at this time.

There have been certain procedural developments in the significant litigation matters described in Note 20 to the Annual Financial Statements. These do not significantly affect the assessment of the Group's management concerning the adequacy of the total provisions recorded for legal matters.

11. Debt

Debt: movements in carrying value of recognised liabilities in millions of CHF

Six months ended 30 June 2023	
At 1 January 2023	25,351
Proceeds from issue of bonds and notes	1,238
Redemption and repurchase of bonds and notes	(645)
Increase (decrease) in commercial paper	(41)
Increase (decrease) in other debt	(19)
Changes from financing cash flows	**533**
Net (gains) losses on redemption and repurchase of bonds and notes [4]	0
Amortisation of debt discount [4]	4
Financing costs	**4**
Net foreign currency transaction (gains) losses	2
Currency translation effects	(532)
Changes in foreign exchange rates	**(530)**
Changes in fair values of hedging instruments	28
Other changes	0
At 30 June 2023	**25,386**
Bonds and notes	23,325
Commercial paper	1,669
Amounts due to banks and other financial institutions	391
Other borrowings	1
Total debt	**25,386**
Long-term debt	20,345
Short-term debt	5,041
Total debt	**25,386**

Unamortised discount included in the carrying value of bonds and notes at 30 June 2023 was CHF 59 million (30 June 2022: CHF 67 million).

Issuance of bonds and notes – 2023

On 27 February 2023 the Group completed an offering of EUR 0.75 billion fixed rate bonds with a coupon of 3.204% and EUR 0.5 billion fixed rate bonds with a coupon of 3.355%. The bonds will mature on 27 August 2029 and 27 February 2035, respectively. These bonds have a primary listing at the SIX Swiss Exchange. The Group received CHF 1,238 million aggregate net proceeds from the issuance and sale of these fixed rate bonds.

Issuance of bonds and notes – 2022

On 25 February 2022 the Group completed an offering of CHF 3.0 billion fixed rate bonds issued in four tranches, of which CHF 1.25 billion for bonds with a zero coupon, CHF 0.825 billion for bonds with a coupon of 0.5%, CHF 0.625 billion for bonds with a coupon of 0.75% and CHF 0.3 billion for bonds with a coupon of 1.0%. The zero coupon fixed rate bonds with a principal amount of CHF 1.25 billion matured on 25 November 2022. The other bonds will mature on 25 February 2027, 25 February 2031 and 25 February 2037, respectively. These bonds are listed at the SIX Swiss Exchange. The Group received CHF 3,014 million aggregate net proceeds from the issuance and sale of these fixed rate bonds.

On 10 March 2022 the Group completed an offering of USD 1.25 billion fixed rate notes with a coupon of 1.882%, USD 1.0 billion fixed rate notes with a coupon of 2.132% and USD 1.25 billion fixed rate notes with a coupon of 2.314%. The notes will mature on 8 March 2024, 10 March 2025 and 10 March 2027, respectively. The Group received CHF 3,237 million aggregate net proceeds from the issuance and sale of these fixed rate notes.

Also on 10 March 2022 the Group completed an offering of USD 0.75 billion floating rate notes at a rate equal to Secured Overnight Financing Rate (SOFR) plus a margin of 0.33% and USD 0.75 billion floating rate notes at a rate equal to SOFR plus a margin of 0.56%. The notes will mature on 11 September 2023 and 10 March 2025, respectively. The Group received CHF 1,391 million aggregate net proceeds from the issuance and sale of these floating rate notes.

Redemption and repurchase of bonds and notes – 2023

On the due date of 27 February 2023 the Group redeemed notes with an outstanding amount of EUR 0.65 billion. The effective interest rate of these notes was 0.63%. The cash outflow was CHF 645 million, plus accrued interest, and there was no gain or loss recorded on the redemption.

Redemption and repurchase of bonds and notes – 2022

During the six months ended 30 June 2022 the Group did not redeem or repurchase any bonds or notes.

Commercial paper

Roche Holdings, Inc. commercial paper program. Roche Holdings, Inc. has an established commercial paper program under which it can issue up to USD 7.5 billion of unsecured commercial paper notes guaranteed by Roche Holding Ltd. The committed credit line that is available as a back-stop supporting the commercial paper program is USD 7.5 billion at 30 June 2023. The maturity of the notes under the program cannot exceed 365 days from the date of issuance. At 30 June 2023 unsecured commercial paper notes with a principal amount of USD 1.9 billion and an average interest rate of 5.09% were outstanding.

Movements in commercial paper obligations in millions of CHF

Six months ended 30 June 2023	
At 1 January 2023	1,755
Net cash proceeds (payments)	(41)
Currency translation effects	(45)
At 30 June 2023	**1,669**

12. Equity attributable to Roche shareholders

Share capital and non-voting equity securities (*Genussscheine*)

The authorised and issued share capital of the Group and the number of issued non-voting equity securities have not changed during the six months ended 30 June 2023. The weighted average number of shares and non-voting equity securities in issue during the six months ended 30 June 2023 was 799 million (six months ended 30 June 2022: 801 million).

Dividends

On 14 March 2023 the shareholders approved the distribution of a dividend of CHF 9.50 per share and non-voting equity security (2022: CHF 9.30) in respect of the 2022 business year. The distribution to holders of outstanding shares and non-voting equity securities totalled CHF 7,590 million (2022: CHF 7,446 million), which was recorded against retained earnings in the six months ended 30 June 2023.

Own equity instruments

Holdings of own equity instruments in number of shares and non-voting equity securities

	30 June 2023 (millions)	31 December 2022 (millions)
Shares	0.5	0
Non-voting equity securities	10.1	10.1
Total	**10.6**	**10.1**

Own equity instruments are held for the Group's potential conversion obligations that may arise from the Group's equity compensation plans (described in Note 27 to the Annual Financial Statements).

On 10 February 2023, the Group announced that it had acquired 540,000 shares for a total consideration of CHF 166 million. The repurchased shares were reported as treasury shares as at 30 June 2023 and will be used to cover current as well as future obligations arising from equity compensation plans. This announcement followed from reports that a member of a shareholder group with pooled voting rights sold 2.7 million Roche shares. At 30 June 2023, based on information supplied to the Group, the shareholder group with pooled voting rights owned 69,318,000 shares representing 64.97% of the issued shares (31 December 2022: 72,018,000 shares representing 67.50% of the issued shares). These figures do not include any shares without pooled voting rights held outside this group by individual members of the group.

Retained earnings

In addition to net income attributable to Roche shareholders of CHF 7,137 million (six months ended 30 June 2022: CHF 8,530 million) and the dividend payments described above, retained earnings also include gains on remeasurements of defined benefit plans of CHF 131 million, after tax (six months ended 30 June 2022: gains of CHF 949 million, after tax). These were based on updated actuarial calculations for major plans, and the net gains were mainly due to a positive performance of plan assets and lower inflation rates for certain plans outside Switzerland since the end of 2022. For the Swiss plans, the increase of the defined benefit obligation due to lower discount rates was largely offset by the positive performance of plan assets. Therefore, the limit on asset recognition to the surplus in certain defined benefit plans in Switzerland remained stable.

13. Subsidiaries and associates

Chugai

Chugai is a fully consolidated subsidiary of the Group and at 30 June 2023 the Group's interest in Chugai was 61.1% (31 December 2022: 61.1%). The common stock of Chugai is publicly traded and is listed on the Tokyo Stock Exchange under the stock code 'TSE:4519'. Chugai prepares financial statements in accordance with International Financial Reporting Standards (IFRS) that are filed on a quarterly basis with the Tokyo Stock Exchange.

The dividends distributed to third parties holding Chugai shares during the six months ended 30 June 2023 totalled CHF 173 million (six months ended 30 June 2022: CHF 226 million) and were recorded against non-controlling interests. Dividends paid by Chugai to Roche are eliminated on consolidation as intercompany items.

14. Earnings per share and non-voting equity security

Basic earnings per share and non-voting equity security

	Six months ended 30 June 2023	2022
Net income attributable to Roche shareholders (CHF millions)	**7,137**	**8,530**
Weighted average number of outstanding shares (millions)	107	116
Number of outstanding non-voting equity securities (millions)	703	703
Weighted average number of own shares and non-voting equity securities held (millions)	(11)	(18)
Weighted average number of outstanding shares and non-voting equity securities used to calculate basic earnings per share (millions)	**799**	**801**
Basic earnings per share and non-voting equity security (CHF)	**8.93**	**10.65**

Diluted earnings per share and non-voting equity security

	Six months ended 30 June 2023	2022
Net income attributable to Roche shareholders (CHF millions)	7,137	8,530
Increase in non-controlling interests' share of Group net income, assuming all outstanding Chugai stock options exercised (CHF millions)	0	0
Net income used to calculate diluted earnings per share (CHF millions)	**7,137**	**8,530**
Weighted average number of outstanding shares and non-voting equity securities (millions)	799	801
Adjustment for assumed exercise of equity compensation plans, where dilutive (millions)	5	9
Weighted average number of outstanding shares and non-voting equity securities used to calculate diluted earnings per share (millions)	**804**	**810**
Diluted earnings per share and non-voting equity security (CHF)	**8.87**	**10.54**

15. Statement of cash flows

Cash generated from operations in millions of CHF

	Six months ended 30 June 2023	2022
Net income	7,563	9,161
Add back non-operating (income) expense		
– Financing costs [4]	490	304
– Other financial (income) expense [4]	100	258
– Income taxes [5]	1,611	1,824
Operating profit	**9,764**	**11,547**
Depreciation of property, plant and equipment [2]	1,228	1,255
Depreciation of right-of-use assets [2]	161	174
Amortisation of intangible assets [2]	361	471
Impairment of goodwill [2]	0	0
Impairment of intangible assets [2]	260	423
Impairment (reversal) of property, plant and equipment [2]	40	28
Impairment of right-of-use assets [2]	2	0
Operating (income) expense for defined benefit plans	240	330
Operating expense for equity-settled equity compensation plans	383	316
Net (income) expense for provisions	(56)	202
Bad debt (reversal) expense	9	0
Inventory write-downs	283	131
Net (gain) loss on disposal of products	(585)	(338)
Other adjustments	1	(17)
Cash generated from operations	**12,091**	**14,522**

Dividends paid in millions of CHF

	Six months ended 30 June 2023	2022
Dividends to Roche shareholders	(7,590)	(7,446)
Dividends to non-controlling shareholders		
– Chugai	(173)	(226)
– Other non-controlling interests	0	1
Increase (decrease) in dividends payable	1	0
Dividend withholding tax	(27)	(1)
Total	**(7,789)**	**(7,672)**

16. Financial risk management

The Group's financial risk management objectives and policies are consistent with those disclosed in Note 31 to the Annual Financial Statements.

Fair value hierarchy

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:
- Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities.
- Level 2 – observable inputs other than quoted prices in active markets for identical assets and liabilities.
- Level 3 – unobservable inputs.

Fair value hierarchy of financial instruments in millions of CHF

	Level 1	Level 2	Level 3	Total
At 30 June 2023				
Marketable securities:				
– Equity securities at fair value through profit or loss	1	–	–	1
– Debt securities at fair value through OCI	549	37	–	586
– Money market instruments at fair value through OCI	575	2,354	–	2,929
Derivative financial instruments	–	265	–	265
Equity investments at fair value through OCI	296	8	–	304
Equity and debt investments at fair value through profit or loss	113	174	28	315
Financial assets recognised at fair value	**1,534**	**2,838**	**28**	**4,400**
Derivative financial instruments	–	(639)	–	(639)
Contingent consideration	–	–	(99)	(99)
Financial liabilities recognised at fair value	**–**	**(639)**	**(99)**	**(738)**

At 30 June 2023 Level 1 financial assets consisted of bonds, treasury bills and quoted shares. Level 2 financial assets consisted primarily of commercial paper, certificates of deposit and derivative financial instruments.

The Group determines Level 2 fair values using the following valuation techniques:
- Marketable securities and derivative financial instruments are based on valuation models that use observable market data for interest rates, yield curves, foreign exchange rates and implied volatilities for similar instruments at the measurement date.
- Equity and debt investments at fair value through OCI and at fair value through profit or loss are based on a valuation model that uses the most recently published observable market data.

The Group recognises transfers between levels of the fair value hierarchy as at the end of the reporting period during which the transfer occurred. There were no significant transfers between Level 1 and Level 2 during the six months ended 30 June 2023.

Level 3 fair values

Details of the determination of Level 3 fair value measurements are set out below.

Contingent consideration arrangements in millions of CHF

Six months ended 30 June 2023	
At 1 January 2023	(103)
Utilised for settlements	0
Total gains and losses included in the income statement	
– Unused amounts reversed – recorded within other operating income (expense)	6
– Additional amounts created – recorded within other operating income (expense)	0
– Discount unwind included in financing costs	(3)
Total gains and losses included in other comprehensive income	
– Currency translation effects	1
At 30 June 2023	**(99)**

Contingent consideration arrangements

The Group is party to certain contingent consideration arrangements, including those from business combinations. The fair values of contingent consideration from business combinations are determined considering the expected payments and, where payments are expected to be made beyond the next 12 months, discounted to present value using a risk-adjusted average discount rate of 5.3% at 30 June 2023 (31 December 2022: 5.3%). The expected payments are determined by considering the possible scenarios of forecast sales and other performance criteria, the amount to be paid under each scenario and the probability of each scenario. The significant unobservable inputs are the forecast sales, other performance criteria and the risk-adjusted discount rate. The estimated fair value would increase if the forecast sales or other performance criteria rates were higher or the risk-adjusted discount rate was lower. At 30 June 2023 the total potential payments under contingent consideration arrangements arising from business combinations could be up to CHF 0.3 billion (31 December 2022: CHF 0.4 billion).

Carrying value and fair value

At 30 June 2023 the carrying value of bonds and notes was CHF 23.3 billion compared to a fair value of CHF 21.8 billion and the carrying value of total debt was CHF 25.4 billion compared to a fair value of CHF 23.9 billion. The carrying values of financial assets are a reasonable approximation of the fair values at 30 June 2023.

KPMG

Independent Auditor's Report on the Review of Interim Consolidated Financial Statements

to the Board of Directors of Roche Holding Ltd, Basel

Introduction

We have been engaged to review the accompanying consolidated income statement and consolidated statement of comprehensive income of Roche Holding Ltd for the six-month period ended 30 June 2023, the related consolidated balance sheet as at 30 June 2023, the consolidated statements of cash flows and changes in equity for the six-month period then ended, and selected explanatory notes (the interim consolidated financial statements) on pages 41–72. The Board of Directors is responsible for the preparation and presentation of these interim consolidated financial statements in accordance with International Accounting Standard 34 *Interim Financial Reporting*. Our responsibility is to express a conclusion on these interim consolidated financial statements based on our review.

Scope of Review

We conducted our review in accordance with the International Standard on Review Engagements 2410, *Review of Interim Financial Information Performed by the Independent Auditor of the Entity*. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying interim consolidated financial statements as at 30 June 2023 are not prepared, in all material respects, in accordance with International Accounting Standard 34 *Interim Financial Reporting.*

KPMG AG

Paul Nichols

François Rouiller
Licensed Audit Expert

Paul Nichols

Basel, 25 July 2023

Supplementary Information

Alternative Performance Measures

The financial information included in the Financial Review includes certain Alternative Performance Measures (APMs) which are not accounting measures as defined by IFRS, in particular the core results, net working capital, net operating assets, free cash flow and constant exchange rates. These APMs should not be used instead of, or considered as alternatives to, the Group's consolidated interim financial results based on IFRS. These APMs may not be comparable to similarly titled measures disclosed by other companies. All APMs presented in the Financial Review relate to the performance of the current reported period and comparative periods.

Core results

Core results allow for an assessment of both the Group's actual results as defined by IFRS and the underlying performance of the business. The core results concept, which is used in the internal management of the business, is based on the IFRS results, with the following adjustments:

- Global restructuring plans (see Note 7) are excluded.
- Amortisation and impairment of intangible assets (see Note 9), with the exception of commercial software intangible assets, and impairment of goodwill (see Note 8) are excluded.
- Acquisition accounting and other impacts from the accounting for mergers and acquisitions (M&A) and alliance transactions (see Financial Review) are excluded.
- Discontinued operations (currently none) are excluded.
- Legal and environmental cases (see Financial Review) are excluded.
- Global issues outside the healthcare sector beyond the Group's control are excluded.
- Material treasury items such as major debt restructurings (currently none) are excluded.
- Pension plan settlements are excluded.
- The tax benefit recorded under IFRS in respect of equity compensation plans (ECPs), which varies according to the price of the underlying equity, is replaced by a normalised tax benefit, being the IFRS 2 expense multiplied by the applicable tax rate (see Note 5).

The Group's IFRS results, including the divisional breakdown, are reconciled to the core results in the tables below. The calculation of Core EPS is also given in the tables below. Additional commentary to the adjustment items is given in the Financial Review.

Core results reconciliation – Six months ended 30 June 2023 in millions of CHF

	IFRS	Global restructuring	Intangibles amortisation	Intangibles impairment	M&A and alliance transactions	Legal & environmental	Pension plan settlements	Global issues	Normalisation of ECP tax benefit	Core
Sales	29,779	–	–	–	–	–	–	–	–	29,779
Other revenue	837	0	–	–	–	–	–	–	–	837
Cost of sales	(7,931)	287	188	0	0	–	–	–	–	(7,456)
Research and development	(6,918)	54	155	260	–	–	–	–	–	(6,449)
Selling, general and administration	(6,850)	330	15	0	–	–	–	–	–	(6,505)
Other operating income (expense)	847	7	–	0	1	(150)	0	–	–	705
Operating profit	**9,764**	**678**	**358**	**260**	**1**	**(150)**	**0**	**–**	**–**	**10,911**
Financing costs	(490)	0	–	–	3	5	–	–	–	(482)
Other financial income (expense)	(100)	–	–	–	0	–	–	–	–	(100)
Profit before taxes	**9,174**	**678**	**358**	**260**	**4**	**(145)**	**0**	**–**	**–**	**10,329**
Income taxes	(1,611)	(134)	(22)	(52)	0	46	0	0	31	(1,742)
Net income	**7,563**	**544**	**336**	**208**	**4**	**(99)**	**0**	**0**	**31**	**8,587**
Attributable to										
– Roche shareholders	7,137	515	334	202	4	(99)	0	0	31	8,124
– Non-controlling interests	426	29	2	6	–	0	0	0	–	463

Core results reconciliation – Six months ended 30 June 2022 (restated)[a] in millions of CHF

	IFRS	Global restructuring	Intangibles amortisation	Intangibles impairment	M&A and alliance transactions	Legal & environmental	Pension plan settlements	Global issues	Normalisation of ECP tax benefit	Core
Sales	32,295	–	–	–	–	–	–	–	–	32,295
Other revenue	1,605	0	–	–	–	–	–	–	–	1,605
Cost of sales	(9,668)	60	286	336	0	–	–	–	–	(8,986)
Research and development	(6,516)	19	165	87	–	–	–	–	–	(6,245)
Selling, general and administration	(6,600)	167	17	0	–	–	–	–	–	(6,416)
Other operating income (expense)	431	20	–	0	(17)	(19)	0	–	–	415
Operating profit	**11,547**	**266**	**468**	**423**	**(17)**	**(19)**	**0**	**–**	**–**	**12,668**
Financing costs	(304)	0	–	–	2	2	–	–	–	(300)
Other financial income (expense)	(258)	–	–	–	0	–	–	–	–	(258)
Profit before taxes	**10,985**	**266**	**468**	**423**	**(15)**	**(17)**	**0**	**–**	**–**	**12,110**
Income taxes	(1,824)	(48)	(42)	(74)	0	6	0	0	32	(1,950)
Net income	**9,161**	**218**	**426**	**349**	**(15)**	**(11)**	**0**	**0**	**32**	**10,160**
Attributable to										
– Roche shareholders	8,530	208	425	349	(15)	(11)	0	0	32	9,518
– Non-controlling interests	631	10	1	0	–	0	0	0	–	642

a) Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. Details and a reconciliation to the previously published income statement are disclosed in Note 1 of the Interim Financial Statements. A reconciliation to the previously published core results is disclosed below.

Divisional core results reconciliation – Six months ended 30 June 2023 in millions of CHF

	IFRS	Global restruc-turing	Intan-gibles amorti-sation	Intan-gibles impair-ment	M&A and alliance trans-actions	Legal & environ-mental	Pension plan settle-ments	Core
Pharmaceuticals								
Sales	22,681	–	–	–	–	–	–	22,681
Other revenue	806	0	–	–	–	–	–	806
Cost of sales	(4,457)	228	122	0	0	–	–	(4,107)
Research and development	(6,065)	37	151	260	–	–	–	(5,617)
Selling, general and administration	(3,588)	139	5	0	–	–	–	(3,444)
Other operating income (expense)	708	2	–	0	(4)	(7)	0	699
Operating profit	**10,085**	**406**	**278**	**260**	**(4)**	**(7)**	**0**	**11,018**
Diagnostics								
Sales	7,098	–	–	–	–	–	–	7,098
Other revenue	31	0	–	–	–	–	–	31
Cost of sales	(3,474)	59	66	0	0	–	–	(3,349)
Research and development	(853)	17	4	0	–	–	–	(832)
Selling, general and administration	(1,381)	29	10	0	–	–	–	(1,342)
Other operating income (expense)	146	5	–	0	5	(143)	0	13
Operating profit	**1,567**	**110**	**80**	**0**	**5**	**(143)**	**0**	**1,619**
Corporate								
Selling, general and administration	(1,881)	162	–	–	–	–	–	(1,719)
Other operating income (expense)	(7)	0	–	–	0	0	0	(7)
Operating profit	**(1,888)**	**162**	**–**	**–**	**0**	**0**	**0**	**(1,726)**

Divisional core results reconciliation – Six months ended 30 June 2022 (restated)[a] in millions of CHF

	IFRS	Global restruc-turing	Intan-gibles amorti-sation	Intan-gibles impair-ment	M&A and alliance trans-actions	Legal & environ-mental	Pension plan settle-ments	Core
Pharmaceuticals								
Sales	22,347	–	–	–	–	–	–	22,347
Other revenue	1,580	0	–	–	–	–	–	1,580
Cost of sales	(4,851)	49	214	336	0	–	–	(4,252)
Research and development	(5,667)	17	161	87	–	–	–	(5,402)
Selling, general and administration	(3,468)	79	7	0	–	–	–	(3,382)
Other operating income (expense)	390	18	–	0	4	(14)	0	398
Operating profit	**10,331**	**163**	**382**	**423**	**4**	**(14)**	**0**	**11,289**
Diagnostics								
Sales	9,948	–	–	–	–	–	–	9,948
Other revenue	25	0	–	–	–	–	–	25
Cost of sales	(4,817)	11	72	0	0	–	–	(4,734)
Research and development	(849)	2	4	0	–	–	–	(843)
Selling, general and administration	(1,489)	14	10	0	–	–	–	(1,465)
Other operating income (expense)	41	1	–	0	(21)	1	0	22
Operating profit	**2,859**	**28**	**86**	**0**	**(21)**	**1**	**0**	**2,953**
Corporate								
Selling, general and administration	(1,643)	74	–	–	–	–	–	(1,569)
Other operating income (expense)	0	1	–	–	0	(6)	0	(5)
Operating profit	**(1,643)**	**75**	**–**	**–**	**0**	**(6)**	**0**	**(1,574)**

a) Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. Details and a reconciliation to the previously published income statement are disclosed in Note 1 of the Interim Financial Statements. A reconciliation to the previously published divisional core results is disclosed below.

Restated core results (selected items) – Six months ended 30 June 2022 in millions of CHF

	Six months ended 30 June 2022			
	Core results as originally published	Presentational changes	Cost allocation changes	Restated core results
Group				
Sales	32,295	–	–	32,295
Royalty and other operating income – until 2022	1,943	(1,943)	–	–
Other revenue – new from 2023	–	1,605	–	1,605
Cost of sales	(9,305)	–	319	(8,986)
Marketing and distribution – until 2022	(4,459)	4,459	–	–
Research and development	(6,628)	–	383	(6,245)
General and administration – until 2022	(1,178)	1,178	–	–
Selling, general and administration – new from 2023	–	(5,714)	(702)	(6,416)
Other operating income (expense) – new from 2023	–	415	–	415
Core operating profit	**12,668**	**–**	**–**	**12,668**
Pharmaceuticals				
Sales	22,347	–	–	22,347
Royalty and other operating income – until 2022	1,918	(1,918)	–	–
Other revenue – new from 2023	–	1,580	–	1,580
Cost of sales	(4,430)	–	178	(4,252)
Marketing and distribution – until 2022	(3,096)	3,096	–	–
Research and development	(5,729)	–	327	(5,402)
General and administration – until 2022	(692)	692	–	–
Selling, general and administration – new from 2023	–	(3,848)	466	(3,382)
Other operating income (expense) – new from 2023	–	398	–	398
Core operating profit	**10,318**	**–**	**971**	**11,289**
Diagnostics				
Sales	9,948	–	–	9,948
Royalty and other operating income – until 2022	25	(25)	–	–
Other revenue – new from 2023	–	25	–	25
Cost of sales	(4,875)	–	141	(4,734)
Marketing and distribution – until 2022	(1,363)	1,363	–	–
Research and development	(899)	–	56	(843)
General and administration – until 2022	(276)	276	–	–
Selling, general and administration – new from 2023	–	(1,661)	196	(1,465)
Other operating income (expense) – new from 2023	–	22	–	22
Core operating profit	**2,560**	**–**	**393**	**2,953**
Corporate				
General and administration – until 2022	(210)	210	–	–
Selling, general and administration – new from 2023	–	(205)	(1,364)	(1,569)
Other operating income (expense) – new from 2023	–	(5)	–	(5)
Core operating profit	**(210)**	**–**	**(1,364)**	**(1,574)**

Core EPS (basic)

	Six months ended 30 June 2023	2022
Core net income attributable to Roche shareholders (CHF millions)	8,124	9,518
Weighted average number of outstanding shares and non-voting equity securities used to calculate basic earnings per share (millions) [14]	799	801
Core earnings per share (basic) (CHF)	**10.17**	**11.89**

Core EPS (diluted)

	Six months ended 30 June 2023	2022
Core net income attributable to Roche shareholders (CHF millions)	8,124	9,518
Increase in non-controlling interests' share of core net income, assuming all outstanding Chugai stock options exercised (CHF millions)	0	0
Net income used to calculate diluted earnings per share (CHF millions)	**8,124**	**9,518**
Weighted average number of outstanding shares and non-voting equity securities used to calculate diluted earnings per share (millions) [14]	**804**	**810**
Core earnings per share (diluted) (CHF)	**10.10**	**11.76**

Free cash flow

Free cash flow is used to assess the Group's ability to generate the cash required to conduct and maintain its operations. It also indicates the Group's ability to generate cash to finance dividend payments, repay debt and to undertake merger and acquisition activities. The free cash flow concept is used in the internal management of the business.

Operating free cash flow is calculated based on the IFRS operating profit and adjusted for certain non-cash items, movements in net working capital and capital expenditures (investments in property, plant and equipment and intangible assets as well as the principal portion of lease liabilities paid for leased assets). Operating free cash flow is different from cash flows from operating activities as defined by IAS 7 in that it includes capital expenditures (which are within the responsibility of divisional management) and excludes income taxes paid (which are not within the responsibility of divisional management). Cash outflows from defined benefit plans are allocated to the operating free cash flow based on the current service cost with the residual allocated to treasury activities.

Free cash flow is calculated as the operating free cash flow adjusted for treasury activities and taxes paid. Free cash flow is different from total cash flows as defined by IAS 7 in that it excludes dividend payments, cash inflows/outflows from financing activities such as issuance/repayment of debt, purchase/sale of marketable securities and cash inflows/outflows from mergers, acquisitions and divestments.

Operating free cash flow and free cash flow are calculated as shown in the tables below. Additional commentary to the adjustment items is given in the Financial Review.

Operating free cash flow reconciliation in millions of CHF

	Six months ended 30 June 2023	2022
Cash flows from operating activities (IFRS basis in accordance with IAS 7)	**7,898**	**9,171**
Add back		
– Income taxes paid	1,570	2,482
Deduct		
– Investments in property, plant and equipment	(1,740)	(1,685)
– Principal portion of lease liabilities paid	(174)	(186)
– Investments in intangible assets	(234)	(341)
– Disposal of property, plant and equipment	33	38
– Disposal of products	585	338
Pensions and other post-employment benefits		
– Add back total payments for defined benefit plans	314	290
– Deduct allocation of payments to operating free cash flow	(240)	(330)
Acquisition-related items, including transaction costs	19	5
Other operating items	0	0
Operating free cash flow	**8,031**	**9,782**

Effective 1 January 2023, certain line items in the statement of cash flows for the six months ended 30 June 2022 have been reclassified following certain presentational changes the Group made. Details and a reconciliation to the previously published statement of cash flows are disclosed in Note 1 of the Interim Financial Statements.

Free cash flow reconciliation in millions of CHF

	Six months ended 30 June 2023	2022
Cash flows from operating activities (IFRS basis in accordance with IAS 7)	**7,898**	**9,171**
Deduct		
– Investments in property, plant and equipment	(1,740)	(1,685)
– Principal portion of lease liabilities paid	(174)	(186)
– Investments in intangible assets	(234)	(341)
– Disposal of property, plant and equipment	33	38
– Disposal of products	585	338
– Interest paid	(368)	(228)
Other operating items, including acquisition-related items	19	5
Other treasury items	109	(15)
Free cash flow	**6,128**	**7,097**

Effective 1 January 2023, certain line items in the statement of cash flows for the six months ended 30 June 2022 have been reclassified following certain presentational changes the Group made. Details and a reconciliation to the previously published statement of cash flows are disclosed in Note 1 of the Interim Financial Statements.

Supplementary information used to calculate the divisional operating free cash flow is shown in the table below.

Divisional operating free cash flow information in millions of CHF

Six months ended 30 June	Pharmaceuticals 2023	Pharmaceuticals 2022	Diagnostics 2023	Diagnostics 2022	Corporate 2023	Corporate 2022	Group 2023	Group 2022
Depreciation, amortisation and impairments								
Depreciation of property, plant and equipment	654	665	540	562	34	28	1,228	1,255
Depreciation of right-of-use assets	95	108	60	59	6	7	161	174
Amortisation of intangible assets	280	383	81	88	–	–	361	471
Impairment (reversal) of property, plant and equipment	31	29	9	(1)	0	0	40	28
Impairment of right-of-use assets	2	0	0	0	0	0	2	0
Impairment of goodwill	0	0	0	0	–	–	0	0
Impairment of intangible assets	260	423	0	0	–	–	260	423
Total	**1,322**	**1,608**	**690**	**708**	**40**	**35**	**2,052**	**2,351**
Other adjustments								
Add back								
– Expenses for equity-settled equity compensation plans	294	248	51	42	38	26	383	316
– Net (income) expense for provisions	(35)	161	(22)	14	1	27	(56)	202
– Net (gain) loss from disposals	(584)	(343)	7	2	0	0	(577)	(341)
– Non-cash working capital and other items	177	29	108	88	0	1	285	118
Deduct								
– Utilisation of provisions	(355)	(373)	(113)	(115)	(18)	(35)	(486)	(523)
– Proceeds from disposals	603	347	15	29	0	0	618	376
Total	**100**	**69**	**46**	**60**	**21**	**19**	**167**	**148**
Operating profit cash adjustments	**1,422**	**1,677**	**736**	**768**	**61**	**54**	**2,219**	**2,499**

EBITDA

The Group does not use Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA) in either its internal management reporting or its external communications. In the opinion of the Group's management, operating free cash flow gives a more useful and consistent measurement of 'cash earnings' than EBITDA, which includes many non-cash items such as provisions, allowances for trade receivables and inventories, and certain non-cash entries arising from acquisition accounting and pension accounting. Operating free cash flow also includes the cash used for investments in property, plant and equipment, leased assets and intangible assets, whereas EBITDA excludes all costs and cash outflows for these items.

For the convenience of those readers who do use EBITDA, this is provided in the table below. As the starting point this uses the core results, which already exclude the amortisation and impairment of goodwill and intangible assets.

EBITDA (using core results) in millions of CHF

	Pharmaceuticals		Diagnostics		Corporate		Group	
Six months ended 30 June	2023	2022	2023	2022	2023	2022	2023	2022
EBITDA								
Core operating profit	11,018	11,289	1,619	2,953	(1,726)	(1,574)	10,911	12,668
Depreciation and impairment of property, plant and equipment – Core basis	642	654	541	561	34	28	1,217	1,243
Depreciation and impairment of right-of-use assets – Core basis	95	108	60	59	6	7	161	174
Amortisation and impairment of commercial software intangible assets – Core basis	2	1	1	2	–	–	3	3
EBITDA	**11,757**	**12,052**	**2,221**	**3,575**	**(1,686)**	**(1,539)**	**12,292**	**14,088**
– Margin, % of sales	51.8	53.9	31.3	35.9	–	–	41.3	43.6

Effective 1 January 2023, the Group has made certain presentational and cost allocation changes to the income statement. Details and a reconciliation to the previously published income statement are disclosed in Note 1 of the Interim Financial Statements. A reconciliation to the previously published divisional core results is disclosed above.

Net operating assets

Net operating assets allow for an assessment of the Group's operating performance of the business independently from financing and tax activities. Net operating assets are calculated as property, plant and equipment, leased assets ('right-of-use assets'), goodwill, intangible assets, net working capital and long-term net operating assets minus provisions.

The calculation of the net operating assets disclosed in Note 2 is shown in the table below.

Net operating assets reconciliation – 30 June 2023 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Treasury and taxation	Group
Property, plant and equipment	15,488	6,991	313	–	22,792
Right-of-use assets	800	261	42	–	1,103
Goodwill	5,660	4,904	–	–	10,564
Intangible assets	7,412	1,717	–	–	9,129
Inventories	5,075	3,421	–	–	8,496
Provisions	(1,983)	(664)	(117)	–	(2,764)
Current income tax net liabilities	–	–	–	(3,306)	(3,306)
Deferred tax net assets	–	–	–	5,996	5,996
Defined benefit plan net liabilities	–	–	–	(3,377)	(3,377)
Lease liabilities	–	–	–	(1,158)	(1,158)
Marketable securities	–	–	–	3,789	3,789
Cash and cash equivalents	–	–	–	3,720	3,720
Debt	–	–	–	(25,386)	(25,386)
Other net assets (liabilities)					
– Net working capital	(1,024)	814	(283)	–	(493)
– Other long-term net operating assets	846	(56)	(5)	–	785
– Other	–	–	–	454	454
Total net assets	**32,274**	**17,388**	**(50)**	**(19,268)**	**30,344**

Net debt

Net debt is used to monitor the Group's overall short- and long-term liquidity. Net debt is calculated as the sum of total long-term and short-term debt less marketable securities, cash and cash equivalents.

Net debt calculations, including details of movements during the current reported period, are shown in the table on page 36 in the Financial Review.

Net working capital

Net working capital is used to assess the Group's efficiency in utilising assets and short-term liquidity. Net trade working capital is calculated as trade receivables and inventories minus trade payables. Net working capital is calculated as net trade working capital adjusted for other receivables and other payables.

Net working capital and net trade working capital calculations are shown in the tables on page 22 (Pharmaceuticals Division), page 28 (Diagnostics Division) and page 30 (Corporate) in the Financial Review.

Constant exchange rates

Certain percentage changes in the Financial Review have been calculated using constant exchange rates (CER) which allow for an assessment of the Group's financial performance with the effects of exchange rate fluctuations eliminated. The percentage changes at constant exchange rates are calculated using simulations by reconsolidating both the current reported period and the prior period numbers at constant currency exchange rates, equalling the average exchange rates for the prior year. For example, a CER change between a 2023 line item and its 2022 equivalent is calculated using the average exchange rate for the year ended 31 December 2022 for both the 2023 line item and the 2022 line item and subsequently calculating the change in percent with respect to the two recalculated numbers.

Foreign exchange gains and losses and the gains (losses) on the net monetary positions in hyperinflationary economies are excluded from the calculation of CER growth rates in the earnings per share disclosures. In countries where there is a significant devaluation in the local currency in the current reported period, the simulations use the average exchange rate of the current reported period instead of the prior period to avoid that CER growth rates are artificially inflated.

Roche Securities

Number of shares and non-voting equity securities[a]

	30 June 2023	31 December 2022
Number of shares (nominal value: CHF 1.00)	106,691,000	106,691,000
Number of non-voting equity securities (*Genussscheine*) (no nominal value)	702,562,700	702,562,700
Total	**809,253,700**	**809,253,700**
Number of own shares and non-voting equity securities (*Genussscheine*) held	(10,602,033)	(10,073,029)
Total in issue	**798,651,667**	**799,180,671**

Data per share and non-voting equity security in CHF

		Six months ended 30 June 2023	2022
Earnings (basic)		8.93	10.65
Earnings (diluted)		8.87	10.54
Core earnings (basic)		10.17	11.89
Core earnings (diluted)		10.10	11.76
Stock price of share[b]	Opening	358.40	408.80
	High	362.20	433.00
	Low	268.00	343.00
	Period end	293.60	368.40
Stock price of non-voting equity security (*Genussschein*)[b]	Opening	290.50	379.10
	High	297.80	400.55
	Low	256.90	301.35
	Period end	273.50	318.55

Market capitalisation in millions of CHF

	30 June 2023	31 December 2022	30 June 2022
Period end	220,565	239,405	260,343

a) Each non-voting equity security (*Genussschein*) confers the same rights as any of the shares to participate in the available earnings and any remaining proceeds from liquidation following repayment of the nominal value of the shares and the participation certificate capital (if any). Shares and non-voting equity securities are listed on the SIX Swiss Exchange. Roche Holding Ltd has no restrictions as to ownership of its shares or non-voting equity securities.
b) All stock price data reflect daily closing prices.

Published by
F. Hoffmann-La Roche Ltd
Group Communications
4070 Basel, Switzerland
Tel.: +41 (0)61 688 11 11
www.roche.com

To order/download publications
Internet: roche.com/publications
E-mail: materials.management.mm1@roche.com
Fax: +41 (0)61 688 69 02

Media Relations
Tel.: +41 (0)61 688 88 88
E-mail: media.relations@roche.com

Investor Relations
Tel.: +41 (0)61 688 88 80
E-mail: investor.relations@roche.com

Corporate Sustainability Committee
Tel.: +41 (0)61 688 48 90
E-mail: corporate.sustainability@roche.com

Cautionary statement regarding forward-looking statements

This Half-Year Report contains certain forward-looking statements. These forward-looking statements may be identified by words such as 'believes', 'expects', 'anticipates', 'projects', 'intends', 'should', 'seeks', 'estimates', 'future' or similar expressions or by discussion of, among other things, strategy, goals, plans or intentions. Various factors may cause actual results to differ materially in the future from those reflected in forward-looking statements contained in this report, among others: (1) pricing and product initiatives of competitors; (2) legislative and regulatory developments and economic conditions; (3) delay or inability in obtaining regulatory approvals or bringing products to market; (4) fluctuations in currency exchange rates and general financial market conditions; (5) uncertainties in the discovery, development or marketing of new products or new uses of existing products, including without limitation negative results of clinical trials or research projects, unexpected side effects of pipeline or marketed products; (6) increased government pricing pressures; (7) interruptions in production; (8) loss of or inability to obtain adequate protection for intellectual property rights; (9) litigation; (10) loss of key executives or other employees; and (11) adverse publicity and news coverage.

The statement regarding earnings per share growth is not a profit forecast and should not be interpreted to mean that Roche's earnings or earnings per share for 2023 or any subsequent period will necessarily match or exceed the historical published earnings or earnings per share of Roche.

The Roche Half-Year Report is published in German and English. In case of doubt or differences of interpretation, the English version shall prevail over the German text.

F. Hoffmann-La Roche Ltd
4070 Basel, Switzerland

www.roche.com