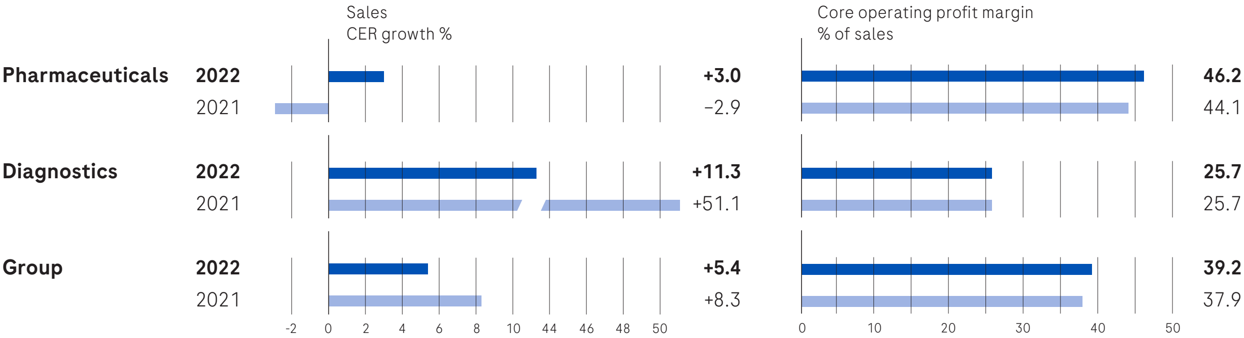
Roche

HALF-YEAR REPORT 2022

Finance in Brief

Key interim results



	Six months ended 30 June 2022 (CHF m)	2021 (CHF m)	% change (CHF)	% change (CER)	% of sales (2022)	% of sales (2021)
IFRS results						
Sales	32,295	30,713	+5	+5		
Operating profit	11,547	10,077	+15	+15	35.8	32.8
Net income	9,161	8,216	+12	+12	28.4	26.8
Net income attributable to Roche shareholders	8,530	7,803	+9	+9	26.4	25.4
Diluted EPS (CHF)	10.54	9.05	+16	+16		
Core results						
Research and development	6,628	6,690	−1	−1	20.5	21.8
Core operating profit	12,668	11,652	+9	+9	39.2	37.9
Core EPS (CHF)	11.76	10.56	+11	+11		
Free cash flow						
Operating free cash flow	9,782	8,117	+21	+21	30.3	26.4
Free cash flow	7,097	6,038	+18	+18	22.0	19.7

	30 June 2022 (CHF m)	31 December 2021 (CHF m)	% change (CHF)	% change (CER)
Net debt	(20,942)	(18,167)	+15	+8
Capitalisation	56,696	59,543	−5	−5
– Debt	27,750	31,198	−11	−14
– Equity	28,946	28,345	+2	+5

CER (Constant Exchange Rates): The percentage changes at Constant Exchange Rates are calculated using simulations by reconsolidating both the 2022 and 2021 results at constant exchange rates (the average rates for the year ended 31 December 2021). For the definition of CER see page 75.

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 68–71 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 71–73 and reconciliations between the IFRS cash flow and free cash flow are given there.

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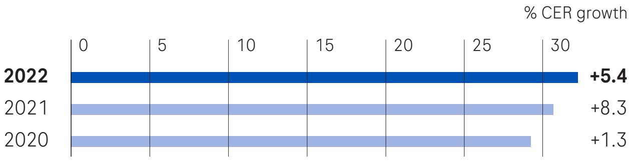
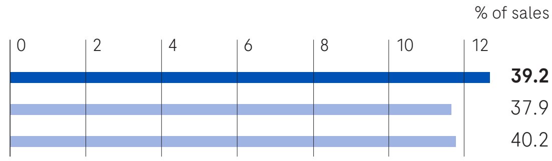
Financial Review

Group results

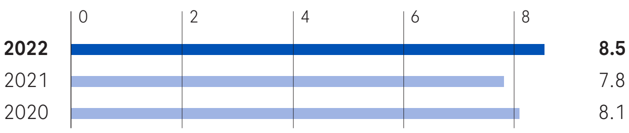
Sales in billions of CHF



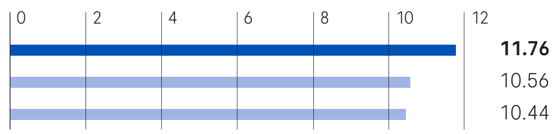
Core operating profit in billions of CHF



Net income attributable to Roche shareholders in billions of CHF



Core EPS in CHF



In the first half of 2022 the Roche Group achieved sales growth of 5% and core operating profit growth of 9%. IFRS net income increased by 12% while Core EPS increased by 11%. Changes in exchange rates against the Swiss franc largely offset each other, so there was a negligible impact on the results expressed in Swiss francs compared to constant exchange rates (CER).

The 5% sales growth was mainly driven by the Diagnostics Division, with increased sales of COVID-19-related products and growth in routine testing across all regions. In the Pharmaceuticals Division sales were higher due to the continuing uptake of new medicines, which more than offset the negative impact from biosimilar competition. The core operating profit growth of 9% reflected the sales growth and also the income from the Ultomiris patent settlement.

IFRS net income increased by 12% and Core EPS by 11%. These increases included positive impacts of 3 percentage points from the Ultomiris patent settlement, net of tax, and 6 percentage points from the share repurchase from Novartis, net of additional financing costs and tax. Operating free cash flow was CHF 9.8 billion, an increase of 21%, due to the higher cash generation of the business including the Ultomiris patent settlement. The free cash flow was CHF 7.1 billion, an increase of 18%, as a result of the growth in the operating free cash flow.

Divisional operating results for the six months ended 30 June 2022

	Pharmaceuticals (CHF m)	Diagnostics (CHF m)	Corporate (CHF m)	Group (CHF m)
Sales	22,347	9,948	–	32,295
Core operating profit	10,318	2,560	(210)	12,668
– Margin, % of sales	46.2	25.7	–	39.2
Operating profit	9,360	2,466	(279)	11,547
– Margin, % of sales	41.9	24.8	–	35.8
Operating free cash flow	8,667	1,509	(394)	9,782
– Margin, % of sales	38.8	15.2	–	30.3

Divisional operating results – Development of results compared to the six months ended 30 June 2021

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales				
– % change at CER	+3	+11	–	+5
Core operating profit				
– % change at CER	+8	+11	−4	+9
– Margin: percentage point change	+2.3	0	–	+1.4
Operating profit				
– % change at CER	+13	+22	+4	+15
– Margin: percentage point change	+3.9	+2.1	–	+3.1
Operating free cash flow				
– % change at CER	+20	+29	+19	+21
– Margin: percentage point change	+5.5	+2.1	–	+4.0

Sales in the Pharmaceuticals Division were CHF 22.3 billion (2021: CHF 21.7 billion), an increase of 3% at CER, driven by growing demand for Hemlibra, Ocrevus, Evrysdi, Phesgo and Tecentriq, which together contributed an additional CHF 1.5 billion (CER) of sales. Sales of MabThera/Rituxan, Herceptin and Avastin decreased by a combined CHF 1.0 billion (CER), as the impact of biosimilar competition further slowed down.

The Diagnostics Division reported sales of CHF 9.9 billion, an increase of 11% at CER. The sales growth was driven by increased sales of COVID-19-related products and growth in routine testing across all regions. Total sales of COVID-19-related tests (at CER), notably the SARS-CoV-2 Rapid Antigen test, were CHF 3.1 billion (2021: CHF 2.5 billion). Sales in the division's base business increased by 6% at CER, driven by the immunodiagnostics business, with cardiac tests being a key contributor.

The Pharmaceuticals Division's core operating profit increased by 8%, above the sales increase of 3%, in part due to the CHF 0.7 billion of income from the Ultomiris patent settlement. Cost of sales increased by 14% as a result of sales volume growth and the impact of the reversal of an idle-plant impairment in 2021. Marketing and distribution costs increased by 4% driven by higher spending on digital customer solutions and product launches and also by pre-launch activities. Research and development costs were CHF 5.7 billion, with oncology remaining the primary area and the cancer immunotherapy portfolio being a key driver. Neuroscience, immunology and ophthalmology also represented significant areas of spending. The decline of 3% in research and development costs was driven by the co-development costs for Ronapreve in 2021.

In the Diagnostics Division, core operating profit increased by 11% at CER to CHF 2.6 billion, in line with the sales growth of 11%. Cost of sales increased by 14% driven by sales volume growth and a mix effect from the increased volumes of SARS-CoV-2 Rapid Antigen tests. Higher distribution costs related to these tests were the main factor in the 3% increase in marketing and distribution expenses. Research and development costs increased by 11%, with digital solutions being the main growth driver. In addition, investments continued for projects in sequencing, mass spectrometry and point of care.

The IFRS operating profit increased by 13% (CER) in the Pharmaceuticals Division, ahead of the 8% growth in core operating profit, because of lower intangible assets amortisation. In the Diagnostics Division, IFRS operating profit increased by 22% (CER), compared to the 11% growth in core operating profit, due to the significant spending on restructuring activities in 2021. The 2022 interim results for the Group include CHF 0.9 billion for the amortisation and impairment of intangible assets and CHF 0.3 billion of expenses from global restructuring plans.

Financing costs increased by 42% (CER) to CHF 0.3 billion mainly due to additional interest expense from the new debt issued to finance the share repurchase from Novartis. Other financial income (expense) contributed CHF 0.3 billion less due to fair value changes in equity investments. The Group's effective core tax rate decreased to 16.1% compared to 16.9% in the first half of 2021. The decrease was mainly due to the relatively higher impact from the resolution of several tax disputes which reduced the Group's effective core tax rate by 2.4 percentage points in the first half of 2022 compared to 0.8 percentage points in the first half of 2021. This decrease was partially offset by the higher percentage of core profit contribution coming from tax jurisdictions with tax rates higher than the Group's average tax rate, notably the tax payable in Japan on the Ultomiris patent settlement.

Net income increased by 12% on an IFRS basis to CHF 9.2 billion and increased by 7% on a core basis to CHF 10.2 billion. The amount of net income attributable to non-controlling interests increased by 62% on an IFRS basis, and by 61% on a core basis, due to the impact of the Ultomiris patent settlement at Chugai and the increased underlying contribution of Chugai to the overall Group results.

Operating free cash flow was CHF 9.8 billion, an increase of 21% at CER. This was due to the higher cash generation of the business, including the cash received from the Ultomiris patent settlement, and a lower increase in net working capital. The free cash flow of CHF 7.1 billion, an increase of 18% at CER, was a result of the growth in the operating free cash flow partly offset by higher tax payments and a decrease in the cash flow from treasury activities.

Income statement

	Six months ended 30 June 2022 (CHF m)	2021 (CHF m)	% change (CHF)	% change (CER)
IFRS results				
Sales	32,295	30,713	+5	+5
Royalties and other operating income	1,943	1,420	+37	+38
Revenue	**34,238**	**32,133**	**+7**	**+7**
Cost of sales	(9,987)	(8,992)	+11	+11
Marketing and distribution	(4,485)	(4,489)	0	0
Research and development	(6,899)	(7,110)	–3	–3
General and administration	(1,320)	(1,465)	–10	–8
Operating profit	**11,547**	**10,077**	**+15**	**+15**
Financing costs	(304)	(211)	+44	+42
Other financial income (expense)	(258)	21	–	–
Profit before taxes	**10,985**	**9,887**	**+11**	**+12**
Income taxes	(1,824)	(1,671)	+9	+12
Net income	**9,161**	**8,216**	**+12**	**+12**
Attributable to				
– Roche shareholders	8,530	7,803	+9	+9
– Non-controlling interests	631	413	+53	+62
EPS – Basic (CHF)	10.65	9.14	+17	+16
EPS – Diluted (CHF)	10.54	9.05	+16	+16
Core results [a]				
Sales	32,295	30,713	+5	+5
Royalties and other operating income	1,943	1,420	+37	+38
Revenue	**34,238**	**32,133**	**+7**	**+7**
Cost of sales	(9,305)	(8,237)	+13	+14
Marketing and distribution	(4,459)	(4,292)	+4	+4
Research and development	(6,628)	(6,690)	–1	–1
General and administration	(1,178)	(1,262)	–7	–5
Operating profit	**12,668**	**11,652**	**+9**	**+9**
Financing costs	(300)	(207)	+45	+42
Other financial income (expense)	(258)	21	–	–
Profit before taxes	**12,110**	**11,466**	**+6**	**+6**
Income taxes	(1,950)	(1,939)	+1	+3
Net income	**10,160**	**9,527**	**+7**	**+7**
Attributable to				
– Roche shareholders	9,518	9,104	+5	+4
– Non-controlling interests	642	423	+52	+61
Core EPS – Basic (CHF)	11.89	10.66	+12	+11
Core EPS – Diluted (CHF)	11.76	10.56	+11	+11

a) See pages 68–71 for definition of core results and Core EPS.

Impact of the COVID-19 pandemic

In the Pharmaceuticals Division sales of Ronapreve, a neutralising antibody combination developed with Regeneron, increased due to sales in Japan. Sales of Actemra/RoActemra, which has received US FDA Emergency Use Authorization for the treatment of COVID-19 in hospitalised adults and children, declined due to lower demand for such patients. Roche's portfolio of COVID-19 tests, notably the SARS-CoV-2 Rapid Antigen test, contributed significantly to the Diagnostics Division's overall sales growth. The sales of the various COVID-19-related diagnostic tests in the first half of 2022 was CHF 3.1 billion (CER) compared to CHF 2.5 billion (CER) in the first half of 2021.

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. The in-licensed Halozyme patent rights for subcutaneous formulations of MabThera/Rituxan and Herceptin begin to expire in 2024. Interim sales, including regional breakdowns, for MabThera/Rituxan, Herceptin and Avastin are disclosed below 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

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% divisional sales (2022)	% divisional sales (2021)
United States	1,296	1,733	–28	5.8	8.0
Europe	454	668	–29	2.0	3.1
Japan	308	393	–14	1.4	1.8
International	1,380	1,626	–16	6.2	7.5
Total sales	**3,438**	**4,420**	**–22**	**15.4**	**20.4**

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 late 2019 in the colorectal cancer indication and in 2020 in the non-small cell lung 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 has come to market in the US at the beginning of the third quarter of 2022. Interim US sales of Lucentis were CHF 572 million (2021: CHF 665 million), a decline of 17% at CER (as reported in US dollars).

Esbriet. Following a negative decision from the US District Court for the District of Delaware in March 2022, which is currently under appeal, 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 313 million (2021: CHF 361 million), a decline of 17% at CER (as reported in US dollars).

Mergers and acquisitions

There were no significant developments in the first half of 2022. Further details are given in Note 6 to the Interim Financial Statements.

Alliance transactions

In the first half of 2022 in-licensing and alliance transactions resulted in intangible assets of CHF 0.1 billion (2021: CHF 0.3 billion) being recognised.

Global restructuring plans

During the first half of 2022 the Group expanded the implementation of various global restructuring plans initiated in prior years.

Global restructuring plans: costs incurred for the six months ended 30 June 2022 in millions of CHF

	Diagnostics	Site consolidation	Other plans	Total
Global restructuring costs				
– Employee-related costs	5	27	114	146
– Site closure costs	5	28	35	68
– Divestments of products and businesses	0	0	0	0
– Other reorganisation expenses	10	3	39	52
Total global restructuring costs	**20**	**58**	**188**	**266**
Additional costs				
– Impairment of goodwill	0	0	0	0
– Impairment of intangible assets	0	0	0	0
– Legal and environmental cases	0	0	(1)	(1)
Total costs	**20**	**58**	**187**	**265**

Other global restructuring plans. Employee-related costs were connected with the outsourcing of operational activities to the global shared service centres and external providers as well as with driving efficiency gains.

Impairment of goodwill and intangible assets

There were intangible asset impairment charges of CHF 0.4 billion in the Pharmaceuticals Division. These charges mainly related to a partial impairment of the product intangible asset for Flatiron's technology. There were no impairments in the Diagnostics Division. Further details are given in Note 9 to the Interim Financial Statements.

Legal and environmental cases

There were no significant developments in the first half of 2022. Further details are given in Note 10 to the Interim Financial Statements.

Share repurchase

On 6 December 2021, the Roche Group repurchased 53.3 million Roche shares held by Novartis for a total consideration of CHF 19.0 billion. The repurchased shares were reported as treasury shares as at 31 December 2021. Upon the cancellation of these shares in February 2022 the share capital of Roche Holding Ltd, which is the Group's parent company, decreased by CHF 53.3 million from CHF 160.0 million to CHF 106.7 million. The CHF 19.0 billion bridge loan facility drawn in 2021 to finance the share repurchase was fully repaid by May 2022, partly from the proceeds from the new debt issuances and partly from internal cash generation. Further details are given in Notes 11 and 12 to the Interim Financial Statements.

Net income and earnings per share

IFRS net income increased by 12% while Core EPS increased by 11%. The Ultomiris patent settlement had an accretive impact, net of tax, of approximately 3 percentage points on EPS. The repurchase of shares from Novartis and the consequent additional financing costs had an accretive effect, net of tax, on EPS of approximately 6 percentage points. The core basis excludes non-core items such as global restructuring costs, amortisation and impairment of goodwill and intangible assets, and mergers and acquisitions and alliance transactions. The amount of net income attributable to non-controlling interests increased by 62% on an IFRS basis, and by 61% on a core basis, due to the impact of the Ultomiris patent settlement at Chugai and the increased underlying contribution of Chugai to the overall Group results.

Net income

	Six months ended 30 June 2022 (CHF m)	2021 (CHF m)	% change (CHF)	% change (CER)
IFRS net income	**9,161**	**8,216**	**+12**	**+12**
Reconciling items (net of tax)				
– Global restructuring	218	405	-46	-45
– Intangible asset amortisation	426	716	-41	-42
– Goodwill and intangible asset impairment	349	134	+160	+151
– Mergers and acquisitions and alliance transactions	(15)	31	–	–
– Legal and environmental cases	(11)	27	–	–
– Normalisation of equity compensation plan tax benefit	32	(2)	–	–
Core net income	**10,160**	**9,527**	**+7**	**+7**

Supplementary net income and EPS information is given on pages 68 to 71. This includes calculations of Core EPS and reconciles the core results to the Group's published IFRS results.

Financial position

Financial position

	30 June 2022 (CHF m)	31 December 2021 (CHF m)	% change (CHF)	% change (CER)
Pharmaceuticals				
Net working capital	3,691	2,405	+53	+55
Long-term net operating assets	30,874	31,010	0	-2
Diagnostics				
Net working capital	3,935	3,030	+30	+30
Long-term net operating assets	13,218	13,030	+1	+1
Corporate				
Net working capital	(186)	(314)	-41	-40
Long-term net operating assets	133	116	+15	+15
Net operating assets	**51,665**	**49,277**	**+5**	**+4**
Net debt	(20,942)	(18,167)	+15	+8
Lease liabilities	(1,316)	(1,354)	-3	-4
Pensions	(3,225)	(4,605)	-30	-29
Income taxes	2,401	2,273	+6	+2
Other non-operating assets, net	363	921	-61	-68
Total net assets	**28,946**	**28,345**	**+2**	**+5**

Compared to the start of the year the Swiss franc appreciated against the Japanese yen and the euro, which had a significant effect on the Group's net operating assets. This negative translation effect was partially compensated by the depreciation of the Swiss franc against the US dollar, net of the effect of the natural hedge from the Group's US dollar-denominated debt. The exchange rates used are given on page 30.

Net working capital increased significantly in both divisions. In the Pharmaceuticals Division, the increase in inventories was driven by the ramp-up of launch products, and by ensuring supply resilience. The decrease in trade payables came mainly from the settlement of relatively high balances at the start of the year. The net liability position for other receivables/payables decreased as a result of lower accrued royalties. In the Diagnostics Division, the net liability for other receivables/payables decreased mainly due to the settlement of year-end accruals, notably employee-related accruals and customer incentive accruals, while inventories increased to support the base business, notably in the Core Lab customer area.

The increase in net debt was due to dividend payments of CHF 7.7 billion, partly offset by the free cash flow of CHF 7.1 billion. The CHF 19.0 billion bridge loan facility drawn in 2021 to finance the share repurchase from Novartis was fully repaid by May 2022, partly from the proceeds from the new debt issuances and partly from internal cash generation. The net pension liability was 29% lower at CER following increases in discount rates. The net asset position for income taxes increased due to tax payments exceeding tax expenses, partially offset by deferred tax impacts from the decrease in the net pension liability. Lease liabilities decreased to CHF 1.3 billion due to the regular payments.

Free cash flow

Free cash flow

	Six months ended 30 June 2022 (CHF m)	2021 (CHF m)	% change (CHF)	% change (CER)
Pharmaceuticals	8,667	7,282	+19	+20
Diagnostics	1,509	1,178	+28	+29
Corporate	(394)	(343)	+15	+19
Operating free cash flow	**9,782**	**8,117**	**+21**	**+21**
Treasury activities	(203)	104	–295	–296
Taxes paid	(2,482)	(2,183)	+14	+15
Free cash flow	**7,097**	**6,038**	**+18**	**+18**

See pages 71–73 for definition of free cash flow.

The Group's operating free cash flow for the first six months of 2022 was CHF 9.8 billion, an increase of 21% at CER. This was due to the higher cash generation of the business and a lower increase in net working capital. The Ultomiris patent settlement at Chugai also had a positive impact on the Pharmaceuticals Division's operating free cash flow. The free cash flow of CHF 7.1 billion, an increase of 18% at CER, was a result of the growth in the operating free cash flow partly offset by higher tax payments and sales of financial long-term assets in the first half of 2021 that were not repeated in 2022.

Pharmaceuticals operating results

Pharmaceuticals Division interim operating results

	2022 (CHF m)	2021 (CHF m)	% change (CHF)	% change (CER)
IFRS results				
Sales	22,347	21,671	+3	+3
Royalties and other operating income	1,918	1,372	+40	+41
Revenue	**24,265**	**23,043**	**+5**	**+5**
Cost of sales	(5,029)	(4,515)	+11	+10
Marketing and distribution	(3,112)	(3,086)	+1	0
Research and development	(5,994)	(6,280)	–5	–5
General and administration	(770)	(849)	–9	–8
Operating profit	**9,360**	**8,313**	**+13**	**+13**
– Margin, % of sales	41.9	38.4	+3.5	+3.9
Core results[a]				
Sales	22,347	21,671	+3	+3
Royalties and other operating income	1,918	1,372	+40	+41
Revenue	**24,265**	**23,043**	**+5**	**+5**
Cost of sales	(4,430)	(3,882)	+14	+14
Marketing and distribution	(3,096)	(2,962)	+5	+4
Research and development	(5,729)	(5,883)	–3	–3
General and administration	(692)	(754)	–8	–8
Core operating profit	**10,318**	**9,562**	**+8**	**+8**
– Margin, % of sales	46.2	44.1	+2.1	+2.3
Financial position				
Net working capital	3,691	2,405	+53	+55
Long-term net operating assets	30,874	31,010	0	–2
Net operating assets	**34,565**	**33,415**	**+3**	**+3**
Free cash flow[b]				
Operating free cash flow	8,667	7,282	+19	+20
– Margin, % of sales	38.8	33.6	+5.2	+5.5

a) See pages 68–71 for definition of core results.
b) See pages 71–73 for definition of free cash flow.

Sales overview

Pharmaceuticals Division – Interim sales by therapeutic area

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
Oncology	10,086	10,194	–1	45.1	47.0
Immunology	3,752	4,006	–7	16.8	18.5
Neuroscience	3,750	2,973	+24	16.8	13.7
Haemophilia A	1,826	1,393	+30	8.2	6.4
Infectious diseases	810	888	–3	3.6	4.1
Ophthalmology	683	665	–1	3.1	3.1
Other therapeutic areas	1,440	1,552	–8	6.4	7.2
Total sales	**22,347**	**21,671**	**+3**	**100**	**100**

Sales in the Pharmaceuticals Division in the first half of 2022 were CHF 22.3 billion (2021: CHF 21.7 billion), an increase of 3% at CER. There was continued growing demand for Hemlibra, Ocrevus, Evrysdi, Phesgo and Tecentriq, which together contributed an additional CHF 1.5 billion (CER) of sales. Sales of MabThera/Rituxan, Herceptin and Avastin decreased by a combined CHF 1.0 billion (CER), as the impact of biosimilar competition further slowed down. Ocrevus continued its growth development, with a sales increase of 17% to CHF 2.9 billion. Perjeta sales were 5% higher at CHF 2.1 billion driven by growth in the International region, with China and Brazil being key factors. Hemlibra continued to show uptake in the US, the International region and across major European markets, with sales reaching CHF 1.8 billion, an increase of 30%. Tecentriq sales grew by 11% to CHF 1.8 billion, driven by the US and Europe.

Sales in the oncology therapeutic area decreased by 1%, due to the biosimilar competition for MabThera/Rituxan, Herceptin and Avastin described above, partially compensated by growth of Phesgo, Tecentriq, Kadcyla, Alecensa and Perjeta. Phesgo continued to show a considerable uptake predominantly in Europe and in the US, with total sales of CHF 0.3 billion. Tecentriq sales grew mostly due to higher demand in the US and Germany. Kadcyla showed growth primarily in the International region followed by Europe. Sales growth was driven by the usage of Kadcyla in the early breast cancer setting. Sales of Alecensa grew across all regions with China being the main driver. Perjeta sales grew mostly due to higher demand in China in both early and metastatic breast cancer settings. This was partly offset by a decline in Perjeta sales in Europe following the launch of Phesgo in 2020.

Sales in immunology decreased by 7%, driven by a decrease in Actemra/RoActemra sales of 10% due to lower demand for hospitalised patients with severe COVID-19 pneumonia. Sales of Esbriet were 14% lower as a result of generic competition in the US. These declines in immunology sales were partly offset by higher sales of Xolair in the US driven by steady growth in the chronic spontaneous urticaria indication. Sales in neuroscience grew by 24% mainly due to Ocrevus and also due to Evrysdi, which reported sales of CHF 0.5 billion, following a high uptake mainly in Europe and the US. Infectious diseases sales were 3% lower due to a decline in Rocephin sales in China. Ronapreve sales increased by 11% due to sales in Japan. Sales in ophthalmology decreased by 1% as the fall in Lucentis sales of 17% in the US due to competitive pressure was largely offset by the initial uptake of Vabysmo. In other therapeutic areas, sales of Activase/TNKase were 10% lower, mainly due to the unwinding of temporary stockpiling in the US by distributors and customers at the end of 2021.

Product sales

Pharmaceuticals Division – Interim sales

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
Oncology					
Perjeta	2,061	1,968	+5	9.2	9.1
Tecentriq	1,758	1,599	+11	7.9	7.4
Herceptin	1,179	1,396	–16	5.3	6.4
Avastin	1,142	1,645	–29	5.1	7.6
Kadcyla	1,074	959	+14	4.8	4.4
MabThera/Rituxan[a]	868	1,071	–20	3.9	4.9
Alecensa	745	631	+19	3.3	2.9
Gazyva/Gazyvaro	349	324	+8	1.6	1.5
Phesgo	325	96	+241	1.5	0.4
Polivy	177	94	+91	0.8	0.4
Erivedge	131	127	+2	0.6	0.6
Others	277	284	0	1.1	1.4
Total Oncology	**10,086**	**10,194**	**–1**	**45.1**	**47.0**
Immunology					
Actemra/RoActemra	1,455	1,642	–10	6.5	7.6
Xolair	1,025	887	+11	4.6	4.1
Esbriet	457	526	–14	2.0	2.4
Pulmozyme	279	276	0	1.2	1.3
CellCept	270	298	–8	1.2	1.4
MabThera/Rituxan[a]	249	308	–21	1.1	1.4
Others	17	69	–74	0.2	0.3
Total Immunology	**3,752**	**4,006**	**–7**	**16.8**	**18.5**
Neuroscience					
Ocrevus	2,910	2,438	+17	13.0	11.3
Evrysdi	500	243	+106	2.2	1.1
Madopar	189	195	–4	0.8	0.9
Others	151	97	+58	0.8	0.4
Total Neuroscience	**3,750**	**2,973**	**+24**	**16.8**	**13.7**
Haemophilia A					
Hemlibra	1,826	1,393	+30	8.2	6.4
Total Haemophilia A	**1,826**	**1,393**	**+30**	**8.2**	**6.4**
Infectious diseases					
Ronapreve	609	595	+11	2.7	2.7
Rocephin	77	139	–46	0.3	0.6
Others	124	154	–18	0.6	0.8
Total Infectious diseases	**810**	**888**	**–3**	**3.6**	**4.1**
Ophthalmology					
Lucentis	572	665	–17	2.6	3.1
Vabysmo	109	0	–	0.5	0.0
Others	2	0	–	0.0	0.0
Total Ophthalmology	**683**	**665**	**–1**	**3.1**	**3.1**
Other therapeutic areas					
Activase/TNKase	559	598	–10	2.5	2.8
Mircera	191	214	–10	0.9	1.0
Others	690	740	–6	3.0	3.4
Total other therapeutic areas	**1,440**	**1,552**	**–8**	**6.4**	**7.2**
Total sales	**22,347**	**21,671**	**+3**	**100**	**100**

a) Total MabThera/Rituxan sales of CHF 1,117 million (2021: CHF 1,379 million) split between oncology and immunology franchises.

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

Ocrevus interim regional sales

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	2,140	1,849	+11	73.5	75.8
Europe	539	422	+34	18.5	17.3
International	231	167	+43	8.0	6.9
Total sales	**2,910**	**2,438**	**+17**	**100**	**100**

There was continuously growing demand in both indications in the US, with the growth being driven both by new and returning patients, with a higher proportion of sales coming from returning patients. In Europe and the International region, Ocrevus continued to show high uptake where launched, notably in Germany, Italy, Spain and Canada.

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

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	740	703	+1	35.9	35.7
Europe	457	578	-17	22.2	29.4
Japan	120	132	-1	5.8	6.7
International	744	555	+34	36.1	28.2
Total sales	**2,061**	**1,968**	**+5**	**100**	**100**

Herceptin interim regional sales

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	263	348	-27	22.3	24.9
Europe	233	277	-11	19.8	19.8
Japan	28	43	-28	2.4	3.1
International	655	728	-11	55.5	52.2
Total sales	**1,179**	**1,396**	**-16**	**100**	**100**

Kadcyla interim regional sales

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	415	401	-1	38.6	41.8
Europe	350	336	+10	32.6	35.0
Japan	68	60	+23	6.3	6.3
International	241	162	+52	22.5	16.9
Total sales	**1,074**	**959**	**+14**	**100**	**100**

Phesgo interim regional sales

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	138	52	+155	42.5	54.2
Europe	163	39	+338	50.2	40.6
International	24	5	+403	7.3	5.2
Total sales	**325**	**96**	**+241**	**100**	**100**

Sales in the HER2 franchise increased by 6% to CHF 4.6 billion. Sales of Perjeta grew by 5%, with the increases driven by China in both early breast cancer and metastatic breast cancer settings. In the US, sales of Perjeta increased by 1% due to growth in the adjuvant setting being largely offset by a reduction in sales volume following the launch of Phesgo. Herceptin sales were 16% lower as a result of biosimilar erosion. Kadcyla sales increased by 14% driven by the usage in the early breast cancer setting, with notable growth in Japan and Italy. The decrease of 1% in sales of Kadcyla in the US was due to competitive pressure. Phesgo sales showed a considerable uptake in the US and in Europe, notably in the UK.

Hemlibra. For haemophilia A.

Hemlibra interim regional sales

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	1,098	837	+26	60.1	60.1
Europe	360	292	+30	19.7	21.0
Japan	180	166	+19	9.9	11.9
International	188	98	+89	10.3	7.0
Total sales	**1,826**	**1,393**	**+30**	**100**	**100**

Sales growth continued, especially in the US and Europe in the non-inhibitor segment. Sales in the International region grew across major markets, notably in Canada. Sales in Japan were higher 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 and unresectable or metastatic hepatocellular carcinoma (HCC).

Tecentriq interim regional sales

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	951	811	+13	54.1	50.7
Europe	383	339	+19	21.8	21.2
Japan	218	257	–7	12.4	16.1
International	206	192	+9	11.7	12.0
Total sales	**1,758**	**1,599**	**+11**	**100**	**100**

Sales increased by 11% with growth mainly in the US and Europe. 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 PD-L1-positive triple-negative breast cancer indications, notably in Germany. In Japan, sales declined by 7% following government price cuts, partly offset by growth in the HCC indication.

Actemra/RoActemra. For rheumatoid arthritis (RA), systemic juvenile idiopathic arthritis, polyarticular juvenile idiopathic arthritis and giant cell arteritis.

Actemra/RoActemra interim regional sales

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	664	689	–7	45.6	42.0
Europe	420	456	–3	28.9	27.8
Japan	174	182	+4	12.0	11.1
International	197	315	–37	13.5	19.1
Total sales	**1,455**	**1,642**	**–10**	**100**	**100**

Sales decreased by 10%, mainly in the International region and the US, driven by lower demand for hospitalised patients with severe COVID-19 pneumonia.

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

Avastin interim regional sales

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	342	530	–38	29.9	32.2
Europe	116	257	–53	10.2	15.6
Japan	263	330	–13	23.0	20.1
International	421	528	–20	36.9	32.1
Total sales	**1,142**	**1,645**	**–29**	**100**	**100**

Sales decreased in the US and Europe due to the continuing impact of biosimilars. In the International region, the main driver in the sales decline was biosimilar competition in China.

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

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	691	855	–22	61.9	62.0
Europe	105	134	–17	9.4	9.7
Japan	17	20	–8	1.5	1.5
International	304	370	–19	27.2	26.8
Total sales	**1,117**	**1,379**	**–21**	**100**	**100**

Sales were 21% lower due to biosimilar erosion across all regions. US sales decreased by 22%, 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

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	1,025	887	+11	100	100
Total sales	**1,025**	**887**	**+11**	**100**	**100**

Sales increased by 11% driven by growth in the chronic spontaneous urticaria indication. Xolair remains the market leader in the larger allergic asthma indication.

Alecensa. For ALK-positive non-small cell lung cancer (NSCLC). The global uptake continued with a 19% increase in sales. The International region, notably China, and US were the main drivers.

Ronapreve. For the treatment of recently diagnosed high-risk patients with mild to moderate COVID-19. Sales for Ronapreve increased by 11% in the first half of 2022 driven by sales in Japan.

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). US sales decreased by 17%, due to competitive pressure. The first biosimilar version of Lucentis with a restricted label has come to market in the US at the beginning of the third quarter of 2022.

Activase/TNKase. For acute ischaemic stroke (AIS) and acute myocardial infarction (AMI). Sales were 10% lower mainly due to temporary stockpiling in the US by distributors and customers at the end of 2021.

Evrysdi. For spinal muscular atrophy (SMA). Sales were 106% higher, driven by the uptake in Europe and the US.

Esbriet. For idiopathic pulmonary fibrosis (IPF). Sales declined by 14% driven by the launch of the first US generic versions in the second quarter of 2022 and by a reduced share of new patient prescriptions.

Pharmaceuticals Division – Interim sales by region

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
United States	11,363	10,802	+1	50.8	49.8
Europe	4,104	4,485	–4	18.4	20.7
Japan	2,202	1,808	+34	9.9	8.3
International	4,678	4,576	+2	20.9	21.2
– *of which China*	*1,618*	*1,669*	*–7*	*7.2*	*7.7*
Total sales	**22,347**	**21,671**	**+3**	**100**	**100**

United States. Sales grew by 1% with the increased sales of Hemlibra, Ocrevus and Tecentriq being largely offset by a combined 28% fall in total MabThera/Rituxan, Herceptin and Avastin sales and also by lower sales of Lucentis and Esbriet. Hemlibra continued to show growth in the non-inhibitor segment with sales growth of 26%. Ocrevus sales increased by 11% and were driven by both new and returning patient demand. Tecentriq sales increased by 13% due to continued growth in new indications. Xolair sales increased by 11%, with growth in the chronic spontaneous urticaria indication. Vabysmo, to treat adults with neovascular or 'wet' age-related macular degeneration (nAMD) and diabetic macular oedema (DME), achieved CHF 0.1 billion of sales since its launch. Sales for Phesgo continued to grow since the launch of the product in 2020. Evrysdi showed a continued uptake since its launch, with sales growth of 32%. Lucentis sales decreased due to competitive pressure. Actemra/RoActemra sales decreased by 7% mostly due to lower demand for hospitalised patients with severe COVID-19 pneumonia.

Europe. Sales declined by 4% mainly driven by the base effect of the initial orders of Ronapreve in the first half of 2021. Excluding Ronapreve, sales grew by 6% at CER, with sales of new products more than offsetting the impacts of biosimilar competition. Biosimilar competition led to a combined sales decline of 29% for MabThera/Rituxan, Herceptin and Avastin. There was sales growth of 34% of Ocrevus, notably in Germany and Italy. Evrysdi also showed high uptake, mainly in Germany and the UK. Phesgo reported continued uptake across all countries with the UK being a key growth driver. Actemra/RoActemra sales decreased by 3% mostly due to lower COVID-19-related demand.

Japan. Sales increased by 34%, mainly as a result of Ronapreve sales of CHF 0.5 billion, supported by sales growth for recently launched products including Evrysdi, Polivy, Hemlibra and Enspryng. These compensated for a combined 14% 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 2% with a sales growth of 15% in Canada. Sales in China were 7% lower mainly driven by the biosimilar erosion for MabThera/Rituxan, Herceptin and Avastin and lower sales for Rocephin, partially offset by continued sales growth of Alecensa, Perjeta and Gazyva/Gazyvaro. The COVID-19 restrictions in China had a certain negative impact on sales across the product portfolio. Excluding China, sales in the International region increased by 7% mainly driven by higher demand for Perjeta, Hemlibra, Kadcyla and Ocrevus.

Operating results

Pharmaceuticals Division – Royalties and other operating income for the six months ended 30 June

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Royalty income	471	515	–11
Income from out-licensing agreements	762	57	Over +500
Income from disposal of products, profit-sharing agreements and other	685	800	–16
Total – IFRS and Core basis	**1,918**	**1,372**	**+41**

Royalties and other operating income increased by 41% at CER. Royalty income was 11% lower, due to lower royalty income from Lucentis. Income from out-licensing agreements increased as a result of income from the Ultomiris patent settlement. Effective 17 March 2022 Chugai and Alexion Pharmaceuticals, Inc. ('Alexion'), a fully-owned subsidiary of AstraZeneca PLC, entered into a settlement agreement resolving all patent disputes between the two companies related to Ultomiris (ravulizumab). Under the terms of the agreement, Alexion made a single payment of USD 775 million to Chugai. No further amounts are payable by either party. The agreement includes the granting by Chugai to Alexion of a worldwide, non-exclusive, fully paid-up licence in respect of Ultomiris. Accordingly this revenue of CHF 726 million has been presented as 'Income from out-licensing agreements' in the Roche Group's financial statements, and in accordance with Roche's established core results concept, has been treated as part of core net income. Income from product disposals 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. There was also growth in profit-sharing income, which increased to CHF 343 million driven by increased sales of Venclexta/Venclyxto in the US.

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

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Manufacturing cost of goods sold and period costs	(2,720)	(2,503)	+9
Royalty expenses	(734)	(628)	+14
Collaboration and profit-sharing agreements	(946)	(927)	+1
Amortisation of commercial software intangible assets	(1)	–	–
Impairment of property, plant and equipment and right-of-use assets	(29)	176	–
Cost of sales – Core basis	**(4,430)**	**(3,882)**	**+14**
Global restructuring plans	(49)	(29)	+65
Amortisation of intangible assets	(214)	(604)	–66
Impairment of intangible assets	(336)	–	–
Total – IFRS basis	**(5,029)**	**(4,515)**	**+10**

Core costs increased by 14% at CER, primarily due to higher manufacturing costs and the CHF 184 million of income in 2021 from the reversal of an idle-plant impairment. As a percentage of sales, cost of sales increased by 1.9 percentage points to 19.8%. Manufacturing cost of sales increased by 9% despite the sales increase of 3%. This was due to volume growth partially offset by product mix factors. Royalty expenses were 14% higher driven by increased sales of certain royalty-bearing products, notably Ocrevus and Evrysdi. Collaboration and profit-sharing expenses increased by 1% due to the payment of a commercial milestone, partly offset by lower underlying expenses. Additionally in the first half of 2022, there was an impairment charge of CHF 336 million related to a partial impairment charge of the product intangible asset relating to Flatiron's technology. The decrease in amortisation charges of intangible assets was primarily attributable to the Esbriet intangible asset becoming fully amortised in late 2021.

Pharmaceuticals Division – Marketing and distribution for the six months ended 30 June

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Marketing and distribution – Core basis	**(3,096)**	**(2,962)**	**+4**
Global restructuring plans	(9)	(115)	–92
Amortisation of intangible assets	(7)	(9)	–20
Total – IFRS basis	**(3,112)**	**(3,086)**	**0**

Core costs increased by 4% at CER. As a percentage of sales, they increased to 13.9% from 13.7% in the comparative period. Major marketing and distribution activities included investments in digital customer support and in ongoing launches, the rollouts of Ocrevus and Tecentriq, and pre-launch activities.

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

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Research and development – Core basis	**(5,729)**	**(5,883)**	**–3**
Global restructuring plans	(17)	(82)	–78
Amortisation of intangible assets	(161)	(150)	+5
Impairment of intangible assets	(87)	(165)	–49
Total – IFRS basis	**(5,994)**	**(6,280)**	**–5**

Core costs decreased by 3% at CER and, as a percentage of sales, decreased by 1.5 percentage points to 25.6%. Oncology remained the primary area of research and development with the cancer immunotherapy portfolio being a key driver. Neuroscience, immunology and ophthalmology also represented significant areas of spending. The decline in spending was mostly driven by lower co-development costs for Ronapreve.

Additionally in the first half of 2022, in-licensing transactions resulted in intangible assets of CHF 0.1 billion being recognised, mainly for payments made based upon the achievement of performance-related milestones. There were intangible asset impairment charges for the full write-down of an asset following the decision to stop the development of a programme for small-molecule inhibitors.

Pharmaceuticals Division – General and administration for the six months ended 30 June

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Administration	(678)	(698)	-3
Gains (losses) on disposal of property, plant and equipment and right-of-use assets	8	2	+243
Business taxes and capital taxes	(67)	(82)	-15
Other general items	45	24	+87
General and administration – Core basis	**(692)**	**(754)**	**-8**
Global restructuring plans	(88)	(75)	+22
Mergers and acquisitions and alliance transactions	(4)	(16)	-77
Legal and environmental cases	14	(4)	–
Total – IFRS basis	**(770)**	**(849)**	**-8**

Core costs decreased by 8% at CER and, as a percentage of sales, decreased to 3.1% from 3.5%. Administration costs were lower mainly due to lower legal expenses. Business taxes and capital taxes decreased as a result of lower excise tax expense in 2022 in the US.

Roche Pharmaceuticals and Chugai subdivisional operating results

Pharmaceuticals subdivisional interim operating results in millions of CHF

	Roche Pharmaceuticals 2022	Roche Pharmaceuticals 2021	Chugai 2022	Chugai 2021	Pharmaceuticals Division 2022	Pharmaceuticals Division 2021
Sales						
– External customers	20,145	19,863	2,202	1,808	22,347	21,671
– Within division	1,249	799	1,277	757	2,526	1,556
Core operating profit	8,118	8,304	2,280	1,384	10,318	9,562
– Margin, % of sales to external customers	40.3	41.8	103.5	76.5	46.2	44.1
Operating profit	7,201	7,090	2,239	1,349	9,360	8,313
– Margin, % of sales to external customers	35.7	35.7	101.7	74.6	41.9	38.4
Operating free cash flow	6,549	6,223	2,137	1,060	8,667	7,282
– Margin, % of sales to external customers	32.5	31.3	97.0	58.6	38.8	33.6

The Pharmaceuticals Division's total core operating profit and operating profit both include the elimination of minus CHF 80 million of unrealised intercompany gains between Roche Pharmaceuticals and Chugai (2021: minus CHF 126 million).

The increase in the exchange rate of the Japanese yen has an adverse impact of approximately 11 percentage points on the Chugai 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 34%, driven by sales of Ronapreve, while sales within the division increased by 85% due to higher sales of Hemlibra by Chugai to Roche Pharmaceuticals. Chugai's core operating profit increased by 76% as a result of the income from the Ultomiris patent settlement and higher gross profit from sales within the division. This was partially offset by lower royalty income from Roche Pharmaceuticals and higher research and development costs. Operating free cash flow at Chugai increased by 114% mainly as a result of the Ultomiris patent settlement and the underlying operating performance.

Financial position

Pharmaceuticals Division – Net operating assets

	30 June 2022 (CHF m)	31 Dec. 2021 (CHF m)	% change (CHF)	% change (CER)	Movement: Transactions (CHF m)	Movement: CTA and other (CHF m)
Trade receivables	7,638	7,478	+2	+2	174	(14)
Inventories	5,068	4,728	+7	+9	400	(60)
Trade payables	(1,697)	(2,421)	–30	–30	733	(9)
Net trade working capital	**11,009**	**9,785**	**+13**	**+13**	**1,307**	**(83)**
Other receivables (payables)	(7,318)	(7,380)	–1	–1	83	(21)
Net working capital	**3,691**	**2,405**	**+53**	**+55**	**1,390**	**(104)**
Property, plant and equipment	15,949	16,055	–1	0	15	(121)
Right-of-use assets	892	916	–3	–4	(38)	14
Goodwill and intangible assets	15,813	15,987	–1	–4	(694)	520
Provisions	(2,502)	(2,704)	–7	–8	210	(8)
Other long-term assets, net	722	756	–4	–3	(27)	(7)
Long-term net operating assets	**30,874**	**31,010**	**0**	**–2**	**(534)**	**398**
Net operating assets	**34,565**	**33,415**	**+3**	**+3**	**856**	**294**

The absolute amount of the movement between the 30 June 2022 and 31 December 2021 consolidated balances reported in Swiss francs is split between actual 2022 transactions (translated at average rates for 2021) and the currency translation adjustment (CTA) that arises on consolidation. The 2022 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 42 of the Interim Financial Statements, and a reconciliation between that balance sheet and the information given above is on page 74.

Currency translation effects on balance sheet amounts. Compared to the start of the year the Swiss franc depreciated against the US dollar having a significant effect on the net operating assets of the Pharmaceuticals Division, which was partially compensated by the appreciation of the Swiss franc against the Japanese yen. This resulted in a net positive translation impact. The exchange rates used are given on page 30.

Net working capital. Net working capital increased by 55%, with trade payables being the main driver. The increase in trade receivables of 2% was mainly due to higher sales in the US, partially offset by a decrease following the collection of year-end balances. The increase in inventories of 9% was driven by the ramp-up of launch products and by ensuring supply resilience. The decrease in trade payables came mainly from the settlement of the relatively high balances at the end of 2021. The net liability position for other receivables/payables decreased due to lower accrued royalties to Regeneron.

Long-term net operating assets. Overall long-term net operating assets decreased by 2% mainly due to lower intangible assets and property, plant and equipment partially offset by lower provisions. Capital expenditure included manufacturing investments in the US, Switzerland, Japan and Germany as well as site developments in Switzerland, South San Francisco and at Chugai's research facilities in Yokohama. Intangible assets decreased as a result of the impairment charges related to Flatiron's technology. Provisions decreased following the utilisation of the provisions recorded at the end of 2021.

Free cash flow

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

	2022 (CHF m)	2021 (CHF m)	% change (CHF)	% change (CER)
Operating profit	**9,360**	**8,313**	**+13**	**+13**
– Depreciation, amortisation and impairment	1,608	1,505	+7	+5
– Provisions	(212)	60	–	–
– Equity compensation plans	248	237	+5	+2
– Other	33	43	–23	–21
Operating profit cash adjustments	**1,677**	**1,845**	**–9**	**–11**
Operating profit, net of operating cash adjustments	**11,037**	**10,158**	**+9**	**+9**
(Increase) decrease in net working capital	(958)	(1,376)	–30	–34
Investments in property, plant and equipment	(959)	(1,046)	–8	–6
Principal portion of lease liabilities paid	(118)	(125)	–6	–3
Investments in intangible assets	(335)	(329)	+2	0
Operating free cash flow	**8,667**	**7,282**	**+19**	**+20**
– as % of sales	38.8	33.6	+5.2	+5.5

See pages 71–73 for definition of free cash flow and a detailed breakdown.

The Pharmaceuticals Division's operating free cash flow increased by 20% at CER to CHF 8.7 billion. The cash generation of the business, measured by the operating profit, net of operating cash adjustments, increased by 9%, which was broadly in line with the increase in core operating profit. The Ultomiris patent settlement at Chugai also had a positive impact on the Pharmaceuticals Division's operating free cash flow. Net working capital absorbed an additional CHF 1.0 billion of cash, largely driven by the decrease in trade payables and the increase in inventories and trade receivables, for the reasons described above in the 'Financial position' section. Compared to half-year 2021, the increase in net working capital was lower. Capital expenditure was 6% lower in comparison with the first half of 2021, with the major items also as described above in the 'Financial Position' section. Investments in intangible assets were at the same level as 2021 and included payments for intangible assets purchased at the end of 2021.

Diagnostics operating results

Diagnostics Division interim operating results

	2022 (CHF m)	2021 (CHF m)	% change (CHF)	% change (CER)
IFRS results				
Sales	9,948	9,042	+10	+11
Royalties and other operating income	25	48	-48	-46
Revenue	**9,973**	**9,090**	**+10**	**+11**
Cost of sales	(4,958)	(4,477)	+11	+12
Marketing and distribution	(1,373)	(1,403)	-2	-1
Research and development	(905)	(830)	+9	+9
General and administration	(271)	(334)	-19	-18
Operating profit	**2,466**	**2,046**	**+21**	**+22**
– Margin, % of sales	24.8	22.6	+2.2	+2.1
Core results[a]				
Sales	9,948	9,042	+10	+11
Royalties and other operating income	25	48	-48	-46
Revenue	**9,973**	**9,090**	**+10**	**+11**
Cost of sales	(4,875)	(4,355)	+12	+14
Marketing and distribution	(1,363)	(1,330)	+2	+3
Research and development	(899)	(807)	+11	+11
General and administration	(276)	(274)	+1	+2
Core operating profit	**2,560**	**2,324**	**+10**	**+11**
– Margin, % of sales	25.7	25.7	0	0
Financial position				
Net working capital	3,935	3,030	+30	+30
Long-term net operating assets	13,218	13,030	+1	+1
Net operating assets	**17,153**	**16,060**	**+7**	**+6**
Free cash flow[b]				
Operating free cash flow	1,509	1,178	+28	+29
– Margin, % of sales	15.2	13.0	+2.2	+2.1

a) See pages 68–71 for definition of core results.
b) See pages 71–73 for definition of free cash flow.

Sales

The Diagnostics Division reported overall sales growth of 11% at CER to CHF 9.9 billion, driven by growth in the sales of COVID-19-related products and increased sales in routine testing across all regions. The sales of COVID-19-related tests in the first half of 2022 (at CER) were CHF 3.1 billion (2021: CHF 2.5 billion), with the SARS-CoV-2 Rapid Antigen test accounting for approximately 63% of the COVID-19-related sales. Sales in the division's base business increased by 6% at CER, with immunodiagnostics products, particularly cardiac tests, being a key contributor.

Sales in the Point of Care customer area grew due to COVID-19-related sales. Growth in routine testing was the main contributor to the increased sales in the Pathology Lab, Core Lab and Molecular Lab customer areas. Diabetes Care sales decreased by 5%, driven by the base effect from the resolution of a rebate dispute in 2021.

Diagnostics Division – Interim sales by customer area

	2022 (CHF m)	2021[a] (CHF m)	% change (CER)	% of sales (2022)	% of sales[a] (2021)
Core Lab	3,875	3,770	+4	38.9	41.7
Point of Care	2,609	1,798	+46	26.2	19.9
Molecular Lab	1,980	1,990	+1	19.9	22.0
Diabetes Care	832	894	–5	8.4	9.9
Pathology Lab	652	590	+10	6.6	6.5
Total sales	**9,948**	**9,042**	**+11**	**100**	**100**

a) In 2022 sales in the Point of Care customer area included sales from the Liat business (POC molecular), and sales in the Core Lab customer area included sales from the Life Science Alliances business. These were both previously shown as part of the Molecular Lab customer area. The comparative information for 2021 has been restated accordingly. Interim sales for 2021 were CHF 182 million for the POC molecular business and CHF 44 million for the Life Science Alliances business.

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 4% due to the growth of routine testing mainly in the areas of immunoassays, with cardiac tests as key contributors, and clinical chemistry. Sales grew across all regions, with the largest contribution coming from the EMEA and Asia-Pacific regions, which grew by 5% and 3%, respectively.

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 tests and blood gas and electrolyte (BGE) tests. Sales of the SARS-CoV-2 Rapid Antigen test are reported in this customer area and these were the main driver of the 46% sales growth. Sales of these tests were concentrated in the North America and Asia-Pacific regions.

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. The sales growth was driven by growth in the base business across the portfolio and by the GenMark business, which was acquired in April 2021. This growth was largely offset by lower COVID-19-related sales in the EMEA and North America regions. The Asia-Pacific region was the main driver of growth.

Diabetes Care. This customer area provides diagnostics solutions for patients and healthcare professionals enabling integrated personalised diabetes management. Sales decreased by 5%, due to the base effect of the resolution of a rebate dispute in the first quarter of 2021. Excluding this, sales decreased by 1% as a result of the continued contraction of the blood glucose monitoring market due to people switching to continuous glucose monitoring systems. This was partly offset by higher demand in emerging markets.

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 10% due to growth in the advanced staining business and the companion diagnostics business.

Diagnostics Division – Interim sales by region

	2022 (CHF m)	2021 (CHF m)	% change (CER)	% of sales (2022)	% of sales (2021)
Europe, Middle East and Africa (EMEA)	3,350	4,144	–14	33.4	45.8
North America	2,868	2,055	+34	29.0	22.7
– *of which US*	*2,511*	*1,849*	*+31*	*25.2*	*20.4*
Asia-Pacific	3,171	2,293	+39	32.0	25.4
– *of which China*	*1,298*	*1,222*	*+2*	*13.0*	*13.5*
Latin America	559	550	+2	5.6	6.1
Total sales	**9,948**	**9,042**	**+11**	**100**	**100**

Sales in the EMEA region decreased by 14% due to the significant reduction of COVID-19-related sales compared to the previous year, partly offset by growth in the immunoassay business. In North America the 34% sales growth was driven by the sales of the SARS-CoV-2 Rapid Antigen test, the impact of the GenMark acquisition, as well as growth in the Liat and immunoassays businesses. Asia-Pacific sales were 39% higher as a result of increased sales of the SARS-CoV-2 Rapid Antigen test and due to growth in the immunoassays business.

Operating results

Diagnostics Division – Royalties and other operating income for the six months ended 30 June

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Royalty income	21	20	+12
Income from out-licensing agreements	0	18	–100
Income from disposal of products and other	4	10	–65
Total – IFRS and Core basis	**25**	**48**	**–46**

Royalties and other operating income decreased by 46% at CER driven by the base effect from an out-licensing agreement in Diabetes Care in 2021.

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

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Manufacturing cost of goods sold and period costs	(4,805)	(4,286)	+14
Royalty expenses	(70)	(61)	+15
Amortisation of commercial software intangible assets	(2)	0	–
Impairment of property, plant and equipment and right-of-use assets	2	(8)	–
Cost of sales – Core basis	**(4,875)**	**(4,355)**	**+14**
Global restructuring plans	(11)	(59)	–83
Amortisation of intangible assets	(72)	(52)	+36
Mergers and acquisitions and alliance transactions	0	(11)	–100
Total – IFRS basis	**(4,958)**	**(4,477)**	**+12**

Core costs increased by 14% at CER. This increase was above the sales growth of 11% because of volume growth and a product mix effect from the increased sales volume of SARS-CoV-2 Rapid Antigen tests in 2022. The core cost of sales ratio increased by 0.9 percentage points to 49.1%. Global restructuring costs decreased due to restructuring activities in Diabetes Care in the prior period.

Diagnostics Division – Marketing and distribution for the six months ended 30 June

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Marketing and distribution – Core basis	**(1,363)**	**(1,330)**	**+3**
Global restructuring plans	–	(65)	–100
Amortisation of intangible assets	(10)	(8)	+28
Total – IFRS basis	**(1,373)**	**(1,403)**	**–1**

Core costs increased by 3% at CER, as a result of higher distribution costs related to SARS-CoV-2 Rapid Antigen tests. On a core basis, marketing and distribution costs as a percentage of sales decreased to 13.7% compared to 14.7% in 2021, due to the sales growth in 2022.

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

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Research and development – Core basis	**(899)**	**(807)**	**+11**
Global restructuring plans	(2)	(16)	–82
Amortisation of intangible assets	(4)	(7)	–45
Total – IFRS basis	**(905)**	**(830)**	**+9**

Core costs increased by 11% at CER, with digital solutions being the main growth driver. In addition, investments continued for projects in sequencing, mass spectrometry and point of care. As a percentage of sales, research and development core costs increased to 9.0% from 8.9%.

Diagnostics Division – General and administration for the six months ended 30 June

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Administration	(286)	(286)	+1
Gains (losses) on disposal of property, plant and equipment and right-of-use assets	1	1	+67
Business taxes and capital taxes	(10)	(9)	+10
Other general items	19	20	–11
General and administration – Core basis	**(276)**	**(274)**	**+2**
Global restructuring plans	(15)	(22)	–38
Mergers and acquisitions and alliance transactions	21	(10)	–
Legal and environmental cases	(1)	(28)	–96
Total – IFRS basis	**(271)**	**(334)**	**–18**

Core costs increased by 2% at CER, driven by higher administration costs, which increased 1% at CER due to the effect from recent acquisitions, partly offset by lower personnel expenses. As a percentage of sales, core costs decreased to 2.8% from 3.0% in 2021. Mergers and acquisitions and alliance transaction costs included income of CHF 27 million from the release of contingent consideration provisions.

Financial position

Diagnostics Division – Net operating assets

	30 June 2022 (CHF m)	31 Dec. 2021 (CHF m)	% change (CHF)	% change (CER)	Movement: Transactions (CHF m)	Movement: CTA and other (CHF m)
Trade receivables	3,293	3,454	–5	–5	(168)	7
Inventories	3,224	2,987	+8	+9	274	(37)
Trade payables	(1,322)	(1,250)	+6	+6	(77)	5
Net trade working capital	**5,195**	**5,191**	**0**	**+1**	**29**	**(25)**
Other receivables (payables)	(1,260)	(2,161)	–42	–42	931	(30)
Net working capital	**3,935**	**3,030**	**+30**	**+30**	**960**	**(55)**
Property, plant and equipment	6,885	6,852	0	+1	85	(52)
Right-of-use assets	268	273	–2	–3	(8)	3
Goodwill and intangible assets	7,082	6,939	+2	–1	(41)	184
Provisions	(978)	(1,062)	–8	–9	98	(14)
Other long-term assets, net	(39)	28	–	–	(72)	5
Long-term net operating assets	**13,218**	**13,030**	**+1**	**+1**	**62**	**126**
Net operating assets	**17,153**	**16,060**	**+7**	**+6**	**1,022**	**71**

The absolute amount of the movement between the 30 June 2022 and 31 December 2021 consolidated balances reported in Swiss francs is split between actual 2022 transactions (translated at average rates for 2021) and the currency translation adjustment (CTA) that arises on consolidation. The 2022 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 42 of the Interim Financial Statements, and a reconciliation between that balance sheet and the information given above is on page 74.

Currency translation effects on balance sheet amounts. Compared to the start of the year the Swiss franc depreciated against the US dollar, partly offset by the appreciation of the Swiss franc against the euro. This resulted in a positive translation impact. 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 30.

Net working capital. Net working capital increased by 30% driven by a lower net liability for other receivables/payables from the settlement of year-end accruals, notably employee-related accruals and customer incentive accruals. The 5% decrease in trade receivables was due to the settlement of the relatively high balances at the end of 2021. Inventories increased by 9% to support growth in the division's base business, notably in the Core Lab customer area. Net working capital also increased due to a large tender contract late in the second quarter which was not yet settled at 30 June.

Long-term net operating assets. Overall long-term net operating assets were stable at CER. 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 1% at CER following the regular amortisation charges, partly offset by contingent payments for asset acquisitions previously closed. Provisions were lower due to utilisation of restructuring provisions and the release of contingent consideration provisions.

Free cash flow

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

	2022 (CHF m)	2021 (CHF m)	% change (CHF)	% change (CER)
Operating profit	**2,466**	**2,046**	**+21**	**+22**
– Depreciation, amortisation and impairment	708	738	–4	–2
– Provisions	(101)	50	–	–
– Equity compensation plans	42	39	+8	+2
– Other	119	226	–47	–46
Operating profit cash adjustments	**768**	**1,053**	**–27**	**–25**
Operating profit, net of operating cash adjustments	**3,234**	**3,099**	**+4**	**+6**
(Increase) decrease in net working capital	(971)	(1,162)	–16	–16
Investments in property, plant and equipment	(687)	(696)	–1	+2
Principal portion of lease liabilities paid	(61)	(57)	+7	+9
Investments in intangible assets	(6)	(6)	0	–3
Operating free cash flow	**1,509**	**1,178**	**+28**	**+29**
– as % of sales	15.2	13.0	+2.2	+2.1

See pages 71–73 for definition of free cash flow and a detailed breakdown.

The operating free cash flow of the Diagnostics Division increased by 29% at CER driven by the operating results of the business. The cash generation of the business, measured by the operating profit, net of operating cash adjustments, increased by 6%, compared to the 11% growth in sales and core operating profit, due to a large tender contract which had not been settled at 30 June. Net working capital absorbed CHF 1.0 billion of cash in the first half of 2022 which was attributable to the settlement of accruals as well as higher inventories as described above in the 'Financial position' section. Capital expenditure increased by 2% due to instrument placements as well as site investments in Germany and the US.

Corporate operating results

Corporate interim operating results summary

	2022 (CHF m)	2021 (CHF m)	% change (CER)
Administration	(264)	(239)	+10
Business taxes and capital taxes	(4)	(11)	–63
Other general items	58	16	+143
General and administration costs – Core basis[a]	**(210)**	**(234)**	**–4**
Global restructuring plans	(75)	(48)	+57
Legal and environmental cases	6	0	–
Total costs – IFRS basis	**(279)**	**(282)**	**+4**
Financial position			
Net working capital	(186)	(314)	–40
Long-term net operating assets	133	116	+15
Net operating assets	**(53)**	**(198)**	**–71**
Free cash flow[b]			
Operating free cash flow	(394)	(343)	+19

a) See pages 68–71 for definition of core results.
b) See pages 71–73 for definition of free cash flow and a detailed breakdown.

General and administration costs decreased by 4% at CER on a core basis. Administration costs were higher by 10%, which was related to cost transfers into corporate functions. Other general items includes an over-absorption of internal IT recharges following underspending in the first half of 2022. Total costs on an IFRS basis increased by 4% due to a higher level of restructuring activities in corporate functions. The change in net working capital was a result of lower payables and higher prepayments. Corporate operating free cash flow showed an increased outflow due to higher administration costs, settlement of payables and increased capital expenditure.

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 at CER and in Swiss francs) for the six months ended 30 June

	% change (CER) 2022	% change (CER) 2021	% change (CHF) 2022	% change (CHF) 2021
Pharmaceuticals Division				
Sales	+3	–3	+3	–7
Core operating profit	+8	–8	+8	–13
Diagnostics Division				
Sales	+11	+51	+10	+49
Core operating profit	+11	+137	+10	+127
Group				
Sales	+5	+8	+5	+5
Core operating profit	+9	+4	+9	–1

Exchange rates against the Swiss franc

	30 June 2022	Average to 30 June 2022	31 December 2021	Average to 30 June 2021
1 USD	0.96	0.94	0.91	0.91
1 EUR	1.00	1.03	1.03	1.09
100 JPY	0.70	0.77	0.79	0.84

In the first half of 2022 compared to the first half of 2021, the Swiss franc was weaker against the US dollar, but was stronger against the euro and the Japanese yen. The net impact on the results expressed in Swiss francs compared to constant exchange rates (CER) was negligible on sales, core operating profit and Core EPS. 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 2022 is shown in the table below.

Currency sensitivities for the six months ended 30 June 2022

Impact of 1% increase in average exchange rate versus the Swiss franc	Sales (CHF m)	Core operating profit (CHF m)
US dollar	144	56
Euro	49	19
Japanese yen	26	31
All other currencies	96	49

Treasury and taxation results

Treasury and taxation interim results

	2022 (CHF m)	2021 (CHF m)	% change (CHF)	% change (CER)
IFRS results				
Operating profit	11,547	10,077	+15	+15
Financing costs	(304)	(211)	+44	+42
Other financial income (expense)	(258)	21	–	–
Profit before taxes	**10,985**	**9,887**	**+11**	**+12**
Income taxes	(1,824)	(1,671)	+9	+12
Net income	**9,161**	**8,216**	**+12**	**+12**
Attributable to				
– Roche shareholders	8,530	7,803	+9	+9
– Non-controlling interests	631	413	+53	+62
Core results [a]				
Operating profit	12,668	11,652	+9	+9
Financing costs	(300)	(207)	+45	+42
Other financial income (expense)	(258)	21	–	–
Profit before taxes	**12,110**	**11,466**	**+6**	**+6**
Income taxes	(1,950)	(1,939)	+1	+3
Net income	**10,160**	**9,527**	**+7**	**+7**
Attributable to				
– Roche shareholders	9,518	9,104	+5	+4
– Non-controlling interests	642	423	+52	+61
Financial position				
Net debt	(20,942)	(18,167)	+15	+8
Lease liabilities	(1,316)	(1,354)	–3	–4
Pensions	(3,225)	(4,605)	–30	–29
Income taxes	2,401	2,273	+6	+2
Equity investments	550	738	–25	–26
Derivatives, net	(668)	(73)	Over +500	Over +500
Collateral, net	239	(17)	–	–
Interest payable	(127)	(102)	+25	+21
Associated companies and other, net	369	375	–2	–5
Total net assets (liabilities)	**(22,719)**	**(20,932)**	**+9**	**+3**
Free cash flow [b]				
Treasury activities	(203)	104	–295	–296
Taxes paid	(2,482)	(2,183)	+14	+15
Total	**(2,685)**	**(2,079)**	**+29**	**+31**

a) See pages 68–71 for definition of core results.
b) See pages 71–73 for definition of free cash flow.

Financing costs

Core financing costs were CHF 300 million, an increase of 42% at CER compared to the first half of 2021. Interest expenses on debt increased by 51% at CER to CHF 248 million due to the issuance of debt in December 2021, February and March 2022 as well as an increase in interest rates. 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 258 million compared to a net income of CHF 21 million in the first half of 2021. Income from equity securities, which reflects the fair value changes in the Roche Venture Fund investments, was a net loss of CHF 117 million (2021: net income of CHF 103 million). The net foreign exchange results, which reflect hedging costs and gains and losses on unhedged positions, were net losses of CHF 54 million (2021: net losses of CHF 80 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 decreased by 0.8 percentage points to 16.1% in the first half of 2022. The decrease was due to the relatively higher impact from the resolution of several tax disputes which reduced the Group's effective core tax rate by 2.4 percentage points in the first half of 2022 compared to 0.8 percentage points in the first half of 2021. This was in part offset by the higher percentage of core profit contribution coming from tax jurisdictions with tax rates higher than the Group's average tax rate, including the tax payable in Japan on the Ultomiris patent settlement.

The IFRS effective tax rate in the first half of 2022 decreased to 16.6% (first half of 2021: 16.9%). The core impacts mentioned above were partly offset by the deferred tax impact from equity compensation plans, which varies according to the price of the underlying equities.

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

			2022			2021
	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	**12,110**	**(1,950)**	**16.1**	**11,466**	**(1,939)**	**16.9**
Global restructuring plans	(266)	48	18.0	(511)	106	20.7
Goodwill and intangible assets	(891)	116	13.0	(995)	145	14.6
Mergers and acquisitions and alliance transactions	15	0	–	(39)	8	20.5
Legal and environmental cases	17	(6)	35.3	(34)	7	20.6
Normalisation of equity compensation plan tax benefit	0	(32)	–	–	2	–
Group's effective tax rate – IFRS basis	**10,985**	**(1,824)**	**16.6**	**9,887**	**(1,671)**	**16.9**

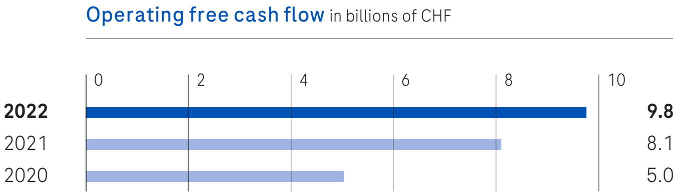
Financial position

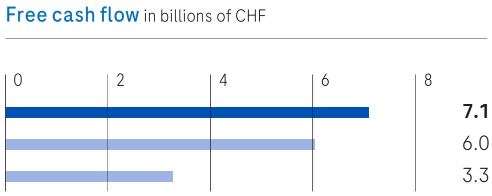
The increase in net debt was due to dividend payments of CHF 7.7 billion, partly offset by the free cash flow of CHF 7.1 billion. The CHF 19.0 billion bridge loan facility drawn in 2021 to finance the share repurchase from Novartis was fully repaid by May 2022, partly from the proceeds from the new debt issuances and partly from internal cash generation. The new debt issued to refinance the bridge loan facility was USD 6.0 billion issued in December 2021, CHF 3.0 billion issued in February 2022 and USD 5.0 billion issued in March 2022. Lease liabilities decreased to CHF 1.3 billion due to the regular payments. The net pension liability was lower following increases in discount rates. The net tax assets increased due to taxes paid exceeding the income tax expenses, partially offset by deferred tax impacts from the decrease in the net pension liability. At 30 June 2022 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 0.7 billion as a result of interest rate and exchange rate movements in the first half of 2022.

Free cash flow

The net cash outflow from treasury activities was CHF 0.2 billion compared to an inflow of CHF 0.1 billion in the first half of 2021. This was mainly due to the higher sales of financial long-term assets in 2021. Total taxes paid in the first half of 2022 were up by 15% at CER, with higher payments in Japan driven by the underlying business results.

Cash flows and net debt





Free cash flow for the six months ended 30 June

	Pharmaceuticals (CHF m)	Diagnostics (CHF m)	Corporate (CHF m)	Group (CHF m)
2022				
Operating profit – IFRS basis	9,360	2,466	(279)	11,547
Operating profit cash adjustments	1,677	768	54	2,499
Operating profit, net of operating cash adjustments	**11,037**	**3,234**	**(225)**	**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	**8,667**	**1,509**	**(394)**	**9,782**
Treasury activities				(203)
Taxes paid				(2,482)
Free cash flow				**7,097**
2021				
Operating profit – IFRS basis	8,313	2,046	(282)	10,077
Operating profit cash adjustments	1,845	1,053	39	2,937
Operating profit, net of operating cash adjustments	**10,158**	**3,099**	**(243)**	**13,014**
(Increase) decrease in net working capital	(1,376)	(1,162)	(78)	(2,616)
Investments in property, plant and equipment	(1,046)	(696)	(17)	(1,759)
Principal portion of lease liabilities paid	(125)	(57)	(5)	(187)
Investments in intangible assets	(329)	(6)	0	(335)
Operating free cash flow	**7,282**	**1,178**	**(343)**	**8,117**
Treasury activities				104
Taxes paid				(2,183)
Free cash flow				**6,038**

See pages 71–73 for definition of free cash flow and a detailed breakdown.

Operating free cash flow increased by 21% at CER to CHF 9.8 billion. This was due to the higher cash generation of the business, measured by the operating profit, net of operating cash adjustments, and a lower increase in net working capital than in the prior period. The free cash flow was CHF 7.1 billion, an increase of 18% at CER. This was a result of the growth in the operating free cash flow partly offset by higher tax payments and sales of financial long-term assets in the first half of 2021 that were not repeated in 2022.

Net debt – Movement in carrying value in millions of CHF

At 1 January 2022	
Cash and cash equivalents	6,850
Marketable securities	6,181
Long-term debt	(16,076)
Short-term debt	(15,122)
Net debt at beginning of period	**(18,167)**
Change in net debt during interim period 2022	
Free cash flow	7,097
Dividend payments	(7,672)
Transactions in own equity instruments	(611)
Mergers and acquisitions, net of divestments of subsidiaries	(46)
Hedging and collateral arrangements	(534)
Currency translation, fair value and other movements	(1,009)
Change in net debt	**(2,775)**
At 30 June 2022	
Cash and cash equivalents	4,315
Marketable securities	2,493
Long-term debt	(22,369)
Short-term debt	(5,381)
Net debt at end of period	**(20,942)**

Net debt – Currency profile in millions of CHF

	Cash and marketable securities		Debt	
	30 June 2022	31 Dec. 2021	30 June 2022	31 Dec. 2021
US dollar	732	1,923	(19,902)	(16,454)
Euro	730	2,666	(1,636)	(1,704)
Swiss franc	626	4,104	(5,493)	(12,314)
Japanese yen	3,807	3,710	0	0
Other	913	628	(719)	(726)
Total	**6,808**	**13,031**	**(27,750)**	**(31,198)**

The net debt position of the Group at 30 June 2022 was CHF 20.9 billion, an increase of CHF 2.8 billion from 31 December 2021. The increase during the first half of 2022 was due to CHF 7.7 billion for the annual dividend payments, which exceeded the free cash flow of CHF 7.1 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 2022	31 December 2021
Funded plans		
– Fair value of plan assets	17,280	19,164
– Defined benefit obligation	(14,397)	(18,292)
Over (under) funding	**2,883**	**872**
Unfunded plans		
– Defined benefit obligation	(4,080)	(5,582)
Total funding status	**(1,197)**	**(4,710)**
Limit on asset recognition	(2,141)	(3)
Reimbursement rights	113	108
Net recognised asset (liability)	**(3,225)**	**(4,605)**

Overall the funding status on an IFRS basis of the Group's funded defined benefit plans increased to 120% compared to 105% at the start of the year. This came from a reduction of the defined benefit obligation due to an increase in discount rates in all regions compared to the end of 2021, partly offset by a decrease in the fair value of plan assets. A limit on asset recognition arose during the first half of 2022 as a result of a surplus, based on current market assumptions, in certain pension plans that was not recognisable under IFRS. 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 2022 due to an increase in the eurozone discount rate, partly offset by an increase in the eurozone inflation rate.

Further information on the Group's pensions and other post-employment benefits is given in Note 26 to the 2021 Annual Financial Statements.

Debt

On 25 February 2022 the Group completed an offering of CHF 3,000 million of fixed rate notes issued in four tranches with coupons between 0% and 1% and maturing between November 2022 and February 2037.

On 10 March 2022 the Group completed an offering of USD 3,500 million of fixed rate notes issued in three tranches with coupons between 1.882% and 2.314% and maturing between March 2024 and March 2027.

Also on 10 March 2022 the Group completed an offering of USD 1,500 million floating rate notes issued in two tranches at a rate equal to the Secured Overnight Financing Rate (SOFR) plus margins between 0.33% and 0.56%. The notes will mature between September 2023 and March 2025.

The Group received total aggregate net proceeds of CHF 7.6 billion from the issuance and sale of these notes. Further details are given in Note 11 to the Interim Financial Statements.

Bonds and notes: nominal amounts at 30 June 2022 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)
2022	1,140	650	77	1,750	3,744	3,576
2023	2,689	0	0	750	3,474	3,319
2024	2,256	1,000	0	500	3,824	3,652
2025	1,650	0	0	0	1,650	1,576
2026	2,100	0	0	825	2,964	2,831
2027–2031	4,650	0	0	1,375	6,089	5,817
2032 and beyond	4,054	0	0	300	4,368	4,173
Total	**18,539**	**1,650**	**77**	**5,500**	**26,113**	**24,944**

a) Total translated at 30 June 2022 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 2021 the free cash flow was CHF 15.7 billion, which included the cash generated from operations, as well as payment of interest and tax. In the first half of 2022 free cash flow was CHF 7.1 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 2.5 billion were outstanding as of 30 June 2022 (31 December 2021: USD 0.5 billion). For longer-term financing the Group maintains high long-term investment-grade credit ratings of AA by Standard & Poor's, Aa3 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 2021 Annual Financial Statements.

Financial risks

As at 30 June 2022 the Group has a net debt position of CHF 20.9 billion (31 December 2021: CHF 18.2 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 2022 (CHF m)	30 June 2022 (% of total)	31 December 2021 (CHF m)	31 December 2021 (% of total)
Cash and cash equivalents	4,315	63	6,850	53
Money market instruments	1,917	29	5,614	43
Debt securities	575	8	565	4
Equity securities	1	0	2	0
Total cash and marketable securities	**6,808**	**100**	**13,031**	**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 6.8 billion of cash and fixed income marketable securities remained high with 89% 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. The Group did not observe a significant increase in credit risk due to the COVID-19 pandemic. 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 at any point in time. 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. The Group did not observe a significant increase in liquidity risk due to the COVID-19 pandemic. Free cash flow was CHF 7.1 billion as compared to CHF 6.0 billion in the first half of 2021.

The Roche Group continues to enjoy high long-term investment-grade credit ratings of AA by Standard & Poor's, Aa3 by Moody's and AA by Fitch. At the same time Roche is rated at the highest available short-term ratings by those agencies. These ratings have not changed since the onset of the COVID-19 pandemic. 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 2022 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. The Group's VaR has increased since 31 December 2021 following the issuance of new debt instruments in the first six months of 2022.

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 2021 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 2022 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.

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 67.

Roche Group consolidated income statement for the six months ended 30 June 2022 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales [2, 3]	22,347	9,948	–	32,295
Royalties and other operating income [2, 3]	1,918	25	–	1,943
Revenue [2, 3]	**24,265**	**9,973**	**–**	**34,238**
Cost of sales	(5,029)	(4,958)	–	(9,987)
Marketing and distribution	(3,112)	(1,373)	–	(4,485)
Research and development [2]	(5,994)	(905)	–	(6,899)
General and administration	(770)	(271)	(279)	(1,320)
Operating profit [2]	**9,360**	**2,466**	**(279)**	**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

Roche Group consolidated income statement for the six months ended 30 June 2021 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales [2, 3]	21,671	9,042	–	30,713
Royalties and other operating income [2, 3]	1,372	48	–	1,420
Revenue [2, 3]	**23,043**	**9,090**	**–**	**32,133**
Cost of sales	(4,515)	(4,477)	–	(8,992)
Marketing and distribution	(3,086)	(1,403)	–	(4,489)
Research and development [2]	(6,280)	(830)	–	(7,110)
General and administration	(849)	(334)	(282)	(1,465)
Operating profit [2]	**8,313**	**2,046**	**(282)**	**10,077**
Financing costs [4]				(211)
Other financial income (expense) [4]				21
Profit before taxes				**9,887**
Income taxes [5]				(1,671)
Net income				**8,216**
Attributable to				
– Roche shareholders				7,803
– Non-controlling interests				413
Earnings per share and non-voting equity security [14]				
Basic (CHF)				9.14
Diluted (CHF)				9.05

Roche Group consolidated statement of comprehensive income in millions of CHF

	Six months ended 30 June 2022	2021
Net income recognised in income statement	**9,161**	**8,216**
Other comprehensive income (OCI)		
Remeasurements of defined benefit plans	949	1,288
Fair value changes on equity investments at fair value through OCI	(68)	(190)
Items that will never be reclassified to the income statement	**881**	**1,098**
Fair value changes on debt investments at fair value through OCI	(24)	(7)
Cash flow hedges	(125)	(5)
Currency translation of foreign operations	(1,117)	494
Items that are or may be reclassified to the income statement	**(1,266)**	**482**
Other comprehensive income, net of tax	**(385)**	**1,580**
Total comprehensive income	**8,776**	**9,796**
Attributable to		
– Roche shareholders	8,653	9,449
– Non-controlling interests	123	347
Total	**8,776**	**9,796**

Roche Group consolidated balance sheet in millions of CHF

	30 June 2022	31 December 2021
Non-current assets		
Property, plant and equipment	23,107	23,163
Right-of-use assets	1,217	1,249
Goodwill [8]	11,160	10,809
Intangible assets [9]	11,735	12,117
Deferred tax assets	5,827	5,583
Defined benefit plan assets	1,323	1,498
Other non-current assets	2,046	2,271
Total non-current assets	**56,415**	**56,690**
Current assets		
Inventories	8,292	7,715
Accounts receivable	10,809	10,806
Current income tax assets	269	320
Other current assets	4,143	3,755
Marketable securities	2,493	6,181
Cash and cash equivalents	4,315	6,850
Total current assets	**30,321**	**35,627**
Total assets	**86,736**	**92,317**
Non-current liabilities		
Long-term debt [11]	(22,369)	(16,076)
Deferred tax liabilities	(690)	(628)
Defined benefit plan liabilities	(4,548)	(6,103)
Provisions [10]	(1,427)	(1,442)
Other non-current liabilities	(1,347)	(1,307)
Total non-current liabilities	**(30,381)**	**(25,556)**
Current liabilities		
Short-term debt [11]	(5,381)	(15,122)
Current income tax liabilities	(3,005)	(3,002)
Provisions [10]	(2,249)	(2,526)
Accounts payable	(3,896)	(4,637)
Other current liabilities	(12,878)	(13,129)
Total current liabilities	**(27,409)**	**(38,416)**
Total liabilities	**(57,790)**	**(63,972)**
Total net assets	**28,946**	**28,345**
Equity		
Capital and reserves attributable to Roche shareholders	25,189	24,489
Equity attributable to non-controlling interests	3,757	3,856
Total equity	**28,946**	**28,345**

Roche Group consolidated statement of cash flows in millions of CHF

	Six months ended 30 June 2022	2021
Cash flows from operating activities		
Cash generated from operations [15]	14,522	13,324
(Increase) decrease in net working capital	(2,052)	(2,616)
Payments made for defined benefit plans	(290)	(288)
Utilisation of provisions	(527)	(511)
Disposal of products	338	484
Other operating cash flows	0	2
Income taxes paid	(2,482)	(2,183)
Total cash flows from operating activities	**9,509**	**8,212**
Cash flows from investing activities		
Purchase of property, plant and equipment	(1,685)	(1,759)
Purchase of intangible assets	(341)	(335)
Disposal of property, plant and equipment	38	38
Business combinations [6]	0	(1,719)
Asset acquisitions [6]	(41)	(103)
Interest received (paid) and dividends received on marketable securities and other investments	2	1
Sales of equity securities and debt securities	101	129
Purchases of equity securities and debt securities	(132)	(99)
Sales (purchases) of money market instruments and time accounts over three months, net	3,547	3,633
Other investing cash flows	(16)	258
Total cash flows from investing activities	**1,473**	**44**
Cash flows from financing activities		
Proceeds from issue of bonds and notes [11]	7,642	1,391
Redemption and repurchase of bonds and notes [11]	0	(1,266)
Increase (decrease) in commercial paper [11]	1,802	191
Increase (decrease) in other debt [11]	(13,527)	(19)
Hedging and collateral arrangements	(534)	(324)
Interest paid	(228)	(243)
Principal portion of lease liabilities paid	(186)	(187)
Dividends paid [15]	(7,672)	(7,955)
Equity-settled equity compensation plans, net of transactions in own equity	(611)	(644)
Other financing cash flows	(1)	0
Total cash flows from financing activities	**(13,315)**	**(9,056)**
Net effect of currency translation on cash and cash equivalents	(202)	73
Increase (decrease) in cash and cash equivalents	**(2,535)**	**(727)**
Cash and cash equivalents at beginning of period	6,850	5,727
Cash and cash equivalents at end of period	**4,315**	**5,000**

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 2021								
At 1 January 2021	160	45,571	106	(16)	(9,480)	36,341	3,432	39,773
Net income recognised in income statement	–	7,803	–	–	–	7,803	413	8,216
Net change in fair value – financial assets at fair value through OCI	–	0	(197)	–	–	(197)	0	(197)
Cash flow hedges	–	–	–	(6)	–	(6)	1	(5)
Currency translation of foreign operations	–	–	1	1	559	561	(67)	494
Remeasurements of defined benefit plans	–	1,288	–	–	–	1,288	0	1,288
Total comprehensive income	**–**	**9,091**	**(196)**	**(5)**	**559**	**9,449**	**347**	**9,796**
Dividends	–	(7,773)	–	–	–	(7,773)	(162)	(7,935)
Equity compensation plans, net of transactions in own equity	–	(201)	–	–	–	(201)	0	(201)
Changes in non-controlling interests	–	(2)	–	–	–	(2)	2	–
At 30 June 2021	**160**	**46,686**	**(90)**	**(21)**	**(8,921)**	**37,814**	**3,619**	**41,433**
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 [12]	(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**

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 2022 (hereafter 'the interim period'). These Interim Financial Statements should be read in conjunction with the consolidated financial statements for the year ended 31 December 2021 (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 19 July 2022.

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.

Impact of the COVID-19 pandemic

During the six months ended 30 June 2022 there was no material accounting impact related to the COVID-19 pandemic.

Seasonality

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

Significant 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 2022.

Changes in accounting policies

In 2022 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.

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 2023 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 2023.

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

	Pharmaceuticals		Diagnostics		Corporate		Group	
Six months ended 30 June	2022	2021	2022	2021	2022	2021	2022	2021
Revenue from external customers								
Sales	22,347	21,671	9,948	9,042	–	–	32,295	30,713
Royalties and other operating income	1,918	1,372	25	48	–	–	1,943	1,420
Total	**24,265**	**23,043**	**9,973**	**9,090**	**–**	**–**	**34,238**	**32,133**
Revenue from other operating segments								
Sales	–	–	9	11	–	–	9	11
Royalties and other operating income	–	–	–	–	–	–	–	–
Elimination of interdivisional revenue							(9)	(11)
Total	**–**	**–**	**9**	**11**	**–**	**–**	**–**	**–**
Segment results								
Operating profit	9,360	8,313	2,466	2,046	(279)	(282)	11,547	10,077
Capital expenditure								
Business combinations	0	0	0	1,858	–	–	0	1,858
Asset acquisitions	0	36	41	0	–	–	41	36
Additions to property, plant and equipment	760	1,105	681	694	39	17	1,480	1,816
Additions to right-of-use assets	94	92	61	67	4	29	159	188
Additions to intangible assets	112	272	6	1	–	–	118	273
Total	**966**	**1,505**	**789**	**2,620**	**43**	**46**	**1,798**	**4,171**
Research and development								
Research and development costs	5,994	6,280	905	830	–	–	6,899	7,110
Other segment information								
Depreciation of property, plant and equipment	665	634	562	598	28	29	1,255	1,261
Depreciation of right-of-use assets	108	116	59	57	7	5	174	178
Amortisation of intangible assets	383	763	88	67	–	–	471	830
Impairment (reversal) of property, plant and equipment	29	(173)	(1)	16	0	0	28	(157)
Impairment of right-of-use assets	0	0	0	0	0	0	0	0
Impairment of goodwill	0	0	0	0	–	–	0	0
Impairment of intangible assets	423	165	0	0	–	–	423	165
Inventory fair value adjustments	0	0	0	11	–	–	0	11
Equity compensation plan expenses	258	245	48	45	29	25	335	315

Pharmaceuticals subdivisional information in millions of CHF

	Roche Pharmaceuticals		Chugai		Pharmaceuticals Division	
Six months ended 30 June	2022	2021	2022	2021	2022	2021
Revenue from external customers						
Sales	20,145	19,863	2,202	1,808	22,347	21,671
Royalties and other operating income	1,180	1,359	738	13	1,918	1,372
Total	**21,325**	**21,222**	**2,940**	**1,821**	**24,265**	**23,043**
Revenue from other operating segments						
Sales	1,249	799	1,277	757	2,526	1,556
Royalties and other operating income	30	48	399	731	429	779
Elimination of income within division					(2,955)	(2,335)
Total	**1,279**	**847**	**1,676**	**1,488**	**–**	**–**
Segment results						
Operating profit	7,201	7,090	2,239	1,349	9,440	8,439
Elimination of results within division					(80)	(126)
Operating profit	**7,201**	**7,090**	**2,239**	**1,349**	**9,360**	**8,313**
Capital expenditure						
Business combinations	0	0	0	0	0	0
Asset acquisitions	0	36	0	0	0	36
Additions to property, plant and equipment	548	794	212	311	760	1,105
Additions to right-of-use assets	74	73	20	19	94	92
Additions to intangible assets	89	263	23	9	112	272
Total	**711**	**1,166**	**255**	**339**	**966**	**1,505**
Research and development						
Research and development costs	5,480	5,774	532	554	6,012	6,328
Elimination of costs within division					(18)	(48)
Total	**5,480**	**5,774**	**532**	**554**	**5,994**	**6,280**
Other segment information						
Depreciation of property, plant and equipment	581	545	84	89	665	634
Depreciation of right-of-use assets	90	92	18	24	108	116
Amortisation of intangible assets	377	746	6	17	383	763
Impairment (reversal) of property, plant and equipment	29	(173)	0	0	29	(173)
Impairment of right-of-use assets	0	0	0	0	0	0
Impairment of goodwill	0	0	0	0	0	0
Impairment of intangible assets	423	165	0	0	423	165
Inventory fair value adjustment	0	0	0	0	0	0
Equity compensation plan expenses	256	244	2	1	258	245

Net assets in millions of CHF

	Assets 30 June 2022	Assets 31 December 2021	Liabilities 30 June 2022	Liabilities 31 December 2021	Net assets 30 June 2022	Net assets 31 December 2021
Net operating assets						
Pharmaceuticals	48,440	48,677	(13,875)	(15,262)	34,565	33,415
Diagnostics	22,181	21,459	(5,028)	(5,399)	17,153	16,060
Corporate	451	420	(504)	(618)	(53)	(198)
Total	**71,072**	**70,556**	**(19,407)**	**(21,279)**	**51,665**	**49,277**
Current income tax net assets (liabilities)					(2,736)	(2,682)
Deferred tax net assets (liabilities)					5,137	4,955
Defined benefit plan net assets (liabilities)					(3,225)	(4,605)
Lease liabilities					(1,316)	(1,354)
Marketable securities					2,493	6,181
Cash and cash equivalents					4,315	6,850
Debt					(27,750)	(31,198)
Other net assets (liabilities)					363	921
Total net assets					**28,946**	**28,345**

Net operating assets – Pharmaceuticals subdivisional information in millions of CHF

	Assets 30 June 2022	Assets 31 December 2021	Liabilities 30 June 2022	Liabilities 31 December 2021	Net assets 30 June 2022	Net assets 31 December 2021
Roche Pharmaceuticals	45,130	44,860	(14,331)	(15,808)	30,799	29,052
Chugai	6,561	7,892	(993)	(1,700)	5,568	6,192
Elimination within division	(3,251)	(4,075)	1,449	2,246	(1,802)	(1,829)
Pharmaceuticals Division	**48,440**	**48,677**	**(13,875)**	**(15,262)**	**34,565**	**33,415**

3. Revenue

Disaggregated revenue information

Disaggregation of revenue in millions of CHF

	Six months ended 30 June 2022			Six months ended 30 June 2021		
	Revenue from contracts with customers	Revenue from other sources	Total	Revenue from contracts with customers	Revenue from other sources	Total
Pharmaceuticals Division						
Sales by therapeutic area						
Oncology	10,086	–	10,086	10,194	–	10,194
Immunology	3,752	–	3,752	4,006	–	4,006
Neuroscience	3,750	–	3,750	2,973	–	2,973
Haemophilia A	1,826	–	1,826	1,393	–	1,393
Infectious diseases	810	–	810	888	–	888
Ophthalmology	683	–	683	665	–	665
Other therapeutic areas	1,440	–	1,440	1,552	–	1,552
Sales	**22,347**	**–**	**22,347**	**21,671**	**–**	**21,671**
Royalty income	471	–	471	515	–	515
Income from out-licensing agreements	762	–	762	57	–	57
Income from disposal of products and other	342	343	685	494	306	800
Royalties and other operating income	**1,575**	**343**	**1,918**	**1,066**	**306**	**1,372**
Diagnostics Division						
Sales by customer area						
Core Lab[a]	3,576	299	3,875	3,446	324	3,770
Point of Care[a]	2,601	8	2,609	1,789	9	1,798
Molecular Lab[a]	1,919	61	1,980	1,929	61	1,990
Diabetes Care	831	1	832	893	1	894
Pathology Lab	611	41	652	554	36	590
Sales	**9,538**	**410**	**9,948**	**8,611**	**431**	**9,042**
Royalty income	21	–	21	20	–	20
Income from out-licensing agreements	0	–	0	18	–	18
Income from disposal of products and other	1	3	4	0	10	10
Royalties and other operating income	**22**	**3**	**25**	**38**	**10**	**48**
Total	**33,482**	**756**	**34,238**	**31,386**	**747**	**32,133**

a) In 2022 sales in the Point of Care customer area included sales from the Liat business (POC molecular), and sales in the Core Lab customer area included sales from the Life Science Alliances business. These were both previously shown as part of the Molecular Lab customer area. The comparative information for 2021 has been restated accordingly. Sales during the six months ended 30 June 2021 were CHF 182 million for the POC molecular business and CHF 44 million for the Life Science Alliances business.

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	
	2022	2021
Gross sales	27,940	27,109
Government and regulatory mandatory price reductions	(3,053)	(3,020)
Contractual price reductions	(1,965)	(1,894)
Cash discounts	(143)	(158)
Customer returns reserves	(146)	(143)
Others	(286)	(223)
Net sales	**22,347**	**21,671**

Government and regulatory mandatory price reductions. These consist of mandatory price reductions. The major elements are 340B Drug Discount Program, Medicaid and other plans in the US, which totalled USD 2.5 billion equivalent to CHF 2.4 billion (six months ended 30 June 2021: USD 2.7 billion equivalent to CHF 2.5 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 2022	2021
Interest expense	(248)	(159)
Amortisation of debt discount [11]	(2)	(4)
Fair value loss on treasury locks designated as cash flow hedges – transferred from OCI	(1)	0
Net gains (losses) on redemption and repurchase of bonds and notes [11]	0	0
Discount unwind	(4)	(4)
Net interest cost of defined benefit plans	(41)	(36)
Interest expenses on lease liabilities	(8)	(8)
Total financing costs	**(304)**	**(211)**

Other financial income (expense) in millions of CHF

	Six months ended 30 June 2022	2021
Net gains (losses) on equity investments / securities at fair value through profit or loss	(117)	103
Net income (expense) from equity investments / securities	**(117)**	**103**
Interest income (expense) from debt securities at fair value through OCI and at amortised cost	4	3
Net gains (losses) on sale of debt securities at fair value through OCI	0	0
Net gains (losses) on sale of debt securities at fair value through profit or loss	(11)	0
Net interest income (expense) and income from debt securities	**(7)**	**3**
Net foreign exchange gains (losses)	584	261
Net gains (losses) on foreign currency derivatives	(638)	(341)
Foreign exchange gains (losses)	**(54)**	**(80)**
Gains (losses) on net monetary position in hyperinflationary economies	(20)	(10)
Net other financial income (expense)	(43)	5
Associates	(17)	0
Total other financial income (expense)	**(258)**	**21**

Net financial expense in millions of CHF

	Six months ended 30 June 2022	2021
Financing costs	(304)	(211)
Other financial income (expense)	(258)	21
Net financial expense	**(562)**	**(190)**
Financial result from Treasury management	(504)	(154)
Financial result from Pension management	(41)	(36)
Associates	(17)	0
Net financial expense	**(562)**	**(190)**

Hyperinflationary economies

Since 1 April 2022 the Group has considered Turkey to be a hyperinflationary economy in the context of IAS 29 'Financial Reporting in Hyperinflationary Economies'. For 2022 the cumulative inflation index over the last three years exceeds 100%, as measured by the consumer price index published by the Turkish Statistical Institute. Argentina has been treated as a hyperinflationary economy since 1 July 2018.

Accordingly the Group has reviewed the reporting from its affiliates in Argentina and Turkey, and where necessary restated them in line with IAS 29. The potential adjustments resulting from the application of IAS 29 do not have a significant impact on the Group's operating results and balance sheet. An adjustment is recorded for the gains (losses) on the net monetary position, which is a loss of CHF 20 million resulting from the loss in purchasing power of the positive net monetary position during the six months ended 30 June 2022 of the Group's affiliates in Argentina and Turkey (six months ended 30 June 2021: loss of CHF 10 million for the Group's affiliates in Argentina).

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 2022.

Income tax expenses in millions of CHF

	Six months ended 30 June	
	2022	2021
Current income taxes	(2,641)	(1,971)
Deferred taxes	817	300
Total income tax (expense)	**(1,824)**	**(1,671)**

The Group's effective tax rate for the six months ended 30 June 2022 decreased to 16.6% (six months ended 30 June 2021: 16.9%). This was mainly due to the relatively higher impact from the resolution of several tax disputes during the six months ended 30 June 2022 compared to the same period in 2021. This decrease was partly offset by the higher percentage of profit contribution coming from tax jurisdictions with tax rates higher than the Group's average tax rate and by the deferred tax impact from equity compensation plans, which varies according to the price of the underlying equity instruments.

6. Mergers and acquisitions

Business combinations – 2022

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

Business combinations – 2021

GenMark Diagnostics, Inc. On 22 April 2021 the Group acquired a 100% controlling interest in GenMark Diagnostics, Inc. ('GenMark'), a publicly owned US company based in Carlsbad, California, that had been listed on Nasdaq. GenMark is reported in the Diagnostics Division. The total consideration was USD 1,865 million, which was paid in cash.

Cash flows from business combinations

Business combinations: net cash outflow in millions of CHF

	Six months ended 30 June 2022			Six months ended 30 June 2021		
	Pharmaceuticals	Diagnostics	Total	Pharmaceuticals	Diagnostics	Total
Cash consideration paid	0	0	0	0	(1,711)	(1,711)
Deferred consideration paid	0	0	0	0	0	0
Contingent consideration paid	0	0	0	(22)	0	(22)
Cash in acquired company	0	0	0	0	14	14
Total net cash outflow	**0**	**0**	**0**	**(22)**	**(1,697)**	**(1,719)**

Asset acquisitions – 2022

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

Asset acquisitions – 2021

The Group did not complete any asset acquisitions during the six months ended 30 June 2021.

Cash flows from asset acquisitions

Asset acquisitions: net cash outflow in millions of CHF

	Six months ended 30 June 2022			Six months ended 30 June 2021		
	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	(41)	(41)	(36)	(67)	(103)
Total net cash outflow	**0**	**(41)**	**(41)**	**(36)**	**(67)**	**(103)**

For asset acquisitions previously closed the Group recorded additions to product intangible assets related to contingent payments for the achievement of performance-related milestones of CHF 41 million (six months ended 30 June 2021: CHF 36 million). During the six months ended 30 June 2021 the Group made contingent payments of CHF 67 million related to product intangible assets recognised already at 31 December 2020.

7. Global restructuring plans

During the six months ended 30 June 2022 the Group expanded the implementation of various global restructuring plans initiated in prior years.

Global restructuring plans: costs incurred in millions of CHF

	Diagnostics	Site consolidation	Other plans	Total
Six months ended 30 June 2022				
Global restructuring costs				
– Employee-related costs	5	27	114	146
– Site closure costs	5	28	35	68
– Divestment of products and businesses	0	0	0	0
– Other reorganisation expenses	10	3	39	52
Total global restructuring costs	**20**	**58**	**188**	**266**
Additional costs				
– Impairment of goodwill	0	0	0	0
– Impairment of intangible assets	0	0	0	0
– Legal and environmental cases	0	0	(1)	(1)
Total costs	**20**	**58**	**187**	**265**
Six months ended 30 June 2021				
Global restructuring costs				
– Employee-related costs	107	23	276	406
– Site closure costs	31	5	19	55
– Divestment of products and businesses	0	0	0	0
– Other reorganisation expenses	25	1	24	50
Total global restructuring costs	**163**	**29**	**319**	**511**
Additional costs				
– Impairment of goodwill	0	0	0	0
– Impairment of intangible assets	0	0	0	0
– Legal and environmental cases	0	0	0	0
Total costs	**163**	**29**	**319**	**511**

Other global restructuring plans

During the six months ended 30 June 2022 employee-related costs were connected with the outsourcing of operational activities to the global shared service centres and external providers as well as with driving efficiency gains.

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

	Six months ended 30 June 2022	2021
Termination costs	(17)	308
Defined benefit plans	0	0
Other employee-related costs	163	98
Total employee-related costs	**146**	**406**
Impairment of property, plant and equipment and right-of-use assets	0	11
Accelerated depreciation of property, plant and equipment and right-of-use assets	40	40
(Gains) losses on disposal of property, plant and equipment and right-of-use assets	0	2
Other site closure costs	28	2
Total site closure costs	**68**	**55**
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	52	50
Total global restructuring costs	**266**	**511**
Additional costs		
– Impairment of goodwill	0	0
– Impairment of intangible assets	0	0
– Legal and environmental cases	(1)	0
Total costs	**265**	**511**

Global restructuring plans: classification of costs in millions of CHF

	Six months ended 30 June 2022			Six months ended 30 June 2021		
	Depreciation, amortisation and impairment	Other	Total	Depreciation, amortisation and impairment	Other	Total
Cost of sales						
– Pharmaceuticals	22	27	49	10	19	29
– Diagnostics	0	11	11	24	35	59
Marketing and distribution						
– Pharmaceuticals	0	9	9	0	115	115
– Diagnostics	0	0	0	0	65	65
Research and development						
– Pharmaceuticals	10	7	17	15	67	82
– Diagnostics	1	1	2	0	16	16
General and administration						
– Pharmaceuticals	7	80	87	2	73	75
– Diagnostics	0	15	15	0	22	22
– Corporate	0	75	75	0	48	48
Total costs	**40**	**225**	**265**	**51**	**460**	**511**
Total by operating segment						
– Roche Pharmaceuticals	28	100	128	10	274	284
– Chugai	11	23	34	17	0	17
– Diagnostics	1	27	28	24	138	162
– Corporate	0	75	75	0	48	48
Total costs	**40**	**225**	**265**	**51**	**460**	**511**

8. Goodwill

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

Six months ended 30 June 2022	
At 1 January 2022	10,809
Currency translation effects	351
At 30 June 2022	**11,160**
Allocated by operating segment	
Roche Pharmaceuticals	5,926
Chugai	77
Diagnostics	5,157
Total Group	**11,160**

Impairment charges – 2022

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

Impairment charges – 2021

There were no impairments of goodwill during the six months ended 30 June 2021.

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 2022				
At 1 January 2022	5,990	5,526	601	12,117
Asset acquisitions	0	41	0	41
Additions	66	49	3	118
Transfers	39	(39)	0	–
Amortisation charge	(426)	–	(45)	(471)
Impairment charge	(336)	(87)	0	(423)
Currency translation effects	204	132	17	353
At 30 June 2022	**5,537**	**5,622**	**576**	**11,735**
Allocated by operating segment				
Roche Pharmaceuticals	4,075	5,209	467	9,751
Chugai	3	39	17	59
Diagnostics	1,459	374	92	1,925
Total Group	**5,537**	**5,622**	**576**	**11,735**

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

Six months ended 30 June	Amortisation 2022	Amortisation 2021	Impairment 2022	Impairment 2021
Cost of sales				
– Pharmaceuticals	(215)	(604)	(336)	0
– Diagnostics	(74)	(52)	0	0
Marketing and distribution				
– Pharmaceuticals	(7)	(9)	0	0
– Diagnostics	(10)	(8)	0	0
Research and development				
– Pharmaceuticals	(161)	(150)	(87)	(165)
– Diagnostics	(4)	(7)	0	0
Total	**(471)**	**(830)**	**(423)**	**(165)**

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 is 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.

Impairment charges – 2021

Pharmaceuticals Division. Impairment charges totalling CHF 165 million were recorded. The major items related to:

- A charge of CHF 76 million following a clinical data assessment. The asset concerned, which was not yet being amortised, was fully written down.
- A charge of CHF 37 million due to the decision to stop 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 29 million due to the decision to stop a collaboration project with an alliance partner following a data assessment. The asset concerned, which was not yet being amortised, was fully written down.
- A charge of CHF 19 million due to the decision to stop a collaboration project with an alliance partner. The asset concerned, which was being amortised, was fully written down.

10. Provisions and contingent liabilities

Provisions in millions of CHF

	30 June 2022	31 December 2021
Legal provisions	366	372
Environmental provisions	418	447
Restructuring provisions	1,216	1,427
Contingent consideration provisions [16]	121	141
Other provisions	1,555	1,581
Total provisions	**3,676**	**3,968**
Current	2,249	2,526
Non-current	1,427	1,442
Total provisions	**3,676**	**3,968**

During the six months ended 30 June 2022 CHF 527 million of provisions were utilised (six months ended 30 June 2021: CHF 533 million). This amount is entirely included in the cash flow from operating activities and mainly relates to the utilisation of restructuring and other provisions (six months ended 30 June 2021: CHF 511 million). During the six months ended 30 June 2021 CHF 22 million were also included in the cash flow from business combinations for payments made from deferred and contingent consideration arrangements (see Note 6).

As part of the regular review of litigation matters, management has reassessed the provisions recorded for certain litigation matters. Based on the development of the various litigations, there was a net decrease in legal provisions of CHF 12 million (six months ended 30 June 2021: net increase of CHF 47 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.

Meso litigation. On 8 April 2022 the US Court of Appeal issued its ruling. It reversed the induced infringement decision and vacated the damages award. The US Court of Appeal also affirmed that Roche directly infringed one patent and vacated the District Court's decision on 23 December 2020 of non-infringement of three other patents. The case is remanded back to the District Court for a new damages trial. The Group is vigorously defending itself in this matter.

Herceptin investigation. On 8 February 2022 the South African Competition Commission ('Commission') filed a referral with the Competition Tribunal for prosecution of Roche Holding Ltd, F. Hoffmann-La Roche Ltd and Roche Products (Pty) Ltd (together 'Roche') for alleged excessive pricing of trastuzumab (Herceptin) in contravention of the South African Competition Act. The Commission's referral affidavit also alleges that the excessive price of Herceptin constitutes a violation of basic human rights including the right of access to healthcare enshrined in South Africa's Bill of Rights as it denies access to life-saving medicine for women living with breast cancer. The alleged excessive pricing of Herceptin by Roche took place between January 2011 and November 2020 in the South African private healthcare sector and in the South African public healthcare sector during the period from November 2015 to July 2020. The Commission has asked the Competition Tribunal to impose a penalty against Roche. The Group is vigorously defending itself in this matter. The outcome of this matter cannot be determined at this time.

University of Pennsylvania litigation. On 31 January 2022 the University of Pennsylvania filed a patent litigation action in the US against Genentech, Inc. ('Genentech') based on a claim that Herceptin, Perjeta, Phesgo and Herceptin Hylecta would infringe their US Patent No. 7,625,558 (the '558 patent). According to the complaint, the '558 patent generally relates to methods of treating ErbB (HER2) protein-mediated cancer tumours by administering a compound that inhibits the formation of ErbB (HER2). Genentech filed a partial motion to dismiss the University of Pennsylvania's claims of wilfulness on 24 March 2022, which is still pending. 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 2022	
At 1 January 2022	31,198
Proceeds from issue of bonds and notes	7,642
Redemption and repurchase of bonds and notes	0
Increase (decrease) in commercial paper	1,802
Increase (decrease) in other debt	(13,527)
Changes from financing cash flows	**(4,083)**
Net (gains) losses on redemption and repurchase of bonds and notes [4]	0
Amortisation of debt discount [4]	2
Financing costs	**2**
Net foreign currency transaction (gains) losses	49
Currency translation effects	671
Changes in foreign exchange rates	**720**
Changes in fair values of hedging instruments	(87)
Other changes	0
At 30 June 2022	**27,750**
Bonds and notes	24,771
Commercial paper	2,346
Amounts due to banks and other financial institutions	630
Other borrowings	3
Total debt	**27,750**
Long-term debt	22,369
Short-term debt	5,381
Total debt	**27,750**

Unamortised discount included in the carrying value of bonds and notes at 30 June 2022 was CHF 67 million (30 June 2021: CHF 61 million).

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 bonds will mature on 25 November 2022, 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 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.

Issuance of bonds and notes – 2021

On 5 March 2021 the Group completed an offering of USD 0.5 billion and USD 0.65 billion fixed rate notes with a coupon of 0.45% and 0.991%, respectively. The notes will mature on 5 March 2024 and 5 March 2026, respectively. The Group received CHF 1,066 million aggregate net proceeds from the issuance and sale of these fixed rate notes.

Also on 5 March 2021 the Group completed an offering of USD 0.35 billion floating rate notes at a rate equal to SOFR plus a margin of 0.24%. The notes will mature on 5 March 2024. The Group received CHF 325 million aggregate net proceeds from the issuance and sale of these floating rate notes.

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.

Redemption and repurchase of bonds and notes – 2021

On the due date of 4 March 2021 the Group redeemed notes with an outstanding amount of EUR 1.14 billion. The effective interest rate of these notes was 6.66%. The cash outflow was CHF 1,266 million and there was no gain or loss recorded on the redemption.

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 2022. The maturity of the notes under the program cannot exceed 365 days from the date of issuance. At 30 June 2022 unsecured commercial paper notes with a principal amount of USD 2.5 billion and an average interest rate of 1.32% were outstanding.

Movements in commercial paper obligations in millions of CHF

Six months ended 30 June 2022	
At 1 January 2022	500
Net cash proceeds (payments)	1,802
Currency translation effects	44
At 30 June 2022	**2,346**

Amounts due to banks and other financial institutions

At 30 June 2022 CHF 630 million were due within one year (31 December 2021: CHF 14,118 million). This position notably included the credit facility from banks used to finance the share repurchase transaction described in Note 22 to the Annual Financial Statements. This was fully repaid during the six months ended 30 June 2022, partly from the proceeds from the new debt issuances and partly from internal cash generation. At 31 December 2021 the amount of the credit facility outstanding was CHF 13.5 billion.

12. Equity attributable to Roche shareholders

Share capital reduction

At 31 December 2021 the authorised and issued share capital of Roche Holding Ltd, which is the Group's parent company, consisted of 160.0 million shares with a nominal value of CHF 1.00 each.

On 26 November 2021, an Extraordinary General Meeting of Roche shareholders approved a share capital reduction by CHF 53.3 million from CHF 160.0 million to CHF 106.7 million through the cancellation of 53.3 million shares. Following the closing of the share repurchase transaction described in Note 22 to the Annual Financial Statements on 6 December 2021, 53.3 million shares were held by the Group as treasury shares at 31 December 2021. These shares were cancelled in February 2022 when the necessary legal procedures had been completed. Upon cancellation of these shares, the share capital of Roche Holding Ltd decreased by CHF 53.3 million from CHF 160.0 million to CHF 106.7 million. The reduction in the share capital became effective at the beginning of February 2022, with the entry of the share capital reduction in the commercial register of the Canton of Basel-Stadt on 3 February 2022 and the publication of the share capital reduction in the Swiss Official Gazette of Commerce on 8 February 2022.

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

Following the share capital reduction described above, at 30 June 2022 the issued share capital of Roche Holding Ltd, which is the Group's parent company, consisted of 106.7 million shares with a nominal value of CHF 1.00 each. The number of issued non-voting equity securities did not change during the six months ended 30 June 2022. The weighted average number of shares and non-voting equity securities in issue during the six months ended 30 June 2022 was 801 million (six months ended 30 June 2021: 854 million).

Dividends

On 15 March 2022 the shareholders approved the distribution of a dividend of CHF 9.30 per share and non-voting equity security (2021: CHF 9.10) in respect of the 2021 business year. The distribution to holders of outstanding shares and non-voting equity securities totalled CHF 7,446 million (2021: CHF 7,773 million) and has been recorded against retained earnings in the six months ended 30 June 2022.

Own equity instruments

Holdings of own equity instruments in equivalent number of non-voting equity securities

	30 June 2022 (millions)	31 December 2021 (millions)
Shares	0	53.3
Non-voting equity securities	8.7	8.8
Total	**8.7**	**62.1**

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). In addition, as described above, 53.3 million repurchased shares were reported as treasury shares as at 31 December 2021 and cancelled in February 2022.

Retained earnings

In addition to net income attributable to Roche shareholders of CHF 8,530 million (six months ended 30 June 2021: CHF 7,803 million) and the dividend payments described above, retained earnings also include gains on remeasurements of defined benefit plans of CHF 949 million, after tax (six months ended 30 June 2021: gains of CHF 1,288 million, after tax). These were based on updated actuarial calculations for major plans and the net gains were due to changes in discount rates and inflation rates, a negative performance of plan assets since the end of 2021, and the application of a limit on asset recognition to the surplus in certain defined benefit plans.

13. Subsidiaries and associates

Chugai

Chugai is a fully consolidated subsidiary of the Group and at 30 June 2022 the Group's interest in Chugai was 61.1% (31 December 2021: 61.2%). 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 2022 totalled CHF 226 million (six months ended 30 June 2021: CHF 161 million) and have been 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	
	2022	2021
Net income attributable to Roche shareholders (CHF millions)	**8,530**	**7,803**
Weighted average number of outstanding shares (millions)	116	160
Number of outstanding non-voting equity securities (millions)	703	703
Weighted average number of own shares and non-voting equity securities held (millions)	(18)	(9)
Weighted average number of outstanding shares and non-voting equity securities used to calculate basic earnings per share (millions)	**801**	**854**
Basic earnings per share and non-voting equity security (CHF)	**10.65**	**9.14**

Diluted earnings per share and non-voting equity security

	Six months ended 30 June	
	2022	2021
Net income attributable to Roche shareholders (CHF millions)	8,530	7,803
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)	**8,530**	**7,803**
Weighted average number of outstanding shares and non-voting equity securities (millions)	801	854
Adjustment for assumed exercise of equity compensation plans, where dilutive (millions)	9	8
Weighted average number of outstanding shares and non-voting equity securities used to calculate diluted earnings per share (millions)	**810**	**862**
Diluted earnings per share and non-voting equity security (CHF)	**10.54**	**9.05**

15. Statement of cash flows

Cash generated from operations in millions of CHF

	Six months ended 30 June 2022	2021
Net income	9,161	8,216
Add back non-operating (income) expense		
– Financing costs [4]	304	211
– Other financial (income) expense [4]	258	(21)
– Income taxes [5]	1,824	1,671
Operating profit	**11,547**	**10,077**
Depreciation of property, plant and equipment [2]	1,255	1,261
Depreciation of right-of-use assets [2]	174	178
Amortisation of intangible assets [2]	471	830
Impairment of goodwill [2]	0	0
Impairment of intangible assets [2]	423	165
Impairment (reversal) of property, plant and equipment [2]	28	(157)
Impairment of right-of-use assets [2]	0	0
Operating (income) expense for defined benefit plans	330	367
Operating expense for equity-settled equity compensation plans	316	299
Net (income) expense for provisions	202	563
Bad debt (reversal) expense	0	(2)
Inventory write-downs	131	251
Inventory fair value adjustments	0	11
Net (gain) loss on disposal of products	(338)	(484)
Other adjustments	(17)	(35)
Cash generated from operations	**14,522**	**13,324**

Dividends paid in millions of CHF

	Six months ended 30 June 2022	2021
Dividends to Roche shareholders	(7,446)	(7,773)
Dividends to non-controlling shareholders		
– Chugai	(226)	(161)
– Other non-controlling interests	1	(1)
Increase (decrease) in dividends payable	0	1
Dividend withholding tax	(1)	(21)
Total	**(7,672)**	**(7,955)**

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 2022				
Marketable securities:				
– Equity securities at fair value through profit or loss	1	–	–	1
– Debt securities at fair value through OCI	518	0	–	518
– Debt securities at fair value through profit or loss	0	57	–	57
– Money market instruments at fair value through OCI	0	1,740	–	1,740
Derivative financial instruments	–	272	–	272
Equity investments at fair value through OCI	231	16	–	247
Equity investments at fair value through profit or loss	133	170	–	303
Financial assets recognised at fair value	**883**	**2,255**	**–**	**3,138**
Derivative financial instruments	–	(940)	–	(940)
Contingent consideration	–	–	(121)	(121)
Financial liabilities recognised at fair value	**–**	**(940)**	**(121)**	**(1,061)**

At 30 June 2022 Level 1 financial assets consist of bonds and quoted shares. Level 2 financial assets consist 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 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 has occurred. There were no significant transfers between Level 1 and Level 2 during the six months ended 30 June 2022.

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 2022	
At 1 January 2022	(141)
Utilised for settlements	0
Total gains and losses included in the income statement	
– Unused amounts reversed – recorded within general and administration	28
– Additional amounts created – recorded within general and administration	(4)
– Discount unwind included in financing costs	(2)
Total gains and losses included in other comprehensive income	
– Currency translation effects	(2)
At 30 June 2022	**(121)**

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, discounted to present value using a risk-adjusted average discount rate of 2.9% at 30 June 2022 (31 December 2021: 2.7%). 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 2022 the total potential payments under contingent consideration arrangements arising from business combinations could be up to CHF 0.4 billion (31 December 2021: CHF 0.4 billion).

Carrying value and fair value

At 30 June 2022 the carrying value of bonds and notes is CHF 24.8 billion compared to a fair value of CHF 23.7 billion and the carrying value of total debt is CHF 27.8 billion compared to a fair value of CHF 26.7 billion. The carrying values of financial assets are a reasonable approximation of the fair values at 30 June 2022.

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 balance sheet of Roche Holding Ltd as at 30 June 2022 and the related consolidated statements of income, comprehensive income, cash flows and changes in equity for the six-month period then ended, and selected explanatory notes (the interim consolidated financial statements) on pages 39 to 66. 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 2022 are not prepared, in all material respects, in accordance with International Accounting Standard 34 *Interim Financial Reporting*.

KPMG AG

Mark Baillache
Licensed Audit Expert

François Rouiller
Licensed Audit Expert

Basel, 19 July 2022

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 2022 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
Royalties and other operating income	1,943	0	–	–	–	–	–	–	–	1,943
Cost of sales	(9,987)	60	286	336	0	–	–	–	–	(9,305)
Marketing and distribution	(4,485)	9	17	0	–	–	–	–	–	(4,459)
Research and development	(6,899)	19	165	87	–	–	–	–	–	(6,628)
General and administration	(1,320)	178	–	0	(17)	(19)	0	–	–	(1,178)
Operating profit	**11,547**	**266**	**468**	**423**	**(17)**	**(19)**	**0**	**–**	**–**	**12,668**
Financing costs	(304)	0	–	–	2	2	–	–	–	(300)
Other financial income (expense)	(258)	–	–	–	–	–	–	–	–	(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

Core results reconciliation – Six months ended 30 June 2021 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	30,713	–	–	–	–	–	–	–	–	30,713
Royalties and other operating income	1,420	0	–	–	–	–	–	–	–	1,420
Cost of sales	(8,992)	88	656	0	11	–	–	–	–	(8,237)
Marketing and distribution	(4,489)	180	17	0	–	–	–	–	–	(4,292)
Research and development	(7,110)	98	157	165	–	–	–	–	–	(6,690)
General and administration	(1,465)	145	–	0	26	32	0	–	–	(1,262)
Operating profit	**10,077**	**511**	**830**	**165**	**37**	**32**	**0**	**–**	**–**	**11,652**
Financing costs	(211)	0	–	–	2	2	–	–	–	(207)
Other financial income (expense)	21	–	–	–	–	–	–	–	–	21
Profit before taxes	**9,887**	**511**	**830**	**165**	**39**	**34**	**0**	**–**	**–**	**11,466**
Income taxes	(1,671)	(106)	(114)	(31)	(8)	(7)	0	0	(2)	(1,939)
Net income	**8,216**	**405**	**716**	**134**	**31**	**27**	**0**	**0**	**(2)**	**9,527**
Attributable to										
– Roche shareholders	7,803	400	711	134	31	27	0	0	(2)	9,104
– Non-controlling interests	413	5	5	0	–	0	0	0	–	423

Divisional core results reconciliation – Six months ended 30 June 2022 in millions of CHF

	IFRS	Global restructuring	Intangibles amortisation	Intangibles impairment	M&A and alliance transactions	Legal & environmental	Pension plan settlements	Core
Pharmaceuticals								
Sales	22,347	–	–	–	–	–	–	22,347
Royalties and other operating income	1,918	0	–	–	–	–	–	1,918
Cost of sales	(5,029)	49	214	336	0	–	–	(4,430)
Marketing and distribution	(3,112)	9	7	0	–	–	–	(3,096)
Research and development	(5,994)	17	161	87	–	–	–	(5,729)
General and administration	(770)	88	–	0	4	(14)	0	(692)
Operating profit	**9,360**	**163**	**382**	**423**	**4**	**(14)**	**0**	**10,318**
Diagnostics								
Sales	9,948	–	–	–	–	–	–	9,948
Royalties and other operating income	25	0	–	–	–	–	–	25
Cost of sales	(4,958)	11	72	0	0	–	–	(4,875)
Marketing and distribution	(1,373)	0	10	0	–	–	–	(1,363)
Research and development	(905)	2	4	0	–	–	–	(899)
General and administration	(271)	15	–	0	(21)	1	0	(276)
Operating profit	**2,466**	**28**	**86**	**0**	**(21)**	**1**	**0**	**2,560**
Corporate								
General and administration	(279)	75	–	–	0	(6)	0	(210)
Operating profit	**(279)**	**75**	**–**	**–**	**0**	**(6)**	**0**	**(210)**

Divisional core results reconciliation – Six months ended 30 June 2021 in millions of CHF

	IFRS	Global restructuring	Intangibles amortisation	Intangibles impairment	M&A and alliance transactions	Legal & environmental	Pension plan settlements	Core
Pharmaceuticals								
Sales	21,671	–	–	–	–	–	–	21,671
Royalties and other operating income	1,372	0	–	–	–	–	–	1,372
Cost of sales	(4,515)	29	604	0	0	–	–	(3,882)
Marketing and distribution	(3,086)	115	9	0	–	–	–	(2,962)
Research and development	(6,280)	82	150	165	–	–	–	(5,883)
General and administration	(849)	75	–	0	16	4	0	(754)
Operating profit	**8,313**	**301**	**763**	**165**	**16**	**4**	**0**	**9,562**
Diagnostics								
Sales	9,042	–	–	–	–	–	–	9,042
Royalties and other operating income	48	0	–	–	–	–	–	48
Cost of sales	(4,477)	59	52	0	11	–	–	(4,355)
Marketing and distribution	(1,403)	65	8	0	–	–	–	(1,330)
Research and development	(830)	16	7	0	–	–	–	(807)
General and administration	(334)	22	–	0	10	28	0	(274)
Operating profit	**2,046**	**162**	**67**	**0**	**21**	**28**	**0**	**2,324**
Corporate								
General and administration	(282)	48	–	–	0	0	0	(234)
Operating profit	**(282)**	**48**	**–**	**–**	**0**	**0**	**0**	**(234)**

Core EPS (basic)

	Six months ended 30 June 2022	2021
Core net income attributable to Roche shareholders (CHF millions)	9,518	9,104
Weighted average number of outstanding shares and non-voting equity securities used to calculate basic earnings per share (millions) [14]	801	854
Core earnings per share (basic) (CHF)	**11.89**	**10.66**

Core EPS (diluted)

	Six months ended 30 June 2022	2021
Core net income attributable to Roche shareholders (CHF millions)	9,518	9,104
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)	**9,518**	**9,104**
Weighted average number of outstanding shares and non-voting equity securities used to calculate diluted earnings per share (millions) [14]	**810**	**862**
Core earnings per share (diluted) (CHF)	**11.76**	**10.56**

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 2022	2021
Cash flows from operating activities (IFRS basis in accordance with IAS 7)	**9,509**	**8,212**
Add back		
– Income taxes paid	2,482	2,183
Deduct		
– Investments in property, plant and equipment	(1,685)	(1,759)
– Principal portion of lease liabilities paid	(186)	(187)
– Investments in intangible assets	(341)	(335)
– Disposal of property, plant and equipment	38	38
– Disposal of intangible assets	0	0
Pensions and other post-employment benefits		
– Add back total payments for defined benefit plans	290	288
– Deduct allocation of payments to operating free cash flow	(330)	(367)
Acquisition-related items, including transaction costs	5	46
Other operating items	0	(2)
Operating free cash flow	**9,782**	**8,117**

Free cash flow reconciliation in millions of CHF

	Six months ended 30 June 2022	2021
Cash flows from operating activities (IFRS basis in accordance with IAS 7)	**9,509**	**8,212**
Deduct		
– Investments in property, plant and equipment	(1,685)	(1,759)
– Principal portion of lease liabilities paid	(186)	(187)
– Investments in intangible assets	(341)	(335)
– Disposal of property, plant and equipment	38	38
– Disposal of intangible assets	0	0
– Interest paid	(228)	(243)
Other operating items, including acquisition-related items	5	44
Other treasury items	(15)	268
Free cash flow	**7,097**	**6,038**

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

	Pharmaceuticals		Diagnostics		Corporate		Group	
Six months ended 30 June	2022	2021	2022	2021	2022	2021	2022	2021
Depreciation, amortisation and impairments								
Depreciation of property, plant and equipment	665	634	562	598	28	29	1,255	1,261
Depreciation of right-of-use assets	108	116	59	57	7	5	174	178
Amortisation of intangible assets	383	763	88	67	–	–	471	830
Impairment (reversal) of property, plant and equipment	29	(173)	(1)	16	0	0	28	(157)
Impairment of right-of-use assets	0	0	0	0	0	0	0	0
Impairment of goodwill	0	0	0	0	–	–	0	0
Impairment of intangible assets	423	165	0	0	–	–	423	165
Total	**1,608**	**1,505**	**708**	**738**	**35**	**34**	**2,351**	**2,277**
Other adjustments								
Add back								
– Expenses for equity-settled equity compensation plans	248	237	42	39	26	23	316	299
– Net (income) expense for provisions	161	366	14	189	27	8	202	563
– Net (gain) loss from disposals	(343)	(485)	2	8	0	0	(341)	(477)
– Non-cash working capital and other items	29	25	88	199	1	1	118	225
Deduct								
– Utilisation of provisions	(373)	(306)	(115)	(139)	(35)	(27)	(523)	(472)
– Proceeds from disposals	347	503	29	19	0	0	376	522
Total	**69**	**340**	**60**	**315**	**19**	**5**	**148**	**660**
Operating profit cash adjustments	**1,677**	**1,845**	**768**	**1,053**	**54**	**39**	**2,499**	**2,937**

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	2022	2021	2022	2021	2022	2021	2022	2021
EBITDA								
Core operating profit	10,318	9,562	2,560	2,324	(210)	(234)	12,668	11,652
Depreciation and impairment of property, plant and equipment – Core basis	654	436	561	590	28	29	1,243	1,055
Depreciation and impairment of right-of-use assets – Core basis	108	114	59	57	7	5	174	176
Amortisation and impairment of commercial software intangible assets – Core basis	1	0	2	0	0	0	3	0
EBITDA	**11,081**	**10,112**	**3,182**	**2,971**	**(175)**	**(200)**	**14,088**	**12,883**
– Margin, % of sales	49.6	46.7	32.0	32.9	–	–	43.6	41.9

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 2022 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Treasury and taxation	Group
Property, plant and equipment	15,949	6,885	273	–	23,107
Right-of-use assets	892	268	57	–	1,217
Goodwill	6,003	5,157	–	–	11,160
Intangible assets	9,810	1,925	–	–	11,735
Inventories	5,068	3,224	–	–	8,292
Provisions	(2,502)	(978)	(196)	–	(3,676)
Current income tax net liabilities	–	–	–	(2,736)	(2,736)
Deferred tax net assets	–	–	–	5,137	5,137
Defined benefit plan net liabilities	–	–	–	(3,225)	(3,225)
Lease liabilities	–	–	–	(1,316)	(1,316)
Marketable securities	–	–	–	2,493	2,493
Cash and cash equivalents	–	–	–	4,315	4,315
Debt	–	–	–	(27,750)	(27,750)
Other net assets (liabilities)					
– Net working capital	(1,377)	711	(186)	–	(852)
– Other long-term net operating assets	722	(39)	(1)	–	682
– Other	–	–	–	363	363
Total net assets	**34,565**	**17,153**	**(53)**	**(22,719)**	**28,946**

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 34 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 27 (Diagnostics Division) and page 29 (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 2022 line item and its 2021 equivalent is calculated using the average exchange rate for the year ended 31 December 2021 for both the 2022 line item and the 2021 line item and subsequently calculating the change in percent with respect to the two recalculated numbers.

Foreign exchange gains and losses are excluded from the calculation of CER growth rates in the earning 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 2022	31 December 2021
Number of shares (nominal value: CHF 1.00)	106,691,000	160,000,000
Number of non-voting equity securities *(Genussscheine)* (no nominal value)	702,562,700	702,562,700
Total	**809,253,700**	**862,562,700**
Number of own shares and non-voting equity securities *(Genussscheine)* held	(8,674,855)	(62,159,409)
Total in issue	**800,578,845**	**800,403,291**

Following the closing of the share repurchase transaction on 6 December 2021 (see Note 22 to the Roche Group Consolidated Financial Statements for the year ended 31 December 2021), the number of own shares and non-voting equity securities *(Genussscheine)* held by the Roche Group at 31 December 2021 as summarised in the table above included 53,309,000 bearer shares. These shares were cancelled in February 2022 (see Note 12 to these Roche Group Interim Consolidated Financial Statements).

Data per share and non-voting equity security in CHF

		Six months ended 30 June 2022	Six months ended 30 June 2021
Earnings (basic)		10.65	9.14
Earnings (diluted)		10.54	9.05
Core earnings (basic)		11.89	10.66
Core earnings (diluted)		11.76	10.56
Stock price of share [b]	Opening	408.80	310.00
	High	433.00	377.60
	Low	343.00	303.80
	Period end	368.40	375.80
Stock price of non-voting equity security *(Genussschein)* [b]	Opening	379.10	309.00
	High	400.55	349.15
	Low	301.35	297.05
	Period end	318.55	348.55

Market capitalisation in millions of CHF

	30 June 2022	31 December 2021	30 June 2021
Period end	260,343	306,601	302,113

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.

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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 2022 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.

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