NOVARTIS | Reimagining Medicine

Novartis First Quarter 2023

Condensed interim financial report – supplementary data

Novartis Global Communications

Novartis First Quarter 2023 Condensed Interim Financial Report – Supplementary Data

Group

Key Figures

First quarter

	Q1 2023 USD m	Q1 2022 USD m	% change USD	% change cc[1]
Net sales to third parties	**12 953**	**12 531**	**3**	**8**
Divisional operating income[2]	2 994	3 021	-1	8
Corporate income and expense, net[2]	-138	-169	18	16
Operating income	**2 856**	**2 852**	**0**	**9**
As % of net sales	*22.0*	*22.8*		
Loss from associated companies	-1	-2	nm	nm
Interest expense	-211	-201	-5	-7
Other financial income and expense	96	20	nm	nm
Income taxes	-446	-450	1	-9
Net income	**2 294**	**2 219**	**3**	**14**
Basic earnings per share (USD)	**1.09**	**1.00**	**9**	**20**
Net cash flows from operating activities	**2 957**	**1 649**	**79**	
Free cash flow[1, 3]	**2 720**	**1 392**	**95**	
Core[1]				
Core operating income	**4 413**	**4 083**	**8**	**15**
As % of net sales	*34.1*	*32.6*		
Core net income	**3 614**	**3 251**	**11**	**18**
Core basic earnings per share (USD)	**1.71**	**1.46**	**17**	**25**

[1] Constant currencies (cc), core results and free cash flow are non-IFRS measures. An explanation of non-IFRS measures can be found on page 35. Unless otherwise noted, all growth rates in this release refer to same period in prior year.

[2] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023 (see Note 9 in this Condensed Interim Financial Report).

[3] Effective January 1, 2023, Novartis revised its definition of free cash flow, to define free cash flow as net cash flows from operating activities less purchases of property, plant and equipment. To aid in comparability, the prior year free cash flow amounts have been revised to conform with the new free cash flow definition. See page 35 of the Condensed Interim Financial Report.

nm = not meaningful

Strategy Update

Our focus

With our new focused strategy unveiled in 2022, Novartis is transforming into a "pure-play" Innovative Medicines business. We have a clear focus on **five core therapeutic areas** (cardiovascular, immunology, neuroscience, solid tumors and hematology), with multiple significant in-market and pipeline assets in each of these areas, that address high disease burden and have substantial growth potential. In addition to two established **technology platforms** (chemistry and biotherapeutics), three emerging platforms (gene & cell therapy, radioligand therapy, and xRNA) are being prioritized for continued investment into new R&D capabilities and manufacturing scale. Geographically, we are focused on growing in our **priority geographies** – the US, China, Germany and Japan.

Our priorities

1. **Accelerate growth**: Renewed attention to deliver high-value medicines (NMEs) and focus on launch excellence, with a rich pipeline across our core therapeutic areas.
2. **Deliver returns**: Continuing to embed operational excellence and deliver improved financials. Novartis remains disciplined and shareholder-focused in our approach to capital allocation, with substantial cash generation and a strong capital structure supporting continued flexibility.
3. **Strengthening foundations**: Unleashing the power of our people, scaling data science and technology and continuing to build trust with society.

Sandoz planned spin-off

The planned spin-off remains on track for the second half of 2023. Completion of the transaction is subject to certain conditions, including consultation with works councils and employee representatives (as required), general market conditions, tax rulings and opinions, final Board of Directors endorsement and shareholder approval in line with Swiss corporate law. The transaction is expected to be tax neutral to Novartis.

Financials

First quarter

Net sales

Net sales were USD 13.0 billion (+3%, +8% cc) in the first quarter driven by volume growth of 16 percentage points, price erosion of 4 percentage points and the negative impact from generic competition of 4 percentage points.

Corporate income and expense, net

Corporate income and expense, which includes the cost of Group management and central services, amounted to an expense of USD 138 million in the first quarter compared to an expense of USD 169 million in the prior year, mainly driven by income from a fair value adjustment on contingent receivables related to intellectual property rights, partly offset by higher restructuring costs and project costs related to the execution of the Sandoz planned spin-off.

Operating income

Operating income was USD 2.9 billion (0%, +9% cc), mainly driven by higher sales. Other income from legal matters was more than offset by higher restructuring and impairment charges. Operating income margin was 22.0% of net sales, decreasing by 0.8 percentage points (+0.4 percentage points cc).

Core operating income was USD 4.4 billion (+8%, +15% cc) driven by mainly higher gross margin partly offset by higher other expense and R&D costs. Core operating income margin was 34.1% of net sales, increasing by 1.5 percentage points (+2.2 percentage points cc).

Interest expense and other financial income/expense

Interest expense amounted to USD 211 million and was broadly in line with the prior year. Other financial income and expense amounted to an income of USD 96 million compared to USD 20 million in the prior year and core other

financial income and expense amounted to an income of USD 117 million compared to USD 32 million in the prior year quarter, as higher interest income was only partly offset by currency losses.

Income taxes

The tax rate in the first quarter was 16.3% compared to 16.9% in the prior year. The current year tax rate was favorably impacted by the effect of non-taxable income recognized related to a legal matter. Excluding this impact, the current year tax rate would have been 16.7%. The decrease from the prior year was mainly the result of a change in profit mix.

The core tax rate (core taxes as a percentage of core income before tax) was 16.3% compared to 16.9% in the prior year. The decrease from the prior year was mainly the result of a change in profit mix.

Net income, EPS and free cash flow

Net income was USD 2.3 billion (+3%, +14% cc), mainly due to higher operating income and higher interest income. EPS was USD 1.09 (+9%, +20% cc), growing faster than net income, benefiting from lower weighted average number of shares outstanding.

Core net income was USD 3.6 billion (+11%, +18% cc), mainly due to higher core operating income and higher interest income. Core EPS was USD 1.71 (+17%, +25% cc), growing faster than core net income, benefiting from lower weighted average number of shares outstanding.

Free cash flow amounted to USD 2.7 billion (+95% USD), compared to USD 1.4 billion in the prior year quarter. This increase was mainly driven by higher operating income adjusted for non-cash items, favorable changes in working capital and lower income taxes paid, partly offset by higher payments out of provisions.

Innovative Medicines

	Q1 2023 USD m	Q1 2022 restated USD m[1]	% change USD	% change cc
Net sales to third parties	**10 570**	**10 230**	**3**	**7**
Operating income	**2 675**	**2 627**	**2**	**11**
As % of net sales	*25.3*	*25.7*		
Core operating income	**4 088**	**3 672**	**11**	**18**
As % of net sales	*38.7*	*35.9*		

[1] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023 (see Note 9 in this Condensed Interim Financial Report).

First quarter

Net sales

Net sales were USD 10.6 billion (+3%, +7% cc) with volume contributing 16 percentage points to growth. Generic competition had a negative impact of 5 percentage points and pricing had a negative impact of 4 percentage points. Sales in the US were USD 4.1 billion (+11%) and in the rest of the world USD 6.5 billion (–1%, +5% cc).

Sales growth was mainly driven by continued strong performance from *Entresto* (USD 1.4 billion, +28%, +32% cc), *Pluvicto* (USD 211 million), *Kesimpta* (USD 384 million, +97%, +100% cc) and *Kisqali* (USD 415 million, +74%, +81% cc), partly offset by generic competition mainly for *Gilenya*.

In the US (USD 4.1 billion, +11%), sales growth was mainly driven by *Pluvicto*, *Entresto*, *Kesimpta* and *Kisqali*, partly offset by the impact of generic competition on *Gilenya*. In Europe (USD 3.4 billion, –3%, +1% cc), sales growth was driven by *Entresto*, *Kisqali* and *Kesimpta*, partly offset by increased generic competition for *Gilenya* and *Lucentis*. Emerging Growth Markets grew +9% (+16% cc), which includes China sales of USD 0.8 billion (–2%, +5% cc), where growth was mainly driven by *Entresto* and *Cosentyx*.

Operating income

Operating income was USD 2.7 billion (+2%, +11% cc), mainly driven by higher gross margin. Other income from legal matters was more than offset by higher impairments and restructuring charges. Operating income margin was 25.3% of net sales, decreasing 0.4 percentage points (+0.9 percentage points in cc).

Core adjustments were USD 1.4 billion, mainly due to amortization, restructuring and impairment charges, compared to USD 1.0 billion in prior year. Core adjustments increased compared to prior year, mainly due to higher impairments and restructuring charges, partly offset by other income from legal matters.

Core operating income was USD 4.1 billion (+11%, +18% cc), mainly driven by higher gross margin. Core operating income margin was 38.7% of net sales, increasing 2.8 percentage points (+3.6 percentage points cc). Other revenue and sales to other segments as a percentage of sales decreased by 0.2 percentage points (cc). Core cost of goods sold as a percentage of sales decreased by 0.5 percentage points (cc). Core R&D expenses as a percentage of net sales decreased by 1.0 percentage points (cc). Core SG&A expenses as a percentage of net sales decreased by 2.6 percentage points (cc). Core other income and expense as a percentage of net sales decreased the margin by 0.3 percentage points (cc).

PRODUCT COMMENTARY (RELATING TO Q1 PERFORMANCE)

CARDIOVASCULAR

	Q1 2023 USD m	Q1 2022 USD m	% change USD	% change cc
Cardiovascular				
Entresto	1 399	1 093	28	32
Leqvio	64	14	nm	nm
Total Cardiovascular	**1 463**	**1 107**	**32**	**36**

nm = not meaningful

Entresto (USD 1,399 million, +28%, +32% cc) sustained robust demand-led growth, with increased patient share across all geographies. *Entresto* is positioned in HF guidelines as a first choice treatment for patients with HFrEF and benefits from the adoption of guideline-directed medical therapy across geographies. In the US, the 2022 AHA/ACC/HFSA HF Guideline positioned *Entresto* as the first choice RASi versus ACEi/ARB in patients with NYHA Class II to III HFrEF, and recognized *Entresto* for patients with HFmrEF and HFpEF. In China and Japan, *Entresto* volume growth is fueled by heart failure as well as increased penetration in hypertension. As announced in March 2023, *Entresto* is included in the 2023 China Hypertension Treatment Guideline as a new drug category and 1st line treatment option. *Entresto* received positive CHMP opinion for pediatric heart failure indication. If approved, this would support extension of regulatory data protection in Europe to November 2026. It is estimated that more than 11 million patients are on treatment with *Entresto* globally. In the US, Novartis is in ANDA litigation with generic manufacturers.

Leqvio (USD 64 million) launch in the US and other markets is ongoing, with focus on patient on-boarding, removing access hurdles and enhancing medical education. In the US, *Leqvio* is covered at or near label for 76% of patients. More than 50% of *Leqvio* source of business in the US is now through "Buy and Bill" acquisition model. *Leqvio* is now approved in 76 countries. Novartis obtained global rights to develop, manufacture and commercialize *Leqvio* under a license and collaboration agreement with Alnylam Pharmaceuticals.

IMMUNOLOGY

	Q1 2023 USD m	Q1 2022 USD m	% change USD	% change cc
Immunology				
Cosentyx	1 076	1 159	-7	-4
Xolair	354	368	-4	2
Ilaris	328	285	15	19
Other		1	nm	nm
Total Immunology	**1 758**	**1 813**	**-3**	**1**

Net sales reflect *Xolair* sales for all indications.
nm = not meaningful

Cosentyx (USD 1,076 million, –7%, –4% cc) continued volume growth across key geographies, offset by revenue deduction adjustments in the US, mainly related to channel mix. Ex-US sales grew +17% (cc). Since initial approval in 2015, *Cosentyx* has proven its sustained efficacy and consistent safety profile across five systemic inflammatory conditions and has treated more than 1 million patients worldwide. Recently presented data showed durable efficacy and symptom improvement at 52 weeks in majority of moderate-to-severe hidradenitis suppurativa patients treated with *Cosentyx*.

Xolair (USD 354 million, –4%, +2% cc) sales grew (cc) in Emerging Growth Markets offset by lower sales in other markets. Following EMA positive opinion in February 2023, the *Xolair* SmPC was updated with long term (48 week) efficacy and safety data on chronic spontaneous urticaria (CSU) allowing continued treatment beyond 24 weeks. Novartis co-promotes *Xolair* with Genentech in the US and shares a portion of revenue as operating income but does not record any US sales.

Ilaris (USD 328 million, +15%, +19% cc) showed continued growth across all geographies. Contributors to growth include the Still's disease indications (SJIA/AOSD) in the US and Europe, as well as strong performance for the Familial Mediterranean Fever (FMF) indication in key markets worldwide.

NEUROSCIENCE

	Q1 2023 USD m	Q1 2022 USD m	% change USD	% change cc
Neuroscience				
Kesimpta	384	195	97	100
Zolgensma	309	363	-15	-14
Mayzent	89	79	13	14
Aimovig	61	54	13	17
Other		1	nm	nm
Total Neuroscience	**843**	**692**	**22**	**24**

nm = not meaningful

Kesimpta (USD 384 million, +97%, +100% cc) sales grew across all geographies driven by increased demand and strong access. *Kesimpta* is a targeted B-cell therapy that can deliver powerful and sustained high efficacy, with a favorable safety and tolerability profile and the flexibility of an at home self-administration for a broad population of RMS patients. *Kesimpta* is now approved in 83 countries with more than 42,000 patients treated.

Zolgensma (USD 309 million, –15%, –14% cc) sales declined mainly in Europe, mainly due to price mix and other one-time events in Q1 2022 as number of patients was relatively stable. *Zolgensma* is now approved in 48 countries.

Mayzent (USD 89 million, +13%, +14% cc) sales grew mainly in Europe and Emerging Growth Markets, partly offset by a decline in the US. Sales continued to grow in patients with multiple sclerosis showing signs of progression despite being on other treatments. *Mayzent* is the first and only oral disease-modifying therapy studied and proven to delay disease progression in a broad SPMS patient population.

Aimovig (USD 61 million, ex-US, ex-Japan +13%, +17% cc) sales grew in Europe and Emerging Growth Markets. *Aimovig* is reimbursed in 32 markets and has been prescribed to over 780,000 patients worldwide.

SOLID TUMORS

	Q1 2023 USD m	Q1 2022 USD m	% change USD	% change cc
Solid Tumors				
Tafinlar + Mekinist [1]	458	403	14	18
Kisqali	415	239	74	81
Pluvicto	211	2	nm	nm
Lutathera	149	125	19	22
Piqray	116	73	59	61
Votrient	105	129	-19	-16
Tabrecta	36	31	16	18
Other	1		nm	nm
Total Solid Tumors	**1 491**	**1 002**	**49**	**53**

[1] Majority of sales for *Mekinist* and *Tafinlar* are combination, but both can be used as monotherapy.
nm = not meaningful

Tafinlar + Mekinist (USD 458 million, +14%, +18% cc) sales grew across all geographies, driven by demand in BRAF+ adjuvant melanoma and NSCLC indications, while maintaining demand in the highly competitive BRAF+ metastatic melanoma market. The US also posted strong growth in the tumor agnostic indication (approved in June 2022). *Tafinlar + Mekinist* remains the worldwide targeted therapy leader in BRAF+ melanoma.

Kisqali (USD 415 million, +74%, +81% cc) sales grew strongly across all geographies, based on increasing recognition of its overall survival and quality of life benefits in HR+/HER2- advanced breast cancer. In January 2023, the USA National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines) released an update recommending *Kisqali* as the only Category 1 Preferred CKD4/6 inhibitor for first-line treatment of patients with HR+/HER2- advanced breast cancer in combination with an aromatase inhibitor (AI). In March 2023, we announced positive topline results from an interim analysis of NATALEE, a Phase III trial evaluating *Kisqali* plus

endocrine therapy in a broad population of patients with HR+/HER2- early breast cancer at risk of recurrence. Results will be presented at an upcoming medical meeting and submitted to regulatory authorities worldwide. Novartis is in US ANDA litigation with a generic manufacturer.

Pluvicto (USD 211 million) continues to see strong demand in the US as the first and only radioligand therapy approved by the FDA for the treatment of adult patients with progressive, PSMA-positive metastatic castration-resistant prostate cancer, who have already been treated with other anticancer treatments (ARPI and taxane-based chemotherapy). In Q1 2023, we completed a filing to the FDA for expedited review and approval of commercial production of *Pluvicto* for US patients at our radioligand manufacturing facility in Millburn, NJ.

Lutathera (USD 149 million, +19%, +22% cc) sales grew mainly in the US and Japan, where growth in the US was driven by the new targeted strategy and RLT field detailing focused on *Lutathera* and in Japan, growth was driven by increased demand following the transfer of the marketing authorization (MA) back to Novartis from Fujifilm Toyama Chemical.

Piqray (USD 116 million, +59%, +61% cc) sales grew mainly in the US, benefiting from indication expansion into PIK3CA-related overgrowth spectrum (PROS). In addition to PROS, *Piqray* is the first and only therapy specifically developed for the approximately 40% of HR+/HER2- advanced breast cancer patients who have a PIK3CA mutation, which is associated with a worse prognosis.

Votrient (USD 105 million, –19%, –16% cc) sales declined due to increased competition, especially from immuno-oncology agents in metastatic renal cell carcinoma.

Tabrecta (USD 36 million, +16%, +18% cc) sales grew mainly in the US. *Tabrecta* is the first therapy approved by the FDA to specifically target metastatic NSCLC with a mutation that leads to MET exon 14 skipping (METex14) in line agnostic setting.

HEMATOLOGY

	Q1 2023 USD m	Q1 2022 USD m	% change USD	% change cc
Hematology				
Promacta/Revolade	547	491	11	15
Tasigna	462	461	0	4
Jakavi	414	389	6	13
Kymriah	135	127	6	11
Scemblix	76	25	204	202
Adakveo	52	44	18	18
Other		1	nm	nm
Total Hematology	**1 686**	**1 538**	**10**	**14**

nm = not meaningful

Promacta/Revolade (USD 547 million, +11%, +15% cc) showed growth across all geographies, driven by increased use in second-line persistent and chronic immune thrombocytopenia and as first-line and/or second-line treatment for severe aplastic anemia.

Tasigna (USD 462 million, 0%, +4% cc) sales grew in Emerging Growth Markets and the US, partly offset by declines in Europe and Japan.

Jakavi (USD 414 million, +6%, +13% cc) sales grew in Emerging Growth Markets, Europe and Japan, driven by strong demand in both myelofibrosis and polycythemia vera indications. As per the Incyte/Novartis License Agreement, Incyte has rights in the US to exclusively develop and commercialize ruxolitinib for all indications under a different brand name Jakafi®.

Kymriah (USD 135 million, +6%, +11% cc) sales grew mainly in Emerging Growth Markets, Japan and the US, partly offset by decline in Europe.

Scemblix (USD 76 million, +204%, +202% cc) continued strong growth mainly in the US and Europe, demonstrating the high unmet need for effective and tolerable treatment options, for CML patients, who have been treated with 2 or more tyrosine kinase inhibitors, or who have the T315I mutation.

Adakveo (USD 52 million, +18%, +18% cc) sales grew mainly in the US, treating patients with vaso-occlusive crises caused by sickle cell disease.

OTHER PROMOTED BRANDS

	Q1 2023 USD m	Q1 2022 USD m	% change USD	% change cc
Other Promoted Brands				
Ultibro Group	114	132	-14	-8
Xiidra	89	107	-17	-16
Beovu	51	48	6	9
Other respiratory	25	19	32	41
Total Other Promoted Brands	**279**	**306**	**-9**	**-5**
Total Promoted Brands [1]	**7 520**	**6 458**	**16**	**20**

[1] Total Promoted Brands refer to the sum of Total Other Promoted Brands and all Therapeutic Areas brands (Hematology, Solid Tumors, Immunology, Neuroscience and Cardiovascular).

***Ultibro* Group** (USD 114 million, –14%, –8% cc) sales declined mainly in Europe and Japan due to competition, partly offset by growth in China. *Ultibro* Group consists of *Ultibro Breezhaler*, *Seebri Breezhaler* and *Onbrez Breezhaler*.

Xiidra (USD 89 million, –17%, –16% cc) 97% of the sales are in the US where the variance is driven by rebates. In the US, Novartis is in ANDA litigation with a generic manufacturer.

Beovu (USD 51 million, +6%, +9% cc) sales grew in Europe, Japan and Emerging Growth Markets, benefitting from 6 new DME indication approvals in Q1 2023, partly offset by a decline in the US.

ESTABLISHED BRANDS

	Q1 2023 USD m	Q1 2022 USD m	% change USD	% change cc
Established Brands				
Lucentis	416	520	-20	-15
Sandostatin	329	320	3	5
Gilenya	232	605	-62	-60
Exforge Group	186	200	-7	-1
Galvus Group	183	216	-15	-9
Diovan Group	158	191	-17	-11
Gleevec/Glivec	147	198	-26	-21
Afinitor/Votubia	110	138	-20	-16
Contract manufacturing [1]	123	99	24	26
Other [2]	1 166	1 285	-9	-4
Total Established Brands [1, 2]	**3 050**	**3 772**	**-19**	**-15**

[1] Q1 2022 restated to reflect the transfer of the Sandoz Division's biotechnology manufacturing services to other companies' activities to the Innovative Medicines Division that was effective as of January 1, 2023.

[2] Q1 2022 restated to reflect the transfer of the *Coartem* brand from the Sandoz Division to the Innovative Medicines Division that was effective as of January 1, 2023.

Lucentis (USD 416 million, –20%, –15% cc) sales declined in Europe, Emerging Growth Markets and Japan mainly due to competition.

Gilenya (USD 232 million, –62%, –60% cc) sales declined due to generic competition across all geographies. Novartis is in litigation against generic manufacturers on the dosing regimen patent and on the method of treatment patent in the US, and on the dosing regimen patent in Europe.

Sandoz

	Q1 2023 USD m	Q1 2022 restated USD m[1]	% change USD	% change cc
Net sales to third parties	**2 383**	**2 301**	**4**	**8**
Operating income	**319**	**394**	**-19**	**-14**
As % of net sales	*13.4*	*17.1*		
Core operating income	**504**	**513**	**-2**	**3**
As % of net sales	*21.1*	*22.3*		

[1] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023 (see Note 9 in this Condensed Interim Financial Report).

First quarter

Net sales

Sandoz net sales were USD 2.4 billion (+4%, +8% cc), with volume contributing 15 percentage points to growth. Pricing had a negative impact of 7 percentage points. Sales growth was mainly driven by Europe, which benefited from strong volume growth driven by continued momentum from prior year launches and a strong cough and cold season. Ex-US sales grew by +12% in cc.

Sales in Europe were USD 1.4 billion (+11%, +16% cc), in the US USD 380 million (–7%), in Asia / Africa / Australasia USD 377 million (–7%, +3% cc) and in Canada and Latin America USD 260 million (+3%, +7% cc).

Retail sales were USD 1.8 billion (+1%, +6% cc). Total Anti-Infectives sales were USD 297 million (+10%, +15% cc).

Global sales of Biopharmaceuticals grew to USD 518 million (+11%, +17% cc), driven by growth ex-US.

Operating income

Operating income was USD 319 million (–19%, –14% cc), with the decline mainly due to higher legal expenses, higher SG&A investments to drive sales growth, and lower divestment income, partly offset by higher sales and improved product mix. The full impact of inflation on production costs will only be realized in subsequent periods, after the sell-through of inventory produced at lower cost in the prior year. Operating income margin was 13.4% of net sales, decreasing 3.7 percentage points (-3.4 percentage points in cc).

Core adjustments were USD 185 million, including USD 54 million of amortization. Prior year core adjustments were USD 119 million including USD 58 million of amortization. The change in core adjustments compared to prior year was mainly due to higher legal settlements.

Core operating income was USD 504 million (–2%, +3% cc), mainly driven by higher sales and improved product mix partly offset by higher SG&A investments and lower divestment income. Core operating income margin was 21.1% of net sales, decreasing by 1.2 percentage points (-1.0 percentage points cc). Core gross margin as a percentage of sales increased by 1.6 percentage points (cc) mainly due to improved product mix, as the full impact of inflation on production costs will only be realized in subsequent periods, after the sell-through of inventory produced at lower cost in the prior year. Core R&D expenses as a percentage of net sales were in line with the prior year (cc). Core SG&A expenses as a percentage of net sales increased by 0.7 percentage points (cc). Core Other income and expense as a percentage of net sales decreased the margin by 1.9 percentage points (cc), mainly due to lower divestment income.

Group Cash Flow and Balance Sheet

Cash Flow

First quarter

Net cash flows from operating activities amounted to USD 3.0 billion, compared with USD 1.6 billion in the prior year quarter. This increase was mainly driven by higher net income adjusted for non-cash items and other adjustments, including divestment gains, favorable changes in working capital and lower income taxes paid, partly offset by higher payments out of provisions.

Net cash inflows from investing activities amounted to USD 10.6 billion, compared with USD 9.4 billion in the prior year quarter.

The current year quarter cash inflows were mainly driven by net proceeds of USD 10.9 billion from the sale of marketable securities, commodities and time deposits; USD 0.2 billion from the sale of intangible assets, financial assets and property, plant and equipment. These cash inflows were partly offset by cash outflows of USD 0.2 billion for purchases of intangible assets and USD 0.2 billion for purchases of property, plant and equipment.

In the prior year quarter, net cash inflows from investing activities of USD 9.4 billion were driven by USD 10.9 billion net proceeds from the sale of marketable securities, commodities and time deposits; and USD 0.2 billion from the sale of intangible assets, financial assets and property, plant and equipment. These cash inflows were partly offset by USD 0.8 billion cash outflows for acquisitions and divestments of businesses, net (primarily the acquisition of Gyroscope Therapeutics Holdings plc); and USD 0.9 billion for purchases of intangible assets, property, plant and equipment and of financial assets.

Net cash outflows used in financing activities amounted to USD 9.2 billion, compared with USD 9.5 billion in the prior year quarter.

The current year quarter cash outflows were driven by USD 7.3 billion for the dividend payment; and USD 2.7 billion for net treasury share transactions. Payments of lease liabilities and other financing cash flows resulted in a net cash outflow of USD 0.2 billion. These cash outflows were partly offset by cash inflows of USD 1.0 billion from the net increase in current financial debts.

In the prior year quarter, net cash outflows used in financing activities of USD 9.5 billion were driven by USD 7.5 billion for the dividend payment; USD 2.4 billion for net treasury share transactions and USD 0.1 billion payments for lease liabilities. These cash outflows were partly offset by cash inflows of USD 0.5 billion from the net increase in current financial debts.

Free cash flow amounted to USD 2.7 billion (+95% USD), compared with USD 1.4 billion in the prior year quarter. This increase was mainly driven by higher operating income adjusted for non-cash items, favorable changes in working capital and lower income taxes paid, partly offset by higher payments out of provisions.

Balance sheet

Assets

Total non-current assets of USD 80.1 billion decreased by USD 0.4 billion compared to December 31, 2022.

Intangible assets other than goodwill decreased by USD 1.2 billion mainly due to amortization and impairments, partially offset by additions and favorable currency translation adjustments.

Goodwill increased by USD 0.2 billion due to favorable currency translation adjustments.

Deferred tax assets increased by USD 0.3 billion and property, plant and equipment, right-of-use assets, investments in associated companies, financial assets, and other non-current assets were broadly in line with December 31, 2022.

Total current assets of USD 32.1 billion at March 31, 2023 decreased by USD 4.8 billion compared to December 31, 2022.

Cash and cash equivalents, marketable securities, commodities, time deposits and derivative financial instruments decreased by USD 6.7 billion mainly due to the dividend payment, and purchases of treasury shares, offset by the cash generated through operating activities.

Inventories increased by USD 0.7 billion and trade receivables increased by USD 0.9 billion. Other current assets increased by USD 0.3 billion and income tax receivables were broadly in line with December 31, 2022.

Liabilities

Total non-current liabilities of USD 29.6 billion increased by USD 0.2 billion compared to December 31, 2022.

Non-current financial debts increased by USD 0.2 billion and non-current lease liabilities, deferred tax liabilities and provisions and other non-current liabilities were broadly in line with December 31, 2022.

Total current liabilities of USD 30.5 billion increased by USD 1.9 billion compared to December 31, 2022.

Current financial debts and derivative financial instruments increased by USD 1.0 billion, mainly due to the issuance of commercial paper notes under the US and Japanese commercial paper programs.

Trade payables and current income tax liabilities increased by USD 0.3 billion and USD 0.4 billion, respectively. Provisions and other current liabilities and current lease liabilities were broadly in line with December 31, 2022.

Equity

The Group`s equity of USD 52.1 billion decreased by USD 7.3 billion compared to December 31, 2022. This decrease was mainly due to the cash-dividend payment of USD 7.3 billion and purchases of treasury shares of USD 2.9 billion partially offset by the net income of USD 2.3 billion, favorable currency translation differences of USD 0.3 billion, exercise of options and employee transactions of USD 0.2 billion, and equity-based compensation of USD 0.2 billion.

Net debt and debt/equity ratio

The Group's liquidity amounted to USD 12.3 billion at March 31, 2023, compared to USD 18.9 billion on December 31, 2022. Total non-current and current financial debts, including derivatives, amounted to USD 27.4 billion at March 31, 2023 compared to USD 26.2 billion at December 31, 2022.

The debt/equity ratio were 0.52:1 at March 31, 2023, compared to 0.44:1 at December 31, 2022. As of March 31, 2023 the net debt was USD 15.1 billion, compared to USD 7.2 billion on December 31, 2022.

Innovation Review

Novartis continues to focus its R&D portfolio prioritizing high value medicines with transformative potential for patients. During the quarter, a comprehensive review of R&D projects resulted in decisions to discontinue or out-license projects for reasons including strategic fit and commercial potential, representing approximately 10% of the Novartis pipeline. We now focus on ~136 projects in clinical development.

Selected Innovative Medicines projects awaiting regulatory decisions

		Completed submissions			
Product	**Indication**	**US**	**EU**	**Japan**	**News update**
Cosentyx	300mg auto-injector and pre-filled syringe	Q4 2022	Approved	Approved	
Cosentyx	Intravenous formulation for psoriatic arthritis (PsA), ankylosing spondylitis (AS), and non-radiographic axial SpA (nr-axSpA)	Q4 2022			
Cosentyx	Hidradenitis suppurativa	Q3 2022	Q2 2022		
Entresto	Heart failure, pediatrics	Approved	Q2 2022		– CHMP positive opinion; if approved, this would support extension of the regulatory data protection to November 2026
Jakavi	Acute graft-versus-host disease (GvHD)		Approved	Q1 2021	
	Chronic GvHD		Approved	Q1 2021	
SEG101 (crizanlizumab)	Sickle cell disease, pediatrics				– Ph3 STAND study did not show superiority compared to placebo
VDT482 (tislelizumab)	2L Esophageal cancer (ESCC)	Q3 2021	Q1 2022		– FDA site inspection planned for Q2 2023
	NSCLC		Q1 2022		

Selected Innovative Medicines pipeline projects

Compound/ product	**Potential indication/ Disease area**	**First planned submissions**	**Current Phase**	**News update**
Aimovig	Migraine, pediatrics	≥2026	3	
AVXS-101 (OAV101)	Spinal muscular atrophy (IT formulation)	2025	3	
Beovu	Diabetic retinopathy	2025	3	
CFZ533 (iscalimab)	Sjögren's syndrome	≥2026	2	
Coartem	Malaria, uncomplicated (<5 kg patients)	2024	3	– Submission will use the MAGHP procedure in Switzerland to facilitate rapid approval in developing countries
Cosentyx	Giant cell arteritis	2025	3	
	Polymyalgia rheumatica	≥2026	3	– Ph3 REPLENISH initiated
	Rotator cuff tendinopathy	≥2026	3	– Ph3 initiating
	Lupus nephritis	≥2026	3	
JDQ443	Non-small cell lung cancer, 2/3L	2024	3	
	Non-small cell lung cancer (combos)	≥2026	2	
KAE609 (cipargamin)	Malaria, uncomplicated	≥2026	2	
	Malaria, severe	≥2026	2	
KLU156 (ganaplacide + lumefantrine)	Malaria, uncomplicated	≥2026	2	– FDA Orphan Drug designation – FDA Fast Track designation for the ganaplacide-containing combination therapy

Compound/ product	Potential indication/ Disease area	First planned submissions	Current Phase	News update
Kisqali + endocrine therapy	Hormone receptor-positive (HR+)/human epidermal growth factor receptor 2-negative (HER2-) early breast cancer (adjuvant)	2023	3	– Trial met primary endpoint at interim analysis demonstrating clinically meaningful benefit in broad population of patients
Leqvio	Secondary prevention of cardiovascular events in patients with elevated levels of LDL-C	≥2026	3	
	Primary prevention CVRR	≥2026	3	– Ph3 VICTORION-1P initiated
LNA043	Osteoarthritis	≥2026	2	– FDA Fast Track designation
LNP023 (iptacopan)	Paroxysmal nocturnal hemoglobinuria	2023	3	– FDA, EU Orphan Drug designation – FDA Breakthrough Therapy designation – China Breakthrough Therapy designation granted – Ph3 APPOINT-PNH data presentation at EBMT
	IgA nephropathy	2024	3	– EU Orphan Drug designation
	C3 glomerulopathy	2024	3	– EU Orphan Drug designation – EU PRIME designation – FDA Rare Pediatric designation – China Breakthrough Therapy designation – Enrollment (of the adult cohort) completed
	IC-MPGN	≥2026	3	– Ph3 start planned in H2 2023
	Atypical haemolytic uraemic syndrome	≥2026	3	
LOU064 (remibrutinib)	Chronic spontaneous urticaria	2024	3	
	Multiple sclerosis	≥2026	3	
	Sjögren's syndrome	≥2026	2	
Lutathera	Gastroenteropancreatic neuroendocrine tumors, 1L in G2/3 tumors	2023	3	
^{177}Lu-NeoB	Multiple solid tumors	≥2026	1	
LXE408	Visceral leishmaniasis	≥2026	2	
MBG453 (sabatolimab)	Myelodysplastic syndrome	2024	3	– FDA Fast Track designation – EU Orphan Drug designation
	Unfit acute myeloid leukemia	≥2026	2	
MIJ821 (onfasprodil)	Depression	≥2026	2	
NIS793	1L Pancreatic cancer	2025	3	– FDA Orphan Drug designation
Piqray	Ovarian cancer	2023	3	
Pluvicto	Metastatic castration-resistant prostate cancer pre-taxane	2023	3	
	Metastatic hormone sensitive prostate cancer	2024	3	
PPY988 (GT005)	Geographic atrophy	≥2026	2	– Gyroscope acquisition
QGE031 (ligelizumab)	Food allergy	≥2026	3	
SAF312 (libvatrep)	Chronic ocular surface pain	≥2026	2	
Scemblix	1L Chronic myeloid leukemia	2024	3	– Submission expected in 2024 vs 2025 due to fast enrollment
TQJ230 (pelacarsen)	Secondary prevention of cardiovascular events in patients with elevated levels of lipoprotein(a)	2025	3	– FDA Fast Track designation – China Breakthrough Therapy designation

Compound/ product	Potential indication/ Disease area	First planned submissions	Current Phase	News update
VAY736 (ianalumab)	Auto-immune hepatitis	≥2026	2	
	Sjögren's syndrome	≥2026	3	– FDA Fast Track designation
	Lupus nephritis	≥2026	3	
	Systemic lupus erythematosus	≥2026	3	– Ph3 studies SIRIUS-SLE 1 and 2 initiated
	1L Immune thrombocytopenia	≥2026	3	– Ph3 study VAYHIT1 initiated
	2L Immune thrombocytopenia	≥2026	3	– Ph3 study VAYHIT2 initiatied
	warm Autoimmune hemolytic anemia	≥2026	3	
VDT482 (tislelizumab)	1L Nasopharyngeal carcinoma	2023	3	
	1L Gastric cancer	2023	3	
	1L ESCC	2023	3	
	Localized ESCC	2024	3	
	1L Hepatocellular carcinoma	2023	3	
	1L Small cell lung cancer	2024	3	
	1L Urothelial cell carcinoma	≥2026	3	
	Adj/Neo adj. NSCLC	≥2026	3	
VPM087 (gevokizumab)	Colorectal cancer, 1L		1	– Project will be discontinued to prioritize other key programs in portfolio
Xolair	Food allergy	2023	3	
YTB323	Lupus nephritis	≥2026	2	– Study initiated
	1L High-risk large B-cell lymphoma	≥2026	2	
XXB750	Hypertension	≥2026	2	
Business development updates				– Acquired FAP-2286 (Ph1/2), a potential first-in-class radioligand therapy with the respective radioligand imaging agent, from Clovis Oncology
				– Entered into research collaboration on bicyclic peptides with Bicycle Therapeutics

Selected Sandoz approvals and pipeline projects

Project/ Compound	Potential indication/ Disease area	News update
GP2411 (denosumab)	Osteoporosis (same as originator)	– US FDA accepted BLA
SOK583 (aflibercept)	Ophthalmology (same as originator)	– In Ph3
Insulin glargine, lispro, aspart	Diabetes	– Collaboration with Gan & Lee – Insulin glargine in registration
Natalizumab	Multiple sclerosis and Crohn's disease	– Collaboration Polpharma Biologics – In registration
Trastuzumab	HER2-positive cancer tumors	– Collaboration EirGenix – In registration
Bevacizumab	Solid tumors	– Collaboration Bio-Thera Solutions – In registration

Condensed Interim Consolidated Financial Statements

Consolidated income statements

First quarter (unaudited)

(USD millions unless indicated otherwise)	Note	**Q1 2023**	Q1 2022
Net sales to third parties	9	**12 953**	**12 531**
Other revenues	9	255	283
Cost of goods sold		-3 931	-3 856
Gross profit		**9 277**	**8 958**
Selling, general and administration		-3 443	-3 512
Research and development		-2 794	-2 320
Other income		970	226
Other expense		-1 154	-500
Operating income		**2 856**	**2 852**
Loss from associated companies		-1	-2
Interest expense		-211	-201
Other financial income and expense		96	20
Income before taxes		**2 740**	**2 669**
Income taxes		-446	-450
Net income		**2 294**	**2 219**
Attributable to:			
Shareholders of Novartis AG		*2 293*	*2 222*
Non-controlling interests		*1*	*-3*
Weighted average number of shares outstanding – Basic (million)		2 110	2 225
Basic earnings per share (USD) [1]		**1.09**	**1.00**
Weighted average number of shares outstanding – Diluted (million)		2 120	2 237
Diluted earnings per share (USD) [1]		**1.08**	**0.99**

[1] Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

Consolidated statements of comprehensive income

First quarter (unaudited)

(USD millions)	**Q1 2023**	Q1 2022
Net income	**2 294**	**2 219**
Other comprehensive income		
Items that are or may be recycled into the consolidated income statement		
Net investment hedge, net of taxes	-35	25
Currency translation effects, net of taxes	306	-270
Total of items that are or may be recycled	271	-245
Items that will never be recycled into the consolidated income statement		
Actuarial (losses)/gains from defined benefit plans, net of taxes	-58	1 867
Fair value adjustments on equity securities, net of taxes	-44	-180
Total of items that will never be recycled	-102	1 687
Total comprehensive income	**2 463**	**3 661**
Attributable to:		
Shareholders of Novartis AG	*2 461*	*3 664*
Non-controlling interests	*2*	*-3*

Consolidated balance sheets

(USD millions)	Note	**Mar 31, 2023 (unaudited)**	Dec 31, 2022 (audited)
Assets			
Non-current assets			
Property, plant and equipment	9	10 841	10 764
Right-of-use assets		1 507	1 431
Goodwill	9	29 481	29 301
Intangible assets other than goodwill	9	30 451	31 644
Investments in associated companies		130	143
Deferred tax assets		4 081	3 739
Financial assets		2 425	2 411
Other non-current assets		1 211	1 110
Total non-current assets		**80 127**	**80 543**
Current assets			
Inventories		7 886	7 175
Trade receivables		8 916	8 066
Income tax receivables		267	268
Marketable securities, commodities, time deposits and derivative financial instruments		260	11 413
Cash and cash equivalents		12 000	7 517
Other current assets		2 785	2 471
Total current assets		**32 114**	**36 910**
Total assets		**112 241**	**117 453**
Equity and liabilities			
Equity			
Share capital		842	890
Treasury shares		-36	-92
Reserves		51 253	58 544
Equity attributable to Novartis AG shareholders		**52 059**	**59 342**
Non-controlling interests		83	81
Total equity		**52 142**	**59 423**
Liabilities			
Non-current liabilities			
Financial debts		20 396	20 244
Lease liabilities		1 589	1 538
Deferred tax liabilities		2 727	2 686
Provisions and other non-current liabilities		4 838	4 906
Total non-current liabilities		**29 550**	**29 374**
Current liabilities			
Trade payables		5 426	5 146
Financial debts and derivative financial instruments		6 968	5 931
Lease liabilities		251	251
Current income tax liabilities		2 966	2 533
Provisions and other current liabilities		14 938	14 795
Total current liabilities		**30 549**	**28 656**
Total liabilities		**60 099**	**58 030**
Total equity and liabilities		**112 241**	**117 453**

Consolidated statements of changes in equity

First quarter (unaudited)

(USD millions)	Note	Share capital	Treasury shares	Reserves: Retained earnings	Reserves: Total value adjustments	Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
Total equity at January 1, 2023		**890**	**-92**	**63 540**	**-4 996**	**59 342**	**81**	**59 423**
Net income				2 293		2 293	1	2 294
Other comprehensive income					168	168	1	169
Total comprehensive income				**2 293**	**168**	**2 461**	**2**	**2 463**
Dividends				-7 255		-7 255		-7 255
Purchase of treasury shares			-18	-2 859		-2 877		-2 877
Reduction of share capital		-48	68	-20				
Exercise of options and employee transactions			2	151		153		153
Equity-based compensation			4	187		191		191
Taxes on treasury share transactions				8		8		8
Fair value adjustments on financial assets sold				8	-8			
Other movements	4.3			36		36		36
Total of other equity movements		**-48**	**56**	**-9 744**	**-8**	**-9 744**		**-9 744**
Total equity at March 31, 2023		**842**	**-36**	**56 089**	**-4 836**	**52 059**	**83**	**52 142**

(USD millions)	Note	Share capital	Treasury shares	Reserves: Retained earnings	Reserves: Total value adjustments	Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
Total equity at January 1, 2022		**901**	**-48**	**70 989**	**-4 187**	**67 655**	**167**	**67 822**
Net income				2 222		2 222	-3	2 219
Other comprehensive income					1 442	1 442		1 442
Total comprehensive income				**2 222**	**1 442**	**3 664**	**-3**	**3 661**
Dividends				-7 506		-7 506		-7 506
Purchase of treasury shares			-17	-2 790		-2 807		-2 807
Exercise of options and employee transactions			1	92		93		93
Equity-based compensation			4	229		233		233
Shares delivered to Alcon employees as a result of the Alcon spin-off			0	5		5		5
Taxes on treasury share transactions				10		10		10
Decrease of treasury share repurchase obligation under a share buyback trading plan	4.2			170		170		170
Fair value adjustments on financial assets sold				7	-7			
Other movements	4.3			23		23		23
Total of other equity movements			**-12**	**-9 760**	**-7**	**-9 779**		**-9 779**
Total equity at March 31, 2022		**901**	**-60**	**63 451**	**-2 752**	**61 540**	**164**	**61 704**

Consolidated statements of cash flows

First quarter (unaudited)

(USD millions)	Note	**Q1 2023**	Q1 2022
Net income		**2 294**	**2 219**
Adjustments to reconcile net income to net cash flows from operating activities			
Reversal of non-cash items and other adjustments	6.1	3 007	2 353
Dividends received from associated companies and others		5	
Interest received		256	17
Interest paid		-123	-110
Other financial receipts		80	
Other financial payments		-6	-30
Income taxes paid		-348	-633
Net cash flows from operating activities before working capital and provision changes		**5 165**	**3 816**
Payments out of provisions and other net cash movements in non-current liabilities		-704	-156
Change in net current assets and other operating cash flow items	6.2	-1 504	-2 011
Net cash flows from operating activities		**2 957**	**1 649**
Purchases of property, plant and equipment		-237	-257
Proceeds from sale of property, plant and equipment		32	33
Purchases of intangible assets		-233	-602
Proceeds from sale of intangible assets		130	66
Purchases of financial assets		-42	-35
Proceeds from sale of financial assets		64	66
Acquisitions and divestments of interests in associated companies, net		-3	-18
Acquisitions and divestments of businesses, net	6.3	-39	-821
Purchases of marketable securities, commodities and time deposits		-65	-4 221
Proceeds from sale of marketable securities, commodities and time deposits		11 014	15 154
Net cash flows from investing activities		**10 621**	**9 365**
Dividends paid to shareholders of Novartis AG		-7 255	-7 506
Acquisitions of treasury shares		-2 886	-2 542
Proceeds from exercised options and other treasury share transactions, net		159	94
Increase in non-current financial debts		2	3
Change in current financial debts		1 022	478
Payments of lease liabilities		-75	-77
Other financing cash flows, net		-169	22
Net cash flows used in financing activities		**-9 202**	**-9 528**
Net change in cash and cash equivalents before effect of exchange rate changes		**4 376**	**1 486**
Effect of exchange rate changes on cash and cash equivalents		107	-41
Net change in cash and cash equivalents		**4 483**	**1 445**
Cash and cash equivalents at January 1		7 517	12 407
Cash and cash equivalents at March 31		**12 000**	**13 852**

Notes to the Condensed Interim Consolidated Financial Statements for the three-month period ended March 31, 2023 (unaudited)

1. Basis of preparation

These Condensed Interim Consolidated Financial Statements for the three-month interim period ended March 31, 2023, were prepared in accordance with International Accounting Standard 34 *Interim Financial Reporting* and accounting policies set out in the 2022 Annual Report published on February 1, 2023.

2. Selected critical accounting policies

The Group's principal accounting policies are set out in Note 1 to the Consolidated Financial Statements in the 2022 Annual Report and conform with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

The preparation of financial statements requires management to make certain estimates and assumptions, either at the balance sheet date or during the year, which affect the reported amounts of revenues, expenses, assets, liabilities and contingent amounts.

Estimates are based on historical experience and other assumptions that are considered reasonable under the given circumstances and are regularly monitored. Actual outcomes and results could differ from those estimates and assumptions. Revisions to estimates are recognized in the period in which the estimate is revised.

As disclosed in the 2022 Annual Report, goodwill, and acquired In-Process Research & Development projects are reviewed for impairment at least annually and these, as well as all other investments in intangible assets, are reviewed for impairment whenever an event or decision occurs that raises concern about their balance sheet carrying value. The amount of goodwill and other intangible assets on the Group's consolidated balance sheet has risen significantly in recent years, primarily from acquisitions. Impairment testing may lead to potentially significant impairment charges in the future that could have a materially adverse impact on the Group's results of operations and financial condition.

The Group's activities are not subject to significant seasonal fluctuations.

3. Significant transactions

The Group applied the acquisition method of accounting for businesses acquired, and did not elect to apply the optional concentration test to account for acquired business as an asset separately acquired.

Significant transactions in 2023

There were no significant transactions in the first quarter of 2023.

Significant transactions in 2022

Innovative Medicines – acquisition of Gyroscope Therapeutics Holdings plc

On December 22, 2021, Novartis entered into an agreement to acquire all outstanding shares of Gyroscope Therapeutics Holdings plc (Gyroscope), a UK-based ocular gene therapy company. Gyroscope focuses on the discovery and development of gene therapy treatments for retinal indications. The purchase price consisted of a cash payment of USD 0.8 billion, subject to certain customary purchase price adjustments, and potential additional milestone payments of up to USD 0.7 billion, which Gyroscope shareholders are eligible to receive upon achievement of specified milestones. The acquisition closed on February 17, 2022.

The fair value of the total purchase consideration was USD 1.0 billion. The amount consisted of an upfront cash payment of USD 0.8 billion (including customary purchase price adjustments) and the fair value of contingent consideration of USD 0.2 billion, which Gyroscope shareholders are eligible to receive upon achievement of specified milestones. The purchase price allocation resulted in net identifiable assets of USD 0.9 billion, consisting primarily of intangible assets of USD 1.1 billion and net deferred tax liabilities of USD 0.2 billion. Goodwill amounted to USD 0.1 billion.

The 2022 results of operations since the date of acquisition were not material.

4. Summary of equity attributable to Novartis AG shareholders

		Number of outstanding shares (in millions)		Issued share capital and reserves attributable to Novartis AG shareholders (in USD millions)	
	Note	**2023**	2022	**Q1 2023**	Q1 2022
Balance at beginning of year		**2 119.6**	**2 234.9**	**59 342**	**67 655**
Shares acquired to be canceled		-31.5	-31.2	-2 769	-2 706
Other share purchases		-1.2	-1.1	-108	-101
Exercise of options and employee transactions	4.1	2.8	1.9	153	93
Equity-based compensation		7.7	8.1	191	233
Shares delivered to Alcon employees as a result of the Alcon spin-off			0.0		5
Taxes on treasury share transactions				8	10
Decrease of treasury share repurchase obligation under a share buyback trading plan	4.2				170
Dividends				-7 255	-7 506
Net income of the period attributable to shareholders of Novartis AG				2 293	2 222
Other comprehensive income attributable to shareholders of Novartis AG				168	1 442
Other movements	4.3			36	23
Balance at March 31		**2 097.4**	**2 212.6**	**52 059**	**61 540**

4.1. At December 31, 2022, the market maker held 3 million (December 31, 2021: 3 million) written call options, originally issued as part of the share-based compensation for employees, that had not yet been exercised. The weighted average exercise price of these options at December 31, 2022, was USD 66.07 (December 31, 2021: USD 61.45), and they had contractual lives of 10 years, with remaining lives less than one year (December 31, 2021: two years). In the first quarter of 2023, the market maker exercised 3 million written call options and as a result there are no written call option outstanding at March 31, 2023.

4.2. In December 2021, Novartis entered into an irrevocable, non-discretionary arrangement with a bank to repurchase Novartis shares on the second trading line under its up-to USD 15.0 billion share buyback. The arrangement was updated in July 2022. Novartis is able to cancel this arrangement at any time but could be subject to a 90-day waiting period. As of March 31, 2023, these waiting period conditions were not applicable and as a result, there was no requirement to record a liability under this arrangement as of March 31, 2023.

4.3. Other movements include, for subsidiaries in hyperinflationary economies, the impact of the restatement of the equity balances of the current period as well as restatement of the non-monetary assets and liabilities with the general price index at the beginning of the period.

5. Financial instruments

Fair value by hierarchy

The following table illustrates the three hierarchical levels for valuing financial instruments at fair value as of March 31, 2023, and December 31, 2022. For additional information on the hierarchies and other matters, please refer to the Consolidated Financial Statements in the 2022 Annual Report, published on February 1, 2023.

	Level 1		Level 2		Level 3		Total	
(USD millions)	**Mar 31, 2023**	Dec 31, 2022	**Mar 31, 2023**	Dec 31, 2022	**Mar 31, 2023**	Dec 31, 2022	**Mar 31, 2023**	Dec 31, 2022
Financial assets								
Marketable securities								
Debt securities			9	9			9	9
Derivative financial instruments			73	204			73	204
Total marketable securities and derivative financial instruments at fair value			**82**	**213**			**82**	**213**
Current contingent consideration receivables					**53**	**43**	**53**	**43**
Long-term financial investments								
Debt and equity securities	428	473	11	10	672	699	1 111	1 182
Fund investments	19	20			211	261	230	281
Non-current contingent consideration receivables					767	607	767	607
Total long-term financial investments at fair value	**447**	**493**	**11**	**10**	**1 650**	**1 567**	**2 108**	**2 070**
Associated companies at fair value through profit or loss					**118**	**129**	**118**	**129**
Financial liabilities								
Current contingent consideration liabilities					-227	-131	-227	-131
Derivative financial instruments			-53	-55			-53	-55
Total current financial liabilities at fair value			**-53**	**-55**	**-227**	**-131**	**-280**	**-186**
Non-current contingent consideration liabilities					-473	-704	-473	-704
Other financial liabilities					-212	-232	-212	-232
Total non-current financial liabilities at fair value					**-685**	**-936**	**-685**	**-936**

In the first quarter of 2023, there was one transfer of equity securities from Level 3 to Level 1 for USD 17 million due to an Initial Public Offering.

The fair value of straight bonds amounted to USD 20.9 billion at March 31, 2023 (USD 20.3 billion at December 31, 2022) compared with the carrying amount of USD 22.5 billion at March 31, 2023 (USD 22.3 billion at December 31, 2022). For all other financial assets and liabilities, the carrying amount is a reasonable approximation of the fair value.

The carrying amount of financial assets included in the line total long-term financial investments of USD 2.1 billion at March 31, 2023 (USD 2.1 billion at December 31, 2022) is included in the line "Financial assets" of the consolidated balance sheets. The carrying amount of non-current contingent consideration liabilities and other financial liabilities included in the line total non-current financial liabilities at fair value of USD 0.7 billion at March 31, 2023 (USD 1.0 billion at December 31, 2022) is included in the line "Provisions and other non-current liabilities" of the consolidated balance sheet.

The Group's exposure to financial risks has not changed significantly during the period and there have been no major changes to the risk management department or in any risk management policies.

6. Details to the consolidated statements of cash flows

6.1. Non-cash items and other adjustments

The following table shows the reversal of non-cash items and other adjustments in the consolidated statements of cash flows.

(USD millions)	**Q1 2023**	Q1 2022
Depreciation, amortization and impairments on:		
Property, plant and equipment	303	314
Right-of-use assets	74	78
Intangible assets	1 619	1 013
Financial assets [1]	47	102
Change in provisions and other non-current liabilities	512	88
Gains on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	-302	-78
Equity-settled compensation expense	199	203
Loss from associated companies	1	2
Income taxes	446	450
Net financial expense	115	181
Other	-7	
Total	**3 007**	**2 353**

[1] Includes fair value changes

In the first quarter of 2023, there were no additions to intangible assets with deferred payments. In the first quarter of 2022, USD 0.3 billion additions to intangible assets other than goodwill were acquired with deferred payments.

In the first quarter of 2023, there were USD 151 million (Q1 2022: USD 43 million) additions to right-of-use assets recognized.

6.2. Cash flows from changes in working capital and other operating items included in the net cash flows from operating activities

(USD millions)	**Q1 2023**	Q1 2022
Increase in inventories	-620	-425
Increase in trade receivables	-850	-496
Increase/(decrease) in trade payables	87	-143
Change in other current and non-current assets	-177	-363
Change in other current liabilities	56	-584
Total	**-1 504**	**-2 011**

6.3. Cash flows arising from acquisitions and divestments of businesses, net

The following table is a summary of the cash flow impact of acquisitions and divestments of businesses. The most significant transactions are described in Note 3.

(USD millions)	**Q1 2023**	Q1 2022
Net assets recognized as a result of acquisitions of businesses		**-979**
Contingent consideration payable, net	-26	181
Payments, deferred consideration and other adjustments, net		-25
Cash flows used for acquisitions of businesses	**-26**	**-823**
Cash flows (used for)/from divestments of businesses, net [1]	**-13**	**2**
Cash flows used for acquisitions and divestments of businesses, net	**-39**	**-821**

[1] In the first quarter of 2023, USD 13 million represented the net cash outflows for divestments in prior years.
In the first quarter of 2022, USD 2 million included net cash flows from business divestments in the first quarter of 2022 and from divestments in previous years.
In the first quarter of 2022, the net identifiable assets of divested businesses amounted to USD 34 million, comprised of non-current assets of USD 5 million; net current assets of USD 29 million, including USD 9 million cash and cash equivalents. The deferred sale price receivable and other adjustments amounted to USD 25 million.

Notes 3 and 7 provide further information regarding acquisitions and divestments of businesses. All acquisitions were for cash.

7. Acquisitions of businesses

Fair value of assets and liabilities arising from acquisitions of businesses:

(USD millions)	**Q1 2023**	Q1 2022
Property, plant and equipment		13
Right-of-use assets		12
Acquired research and development		1 105
Deferred tax assets		51
Other current assets		5
Cash and cash equivalents		70
Deferred tax liabilities		-276
Current and non-current lease liabilities		-12
Trade payables and other liabilities		-67
Net identifiable assets acquired	**0**	**901**
Acquired cash and cash equivalents		-70
Goodwill		148
Net assets recognized as a result of acquisitions of businesses	**0**	**979**

Note 3 details significant acquisitions of businesses. There were no acquisitions of businesses in the first quarter of 2023. In the first quarter of 2022, there was the acquisition of Gyroscope. The goodwill arising out of the Gyroscope acquisition was mainly attributable to the accounting for deferred tax liabilities on acquired assets and the assembled workforce. None of the goodwill arisen in the first quarter of 2022 was tax deductible.

8. Legal proceedings update

A number of Novartis companies are, and will likely continue to be, subject to various legal proceedings, including litigations, arbitrations and governmental investigations, that arise from time to time. Legal proceedings are inherently unpredictable. As a result, the Group may become subject to substantial liabilities that may not be covered by insurance and may in the future incur judgments or enter into settlements of claims that could have a material adverse effect on its results of operations or cash flow. Note 20 to the Consolidated Financial Statements in our 2022 Annual Report and 2022 Form 20-F contains a summary as of the date of these reports of significant legal proceedings to which Novartis or its subsidiaries were a party. The following is a summary as of April 24, 2023, of significant developments in those proceedings, as well as any new significant proceedings commenced since the date of the 2022 Annual Report and 2022 Form 20-F.

Investigations and related litigations

Government generic pricing antitrust investigations, antitrust class actions

Since 2016, Sandoz Inc. has been part of an investigation into alleged price fixing and market allocation of generic drugs in the United States. In 2020, Sandoz Inc. reached a resolution with the DOJ Antitrust Division, pursuant to which Sandoz Inc. paid USD 195 million and entered into a deferred prosecution agreement (DPA). The Sandoz Inc. resolution related to instances of misconduct at the Company between 2013 and 2015 with regard to certain generic drugs sold in the United States. The term of the DPA concluded in March 2023 and the underlying matter has been dismissed. Sandoz Inc. also finalized a resolution with the DOJ Civil Division and in 2021 paid USD 185 million to settle related claims arising under the False Claims Acts (FCA), and entered into a corporate integrity agreement with the Office of

Inspector General (OIG) of the US Department of Health and Human Services (HHS). This resolved all federal government matters related to price fixing allegations.

Since the third quarter of 2016, Sandoz Inc. and Fougera Pharmaceuticals Inc. have been sued alongside other generic pharmaceutical companies in numerous related individual and putative class action complaints by direct and indirect private purchasers and by over 50 US states and territories, represented by their respective Attorneys General. Plaintiffs claim that defendants, including Sandoz Inc., engaged in price fixing and market allocation of generic drugs in the United States, and seek damages and injunctive relief. The litigation includes complaints alleging product-specific conspiracies, as well as complaints alleging the existence of an overarching industry conspiracy, and assert claims for damages and penalties under federal and state antitrust and consumer protection acts. The cases have been consolidated for pretrial purposes in the United States District Court (USDC) for the Eastern District of Pennsylvania, and the claims are being vigorously contested.

Lucentis/Avastin® matters

In 2019, the French Competition Authority (FCA) issued a Statement of Objections against Novartis entities, alleging anti-competitive practices on the French market for anti-vascular endothelial growth factor treatments for wet age-related macular degeneration from 2008 to 2013. In 2020, the FCA issued a decision finding that the Novartis entities had infringed competition law by abusing a dominant position and imposing a fine equivalent to approximately USD 452 million. Novartis paid the fine, again subject to recoupment, and appealed the FCA's decision. In February 2023, the Paris Court of Appeal (Court) overturned the FCA's decision which triggered the reimbursement of the originally paid fine (recorded as "Other income" in the Company's consolidated income statement), and in March 2023, the FCA filed an appeal of the Court's decision. Novartis entities are the subject of similar investigations and proceedings involving competition authorities, which are disclosed in the 2022 Annual Report and 2022 Form 20-F.

Antitrust class actions

Exforge

Since 2018, Novartis Group companies as well as other pharmaceutical companies have been sued by various direct and indirect purchasers of *Exforge* in multiple US individual and putative class action complaints. They claim that Novartis made a reverse payment in the form of an agreement not to launch an authorized generic, alleging violations of federal antitrust law and state antitrust, consumer protection and common laws, and seeking damages as well as injunctive relief. The cases have been consolidated in the S.D.N.Y. In 2022, Novartis agreed to a settlement in principle to pay USD 245 million to resolve these cases. In Q1 2023 Novartis paid USD 245 million to fund the required trust accounts. These settlements are subject to finalization of documentation and, in some cases, court approval.

In addition to the matters described above, there have been other non-material developments in the other legal matters described in Note 20 to the Consolidated Financial Statements contained in our 2022 Annual Report and 2022 Form 20-F.

Novartis believes that its total provisions for investigations, product liability, arbitration and other legal matters are adequate based upon currently available information. However, given the inherent difficulties in estimating liabilities, there can be no assurance that additional liabilities and costs will not be incurred beyond the amounts provided.

9. Segmentation of key figures

The businesses of Novartis are divided operationally on a worldwide basis into two identified reporting segments: Innovative Medicines and Sandoz. In addition, we separately report Corporate activities.

Reporting segments are presented in a manner consistent with the internal reporting to the chief operating decision-maker, which is the Executive Committee of Novartis. The reporting segments are managed separately because they each research, develop, manufacture, distribute and sell distinct products that require differing marketing strategies.

The Executive Committee of Novartis is responsible for allocating resources and assessing the performance of the reporting segments.

The reporting segments are as follows:

Innovative Medicines researches, develops, manufactures, distributes and sells patented pharmaceuticals. Effective as of April 4, 2022, the Innovative Medicines Division is organized in two commercial organizational units: Innovative Medicines International and Innovative Medicines US, and is focused on the core therapeutic areas: cardiovascular; immunology; neuroscience; solid tumors and hematology; as well as other promoted brands (in the therapeutic areas of ophthalmology and respiratory) and established brands. Prior to the announcement on April 4, 2022, the Innovative Medicines Division was organized into two global business units: Novartis Oncology and Novartis Pharmaceuticals.

Sandoz develops, manufactures and markets finished dosage form medicines as well as intermediary products including active pharmaceutical ingredients. Sandoz is organized globally into three franchises: Retail Generics, Anti-Infectives and Biopharmaceuticals. In Retail Generics, Sandoz develops, manufactures and markets finished dosage forms of small molecule pharmaceuticals for sale to third parties across a broad range of therapeutic areas, including finished dosage form of anti-infectives sold to third parties. In Anti-Infectives, Sandoz manufactures and supplies active pharmaceutical ingredients and intermediates, mainly antibiotics, for internal use by Retail Generics and for sale to third-party companies. In Biopharmaceuticals, Sandoz develops, manufactures and markets protein- or other biotechnology-based products, including biosimilars, and provides biotechnology manufacturing services to other companies.

Corporate includes the costs of the Group headquarters and those of corporate coordination functions in major countries, and items that are not specific to one segment.

Our divisions are supported by Novartis Institutes for BioMedical Research, Global Drug Development, and the Operations unit, which combined the Novartis Technical Operations (NTO) and Customer & Technology Solutions (CTS) organizational units, following the internal reorganization announced on April 4, 2022.

Effective January 1, 2023, the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand were transferred to the Innovative Medicines Division. The reporting of the financial results and the net assets of the reporting segments Innovative Medicines, Sandoz and Corporate have been accordingly adapted. To comply with IFRS, Novartis has restated its segmentation disclosure of the consolidated income statement and additional consolidated balance sheet disclosure to reflect these transfers. This restatement had no impact on the reported financial results and consolidated balance sheet of the total Group.

Further details are provided in Note 3 to the Consolidated Financial Statements of the 2022 Annual Report.

Segmentation – Consolidated income statements

First quarter

(USD millions)	Innovative Medicines Q1 2023	Innovative Medicines Q1 2022 restated[2]	Sandoz Q1 2023	Sandoz Q1 2022 restated[2]	Corporate (including eliminations)[1] Q1 2023	Corporate (including eliminations)[1] Q1 2022 restated[2]	Group Q1 2023	Group Q1 2022
Net sales to third parties	**10 570**	**10 230**	**2 383**	**2 301**			**12 953**	**12 531**
Sales to other segments	232	210	92	47	-324	-257		
Net sales	**10 802**	**10 440**	**2 475**	**2 348**	**-324**	**-257**	**12 953**	**12 531**
Other revenues	246	274	6	6	3	3	255	283
Cost of goods sold	-2 990	-2 922	-1 267	-1 222	326	288	-3 931	-3 856
Gross profit	**8 058**	**7 792**	**1 214**	**1 132**	**5**	**34**	**9 277**	**8 958**
Selling, general and administration	-2 760	-2 886	-542	-513	-141	-113	-3 443	-3 512
Research and development	-2 575	-2 112	-219	-208			-2 794	-2 320
Other income	751	145	10	48	209	33	970	226
Other expense	-799	-312	-144	-65	-211	-123	-1 154	-500
Operating income	**2 675**	**2 627**	**319**	**394**	**-138**	**-169**	**2 856**	**2 852**
as % of net sales	*25.3%*	*25.7%*	*13.4%*	*17.1%*			*22.0%*	*22.8%*
Loss from associated companies	1		1		-3	-2	-1	-2
Interest expense							-211	-201
Other financial income and expense							96	20
Income before taxes							**2 740**	**2 669**
Income taxes							-446	-450
Net income							**2 294**	**2 219**

[1] Eliminations mainly relate to the elimination of sales to other segments and the corresponding cost of goods sold.
[2] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023.

Segmentation – Additional consolidated balance sheets and income statements disclosure

(USD millions)	Innovative Medicines Mar 31, 2023	Innovative Medicines Dec 31, 2022 restated	Sandoz Mar 31, 2023	Sandoz Dec 31, 2022 restated	Corporate (including eliminations)[1] Mar 31, 2023	Corporate (including eliminations)[1] Dec 31, 2022	Group Mar 31, 2023	Group Dec 31, 2022
Total assets[2]	**75 923**	**75 836**	**16 427**	**15 752**	**19 891**	**25 865**	**112 241**	**117 453**
Total liabilities	**-16 746**	**-16 966**	**-3 999**	**-3 710**	**-39 354**	**-37 354**	**-60 099**	**-58 030**
Total equity							**52 142**	**59 423**
Net debt[3]					15 104	7 245	15 104	7 245
Net operating assets[2]	**59 177**	**58 870**	**12 428**	**12 042**	**-4 359**	**-4 244**	**67 246**	**66 668**
Included in net operating assets are:								
Property, plant and equipment	8 518	8 488	1 923	1 861	400	415	10 841	10 764
Goodwill[2]	21 947	21 857	7 534	7 444			29 481	29 301
Intangible assets other than goodwill	28 630	29 826	1 432	1 460	389	358	30 451	31 644

[1] Eliminations mainly relate to the elimination of intercompany receivables and payables to other segments and inventories.
[2] December 31, 2022, restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective January 1, 2023. These restatements had no impact on Corporate or the total Group.
[3] See page 42 for additional disclosures related to net debt.

The following table shows the property, plant and equipment impairment charges and reversals, the right-of-use assets impairment charges, the intangible assets impairment charges and additions to restructuring provisions:

First quarter

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions)	**Q1 2023**	Q1 2022	**Q1 2023**	Q1 2022	**Q1 2023**	Q1 2022	**Q1 2023**	Q1 2022
Property, plant and equipment impairment charges	-27	-22	-1	-1			**-28**	**-23**
Property, plant and equipment impairment reversals	9	2		1			**9**	**3**
Right-of-use assets impaiment charges				-1				**-1**
Intangible assets impairment charges [1]	-473	-37	-12				**-485**	**-37**
Additions to restructuring provisions	-378	-44	-5	-10	-32	-10	**-415**	**-64**

[1] The first quarter of 2023 includes an impairment of USD 0.3 billion related to the write-down of IPR&D related to cessation of clinical development program NIZ2985.

In the first quarter of 2023, there were no reversals of prior-year impairment charges on intangible assets (Q1 2022: nil) and right-of-use assets (Q1 2022: nil).

Restructuring provisions movements

(USD millions)	**Q1 2023**	Q1 2022
Balance at beginning of period	**1 131**	**345**
Additions	415	64
Cash payments	-317	-69
Releases	-32	-5
Transfers	-1	0
Currency translation effects	13	-4
Balance at closing of period	**1 209**	**331**

In 2023, additions to provisions of USD 415 million were mainly related to the continuation of the initiative announced in April 2022, to implement a new streamlined organizational model designed to support innovation, growth and productivity.

In 2022, additions to provisions of USD 64 million were mainly related to the continuation of the Innovative Medicines Division and the Operations unit (formerly the Novartis Technical Operations and the Customer & Technology Solutions) 2021 restructuring initiatives.

Segmentation – Net sales to third parties

Net sales by region[1]

First quarter

	Q1 2023 USD m	Q1 2022 restated USD m[2]	% change USD	% change cc[3]	Q1 2023 % of total	Q1 2022 % of total
Innovative Medicines						
Europe	3 421	3 529	-3	1	32	34
US	4 072	3 675	11	11	39	36
Asia/Africa/Australasia	2 299	2 328	-1	8	22	23
Canada and Latin America	778	698	11	20	7	7
Total	**10 570**	**10 230**	**3**	**7**	**100**	**100**
Of which in Established Markets	7 678	7 572	1	4	73	74
Of which in Emerging Growth Markets	2 892	2 658	9	16	27	26
Sandoz						
Europe	1 366	1 235	11	16	57	54
US	380	408	-7	-7	16	18
Asia/Africa/Australasia	377	405	-7	3	16	18
Canada and Latin America	260	253	3	7	11	10
Total	**2 383**	**2 301**	**4**	**8**	**100**	**100**
Of which in Established Markets	1 645	1 574	5	9	69	68
Of which in Emerging Growth Markets	738	727	2	7	31	32
Group						
Europe	4 787	4 764	0	5	37	38
US	4 452	4 083	9	9	34	33
Asia/Africa/Australasia	2 676	2 733	-2	7	21	22
Canada and Latin America	1 038	951	9	16	8	7
Total	**12 953**	**12 531**	**3**	**8**	**100**	**100**
Of which in Established Markets	9 323	9 146	2	5	72	73
Of which in Emerging Growth Markets	3 630	3 385	7	14	28	27

[1] Net sales to third parties by location of customer. Emerging Growth Markets comprise all markets other than the Established Markets of the US, Canada, Western Europe, Japan, Australia and New Zealand.

[2] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023. These restatements had no impact on the total Group.

[3] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 35.

Innovative Medicines Division net sales to third parties by core therapeutic area; other promoted brands; and established brands

First quarter

	Q1 2023 USD m	Q1 2022 USD m[1]	% change USD	% change cc[2]
Cardiovascular				
Entresto	1 399	1 093	28	32
Leqvio	64	14	nm	nm
Total Cardiovascular	**1 463**	**1 107**	**32**	**36**
Immunology				
Cosentyx	1 076	1 159	-7	-4
Xolair[3]	354	368	-4	2
Ilaris	328	285	15	19
Other		1	nm	nm
Total Immunology	**1 758**	**1 813**	**-3**	**1**
Neuroscience				
Kesimpta	384	195	97	100
Zolgensma	309	363	-15	-14
Mayzent	89	79	13	14
Aimovig	61	54	13	17
Other		1	nm	nm
Total Neuroscience	**843**	**692**	**22**	**24**
Solid Tumors				
Tafinlar + Mekinist	458	403	14	18
Kisqali	415	239	74	81
Pluvicto	211	2	nm	nm
Lutathera	149	125	19	22
Piqray	116	73	59	61
Votrient	105	129	-19	-16
Tabrecta	36	31	16	18
Other	1		nm	nm
Total Solid Tumors	**1 491**	**1 002**	**49**	**53**
Hematology				
Promacta/Revolade	547	491	11	15
Tasigna	462	461	0	4
Jakavi	414	389	6	13
Kymriah	135	127	6	11
Scemblix	76	25	204	202
Adakveo	52	44	18	18
Other		1	nm	nm
Total Hematology	**1 686**	**1 538**	**10**	**14**
Other Promoted Brands				
Ultibro Group	114	132	-14	-8
Xiidra	89	107	-17	-16
Beovu	51	48	6	9
Other respiratory	25	19	32	41
Total Other Promoted Brands	**279**	**306**	**-9**	**-5**
Total Promoted Brands	**7 520**	**6 458**	**16**	**20**
Established Brands				
Lucentis	416	520	-20	-15
Sandostatin	329	320	3	5
Gilenya	232	605	-62	-60
Exforge Group	186	200	-7	-1
Galvus Group	183	216	-15	-9
Diovan Group	158	191	-17	-11
Gleevec/Glivec	147	198	-26	-21
Afinitor/Votubia	110	138	-20	-16
Contract manufacturing[4]	123	99	24	26
Other[5]	1 166	1 285	-9	-4
Total Established Brands[4, 5]	**3 050**	**3 772**	**-19**	**-15**
Total division net sales to third parties[4, 5]	**10 570**	**10 230**	**3**	**7**

[1] Reclassified to reflect the new Innovative Medicines divisional structures announced on April 4, 2022, and the product movement between core therapeutic area, other promoted brands and established brands. In Q1 2023 *Lucentis* was reclassified from Other Promoted Brands to Established Brands and *Gilenya* was reclassified from Neuroscience to Established Brands. Q1 2022 has been reclassified to reflect these movements.

[2] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 35.

[3] Net sales to third parties reflect *Xolair* sales for all indications.

[4] Q1 2022 restated to reflect the transfer of the Sandoz Division's biotechnology manufacturing services to other companies' activities to the Innovative Medicines Division that was effective as of January 1, 2023.

[5] Q1 2022 restated to reflect the transfer of the *Coartem* brand from the Sandoz Division to the Innovative Medicines Division that was effective as of January 1, 2023.

nm = not meaningful

Net sales to third parties of the top 20 Innovative Medicines Division brands in 2023

First quarter

			US		Rest of world			Total		
Brands	**Brand classification by therapeutic area, other promoted brands or established brands**	**Key indications**	USD m	% change USD/cc[1]	USD m	% change USD	% change cc[1]	USD m	% change USD	% change cc[1]
Entresto	Cardiovascular	Chronic heart failure, hypertension	704	30	695	26	35	1 399	28	32
Cosentyx	Immunology	Psoriasis (PsO), ankylosing spondylitis (AS), psoriatic arthritis (PsA), non-radiographic axial spondyloarthritis (nr-axSPA)	528	-20	548	10	17	1 076	-7	-4
Promacta/Revolade	Hematology	Immune thrombocytopenia (ITP), severe aplastic anemia (SAA)	277	12	270	11	18	547	11	15
Tasigna	Hematology	Chronic myeloid leukemia (CML)	211	4	251	-3	4	462	0	4
Tafinlar + Mekinist	Solid Tumors	BRAF V600+ metastatic adjuvant melanoma, advanced non-small cell lung cancer (NSCLC), tumor agnostic with BRAF mutation indication	194	26	264	6	13	458	14	18
Lucentis	Established Brands[2]	Age-related macular degeneration (AMD), diabetic macular edema (DME), retinal vein occlusion (RVO)			416	-20	-15	416	-20	-15
Kisqali	Solid Tumors	HR+/HER2- metastatic breast cancer	182	130	233	46	56	415	74	81
Jakavi	Hematology	Myelofibrosis (MF), polycytomia vera (PV), graft-versus-host disease (GvHD)			414	6	13	414	6	13
Kesimpta	Neuroscience	Relapsing-remitting multiple sclerosis (RRMS)	295	72	89	nm	nm	384	97	100
Xolair[3]	Immunology	Severe allergic asthma (SAA), chronic spontaneous urticaria (CSU), nasal polyps			354	-4	2	354	-4	2
Sandostatin	Established Brands	Carcinoid tumors, acromegaly	209	4	120	0	6	329	3	5
Ilaris	Immunology	Auto-inflammatory (CAPS, TRAPS, HIDS/MKD, FMF, SJIA, AOSD, gout)	141	12	187	18	25	328	15	19
Zolgensma	Neuroscience	Spinal muscular atrophy (SMA)	109	-4	200	-20	-19	309	-15	-14
Gilenya	Established Brands[2]	Relapsing multiple sclerosis (RMS)	80	-74	152	-49	-46	232	-62	-60
Pluvicto	Solid Tumors	PSMA-positive mCRPC patients post-ARPI, post-Taxane	205	nm	6	200	242	211	nm	nm
Exforge Group	Established Brands	Hypertension	4	0	182	-7	-2	186	-7	-1
Galvus Group	Established Brands	Type 2 diabetes			183	-15	-9	183	-15	-9
Diovan Group	Established Brands	Hypertension	15	15	143	-20	-13	158	-17	-11
Lutathera	Solid Tumors	GEP-NETs gastroenteropancreatic neuroendocrine tumors	104	14	45	32	42	149	19	22
Gleevec/Glivec	Established Brands	Chronic myeloid leukemia (CML), gastrointestinal stromal tumors (GIST)	38	-24	109	-26	-20	147	-26	-21
Top 20 brands total			**3 296**	**11**	**4 861**	**0**	**6**	**8 157**	**4**	**8**
Rest of portfolio[4]			776	8	1 637	-3	3	2 413	0	5
Total division net sales to third parties[4]			**4 072**	**11**	**6 498**	**-1**	**5**	**10 570**	**3**	**7**

[1] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 35.

[2] In Q1 2023 *Lucentis* was reclassified from Other Promoted Brands to Established Brands and *Gilenya* was reclassified from Neuroscience to Established Brands.

[3] Net sales to third parties reflect *Xolair* sales for all indications.

[4] % change has been restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023.

nm = not meaningful

Sandoz Division net sales to third parties by business franchise

First quarter

	Q1 2023 USD m	Q1 2022 restated[1] USD m	% change USD	% change cc[2]
Retail Generics[3]	1 781	1 764	1	6
Biopharmaceuticals	518	465	11	17
Anti-Infectives[3]	84	72	17	20
Total division net sales to third parties	**2 383**	**2 301**	**4**	**8**

[1] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities (from Biopharmaceuticals) and the *Coartem* brand (from Retail Generics) to the Innovative Medicines Division that was effective as of January 1, 2023. These restatements had no impact on Anti-Infectives.

[2] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 35.

[3] Sandoz total anti-infectives net sales to third parties amounted to USD 297 million (Q1 2022: USD 269 million), of which USD 213 million (Q1 2022: USD 197 million) were sold through the Retail Generics business franchise and USD 84 million (Q1 2022: USD 72 million) were sold to other third-party companies through the Anti-Infectives business franchise.

The product portfolio of Sandoz is widely spread in 2023 and 2022.

Segmentation – Other revenue

First quarter

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions)	**Q1 2023**	Q1 2022	**Q1 2023**	Q1 2022	**Q1 2023**	Q1 2022	**Q1 2023**	Q1 2022
Profit sharing income	199	205					199	205
Royalty income	22	3	4	5		3	26	11
Milestone income	3	19					3	19
Other[1]	22	47	2	1	3		27	48
Total other revenues	**246**	**274**	**6**	**6**	**3**	**3**	**255**	**283**

[1] Other includes revenue from activities such as manufacturing or other services rendered, to the extent such revenue is not recorded under net sales.

Supplementary information (unaudited)

Non-IFRS disclosures

Novartis uses certain non-IFRS metrics when measuring performance, especially when measuring current-year results against prior periods, including core results, constant currencies and free cash flow.

Despite the use of these measures by management in setting goals and measuring the Group's performance, these are non-IFRS measures that have no standardized meaning prescribed by IFRS. As a result, such measures have limits in their usefulness to investors.

Because of their non-standardized definitions, the non-IFRS measures (unlike IFRS measures) may not be comparable to the calculation of similar measures of other companies. These non-IFRS measures are presented solely to permit investors to more fully understand how the Group's management assesses underlying performance. These non-IFRS measures are not, and should not be viewed as, a substitute for IFRS measures.

As an internal measure of Group performance, these non-IFRS measures have limitations, and the Group's performance management process is not solely restricted to these metrics.

Core results

The Group's core results – including core operating income, core net income and core earnings per share – exclude fully the amortization and impairment charges of intangible assets, excluding software, net gains and losses on fund investments and equity securities valued at fair value through profit and loss, and certain acquisition- and divestment-related items. The following items that exceed a threshold of USD 25 million are also excluded: integration- and divestment-related income and expenses; divestment gains and losses; restructuring charges/releases and related items; legal-related items; impairments of property, plant and equipment, software, and financial assets, and income and expense items that management deems exceptional and that are or are expected to accumulate within the year to be over a USD 25 million threshold.

Novartis believes that investor understanding of the Group's performance is enhanced by disclosing core measures of performance since, core measures exclude items that can vary significantly from year to year, they enable better comparison of business performance across years. For this same reason, Novartis uses these core measures in addition to IFRS and other measures as important factors in assessing the Group's performance.

The following are examples of how these core measures are utilized:

- In addition to monthly reports containing financial information prepared under International Financial Reporting Standards (IFRS), senior management receives a monthly analysis incorporating these core measures.
- Annual budgets are prepared for both IFRS and core measures.

As an internal measure of Group performance, the core results measures have limitations, and the Group's performance management process is not solely restricted to these metrics. A limitation of the core results measures is that they provide a view of the Group's operations without including all events during a period, such as the effects of an acquisition, divestment, or amortization/impairments of purchased intangible assets, impairments to property, plant and equipment and restructurings and related items.

Constant currencies

Changes in the relative values of non-US currencies to the US dollar can affect the Group's financial results and financial position. To provide additional information that may be useful to investors, including changes in sales volume, we present information about our net sales and various values relating to operating and net income that are adjusted for such foreign currency effects.

Constant currency calculations have the goal of eliminating two exchange rate effects so that an estimate can be made of underlying changes in the consolidated income statement excluding the impact of fluctuations in exchanges rates:

- The impact of translating the income statements of consolidated entities from their non-USD functional currencies to USD
- The impact of exchange rate movements on the major transactions of consolidated entities performed in currencies other than their functional currency.

We calculate constant currency measures by translating the current year's foreign currency values for sales and other income statement items into USD (excluding the IAS 29 "Financial Reporting in Hyperinflationary Economies" adjustments to the local currency income statements of subsidiaries operating in hyperinflationary economies), using the average exchange rates from the prior year and comparing them to the prior year values in USD.

We use these constant currency measures in evaluating the Group's performance, since they may assist us in evaluating our ongoing performance from year to year. However, in performing our evaluation, we also consider equivalent measures of performance that are not affected by changes in the relative value of currencies.

Growth rate calculation

For ease of understanding, Novartis uses a sign convention for its growth rates such that a reduction in operating expenses or losses compared with the prior year is shown as a positive growth.

Free cash flow

Effective January 1, 2023, Novartis revised its definition of free cash flow, to define free cash flow as net cash flows from operating activities less purchases of property, plant and equipment. This new definition provides a simpler performance measure focusing on core operating activities, and also excludes items that can vary

significantly from year to year which enables better comparison of business performance across years. The prior year free cash flow amounts have been revised to conform with the new free cash flow definition to aid in comparability.

Free cash flow is a non-IFRS measure and is not intended to be a substitute measure for net cash flows from operating activities as determined under IFRS. Free cash flow is presented as additional information because management believes it is a useful supplemental indicator of the Group's ability to operate without reliance on additional borrowing or use of existing cash. Free cash flow is a measure of the net cash generated that is available for investment in strategic opportunities, returning to shareholders and for debt repayment. Free cash flow is a non-IFRS measure, which means it should not be interpreted as a measure determined under IFRS.

Additional information

Net debt

Novartis calculates net debt as current financial debts and derivative financial instruments plus non-current financial debts less cash and cash equivalents and marketable securities, commodities, time deposits and derivative financial instruments.

Net debt is presented as additional information because it sets forth how management monitors net debt or liquidity and management believes it is a useful supplemental indicator of the Group's ability to pay dividends, to meet financial commitments, and to invest in new strategic opportunities, including strengthening its balance sheet.

See page 42 for additional disclosures related to net debt.

CORE RESULTS – Reconciliation from IFRS results to core results – Group

First quarter

(USD millions unless indicated otherwise)	Innovative Medicines Q1 2023	Innovative Medicines Q1 2022 restated[2]	Sandoz Q1 2023	Sandoz Q1 2022 restated[2]	Corporate Q1 2023	Corporate Q1 2022 restated[2]	Group Q1 2023	Group Q1 2022
IFRS operating income	**2 675**	**2 627**	**319**	**394**	**-138**	**-169**	**2 856**	**2 852**
Amortization of intangible assets	**1 027**	**878**	**54**	**58**			**1 081**	**936**
Impairments								
Intangible assets	473	37	12				485	37
Property, plant and equipment related to the Group-wide rationalization of manufacturing sites	-7	17					-7	17
Other property, plant and equipment								
Total impairment charges	**466**	**54**	**12**				**478**	**54**
Acquisition or divestment of businesses and related items								
- Income					-4	-2	-4	-2
- Expense	2						2	
Total acquisition or divestment of businesses and related items, net	**2**				**-4**	**-2**	**-2**	**-2**
Other items								
Divestment gains	-130				4	-18	-126	-18
Financial assets – fair value adjustments	39	32			7	70	46	102
Restructuring and related items								
- Income	-25	-4	-2	-6	-6		-33	-10
- Expense	618	143	35	46	118	17	771	206
Legal-related items								
- Income	-484	-51					-484	-51
- Expense	29		89	6			118	6
Additional income	-134	-15	-3	-2	-160		-297	-17
Additional expense	5	8		17			5	25
Total other items	**-82**	**113**	**119**	**61**	**-37**	**69**	**0**	**243**
Total adjustments	**1 413**	**1 045**	**185**	**119**	**-41**	**67**	**1 557**	**1 231**
Core operating income	**4 088**	**3 672**	**504**	**513**	**-179**	**-102**	**4 413**	**4 083**
as % of net sales	*38.7%*	*35.9%*	*21.1%*	*22.3%*			*34.1%*	*32.6%*
Loss from associated companies	1		1		-3	-2	-1	-2
Interest expense							-211	-201
Other financial income and expense							96	20
Core adjustments to other financial income and expense							21	12
Income taxes, adjusted for above items (core income taxes)							-704	-661
Core net income							**3 614**	**3 251**
Core net income attributable to shareholders of Novartis AG							**3 613**	**3 254**
Core basic EPS (USD) [1]							**1.71**	**1.46**

[1] Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

[2] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023 (see Note 9 in this Condensed Interim Financial Report).

CORE RESULTS – Reconciliation from IFRS results to core results – Group

First quarter

(USD millions unless indicated otherwise)	Q1 2023 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items[3]	Other items[4]	Q1 2023 Core results	Q1 2022 Core results
Gross profit	**9 277**	**928**	**12**		**90**	**10 307**	**9 960**
Operating income	**2 856**	**1 081**	**478**	**-2**		**4 413**	**4 083**
Income before taxes	**2 740**	**1 081**	**478**	**-2**	**21**	**4 318**	**3 912**
Income taxes[5]	-446					-704	-661
Net income	**2 294**					**3 614**	**3 251**
Basic EPS (USD)[6]	**1.09**					**1.71**	**1.46**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-3 931	928	12		90	-2 901	-2 854
The following are adjustments to arrive at core operating income							
Selling, general and administration	-3 443				42	-3 401	-3 498
Research and development	-2 794	153	474		-105	-2 272	-2 256
Other income	970		-8	-4	-849	109	127
Other expense	-1 154			2	822	-330	-250
The following are adjustments to arrive at core income before taxes							
Other financial income and expense	96				21	117	32

[1] Amortization of intangible assets: cost of goods sold includes the amortization of acquired rights to currently marketed products and other production-related intangible assets; research and development includes the amortization of acquired rights for technologies

[2] Impairments: cost of goods sold, research and development and other income include net impairment charges related to intangible assets; other income also includes reversals of impairment charges related to property, plant and equipment

[3] Acquisition or divestment of businesses and related items, including restructuring and integration charges: other income includes adjustments to provisions; other expense includes charges related to an acquisition

[4] Other items: cost of goods sold, selling, general and administration, research and development, other income and other expense include restructuring income and charges related to the restructuring initiative to implement a new streamlined organizational model, the Sandoz strategic review, the Group-wide rationalization of manufacturing sites and other net restructuring charges and related items; cost of goods sold and selling, general and administration also include adjustments to provisions; research and development includes contingent consideration adjustments; other income and other expense include fair value adjustments and divestment gains and losses on financial assets and legal-related items; other income also includes a fair value adjustment on a contingent receivable, gains from the divestment of products and curtailment gains; other financial income and expense includes the monetary loss on the restatement of non-monetary items for subsidiaries in hyperinflationary economies

[5] Taxes on the adjustments between IFRS and core results take into account, for each individual item included in the adjustment, the tax rate that will finally be applicable to the item based on the jurisdiction where the adjustment will finally have a tax impact. Generally, this results in amortization and impairment of intangible assets and acquisition-related restructuring and integration items having a full tax impact. There is usually a tax impact on other items, although this is not always the case for items arising from legal settlements in certain jurisdictions. Adjustments related to income from associated companies are recorded net of any related tax effect. Due to these factors and the differing effective tax rates in the various jurisdictions, the tax on the total adjustments of USD 1.6 billion to arrive at the core results before tax amounts to USD 258 million. The average tax rate on the adjustments is 16.3% since the estimated full year core tax charge of 16.3% has been applied to the pre-tax income of the period.

[6] Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

CORE RESULTS – Reconciliation from IFRS results to core results – Innovative Medicines

First quarter

(USD millions)	Q1 2023 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items[3]	Other items[4]	Q1 2023 Core results	Q1 2022 restated Core results[5]
Gross profit	**8 058**	**874**			**70**	**9 002**	**8 708**
Operating income	**2 675**	**1 027**	**466**	**2**	**-82**	**4 088**	**3 672**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-2 990	874			70	-2 046	-2 006
The following are adjustments to arrive at core operating income							
Selling, general and administration	-2 760				36	-2 724	-2 883
Research and development	-2 575	153	474		-105	-2 053	-2 048
Other income	751		-8		-660	83	82
Other expense	-799			2	577	-220	-187

[1] Amortization of intangible assets: cost of goods sold includes the amortization of acquired rights to currently marketed products and other production-related intangible assets; research and development includes the amortization of acquired rights for technologies

[2] Impairments: research and development and other income include net impairment charges related to intangible assets; other income also includes reversals of impairment charges related to property, plant and equipment

[3] Acquisition or divestment of businesses and related items, including restructuring and integration charges: other expense includes charges related to an acquisition

[4] Other items: cost of goods sold, selling, general and administration, research and development, other income and other expense include restructuring income and charges related to the initiative to implement a new streamlined organizational model, the Sandoz strategic review, the Group-wide rationalization of manufacturing sites and other net restructuring charges and related items; selling, general and administration also includes an adjustment to a provision; research and development includes contingent consideration adjustments; other income and other expense include fair value adjustments on financial assets and legal-related items; other income also includes gains from the divestment of products and a curtailment gain

[5] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023 (see Note 9 in this Condensed Interim Financial Report).

CORE RESULTS – Reconciliation from IFRS results to core results – Sandoz

First quarter

(USD millions)	Q1 2023 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items	Other items[3]	Q1 2023 Core results	Q1 2022 restated Core results[4]
Gross profit	**1 214**	**54**	**12**		**20**	**1 300**	**1 218**
Operating income	**319**	**54**	**12**		**119**	**504**	**513**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-1 267	54	12		20	-1 181	-1 136
The following are adjustments to arrive at core operating income							
Selling, general and administration	-542				5	-537	-503
Other income	10				-2	8	42
Other expense	-144				96	-48	-36

[1] Amortization of intangible assets: cost of goods sold includes the amortization of acquired rights to currently marketed products and other production-related intangible assets

[2] Impairments: cost of goods sold includes impairment charges related to an intangible asset

[3] Other items: cost of goods sold, selling, general and administration, other income and other expense include charges related to the Sandoz strategic review, the Group-wide rationalization of manufacturing sites and other net restructuring charges and related items; cost of goods sold and selling, general and administration also include adjustments to provisions; other expense includes legal-related items

[4] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023 (see Note 9 in this Condensed Interim Financial Report).

CORE RESULTS – Reconciliation from IFRS results to core results – Corporate

First quarter

(USD millions)	Q1 2023 IFRS results	Amortization of intangible assets	Impairments	Acquisition or divestment of businesses and related items[1]	Other items[2]	Q1 2023 Core results	Q1 2022 restated Core results[3]
Gross profit	**5**					**5**	**34**
Operating loss	**-138**			**-4**	**-37**	**-179**	**-102**
The following are adjustments to arrive at core operating loss							
Selling, general and administration	-141				1	-140	-112
Other income	209			-4	-187	18	3
Other expense	-211				149	-62	-27

[1] Acquisition or divestment of businesses and related items, including restructuring and integration charges: other income includes adjustments to provisions

[2] Other items: selling, general and administration, other income and other expense include restructuring charges and income related to the initiative to implement a new streamlined organizational model, the Sandoz strategic review and other net restructuring charges and related items; other income and other expense also include fair value adjustments and divestment gains and losses on financial assets; other income also includes a fair value adjustment on a contingent receivable and a curtailment gain

[3] Restated to reflect the transfers of the Sandoz Division's biotechnology manufacturing services to other companies' activities and the *Coartem* brand to the Innovative Medicines Division that was effective as of January 1, 2023 (see Note 9 in this Condensed Interim Financial Report).

Free cash flow

The following table is a reconciliation of the three major categories of the IFRS consolidated statements of cash flows to free cash flow:

First quarter

	Q1 2023			Q1 2022		
(USD millions)	IFRS cash flow	Adjustments	Free cash flow	IFRS cash flow	Adjustments[1]	Revised Free cash flow[1]
Net cash flows from operating activities	**2 957**		**2 957**	**1 649**		**1 649**
Net cash flows from/(used in) investing activities[2]	**10 621**	**-10 858**	**-237**	**9 365**	**-9 622**	**-257**
Net cash flows used in financing activities[3]	**-9 202**	**9 202**	**0**	**-9 528**	**9 528**	**0**
Free cash flow[1]			**2 720**			**1 392**

[1] To aid in comparability, the prior year adjustments and free cash flow amounts have been revised to conform with the new free cash flow definition that was effective as of January 1, 2023.
[2] With the exception of purchases of property, plant and equipment, all net cash flows from investing activities are excluded from the free cash flow.
[3] Net cash flows used in financing activities are excluded from the free cash flow.

The following table is a summary of the free cash flow:

First quarter

(USD millions)	Q1 2023	Q1 2022
Operating income	**2 856**	**2 852**
Adjustments for non-cash items		
Depreciation, amortization and impairments	2 043	1 507
Change in provisions and other non-current liabilities	512	88
Other	-110	125
Operating income adjusted for non-cash items	**5 301**	**4 572**
Dividends received from associated companies and others	5	
Interest and other financial receipts	336	17
Interest and other financial payments	-129	-140
Income taxes paid	-348	-633
Payments out of provisions and other net cash movements in non-current liabilities	-704	-156
Change in inventories and trade receivables less trade payables	-1 383	-1 064
Change in other net current assets and other operating cash flow items	-121	-947
Net cash flows from operating activities	**2 957**	**1 649**
Purchases of property, plant and equipment	-237	-257
Free cash flow[1]	**2 720**	**1 392**

[1] To aid in comparability, the prior year free cash flow amounts have been revised to conform with the new free cash flow definition that was effective as of January 1, 2023

Additional information

Net debt

Condensed consolidated changes in net debt

First quarter

(USD millions)	**Q1 2023**	Q1 2022
Net change in cash and cash equivalents	**4 483**	**1 445**
Change in marketable securities, commodities, time deposits, financial debts and derivatives financial instruments	-12 342	-11 255
Change in net debt	**-7 859**	**-9 810**
Net debt at January 1	-7 245	-868
Net debt at March 31	**-15 104**	**-10 678**

Components of net debt

(USD millions)	**Mar 31, 2023**	Dec 31, 2022	Mar 31, 2022
Non-current financial debts	-20 396	-20 244	-22 796
Current financial debts and derivative financial instruments	-6 968	-5 931	-6 696
Total financial debts	**-27 364**	**-26 175**	**-29 492**
Less liquidity			
Cash and cash equivalents	12 000	7 517	13 852
Marketable securities, commodities, time deposits and derivative financial instruments	260	11 413	4 962
Total liquidity	**12 260**	**18 930**	**18 814**
Net debt at end of period	**-15 104**	**-7 245**	**-10 678**

Share information

	Mar 31, 2023	Mar 31, 2022
Number of shares outstanding	**2 097 395 834**	2 212 584 901
Registered share price (CHF)	**83.76**	81.25
ADR price (USD)	**92.00**	87.75
Market capitalization (USD billions) [1]	**192.4**	194.7
Market capitalization (CHF billions) [1]	**175.7**	179.8

[1] Market capitalization is calculated based on the number of shares outstanding (excluding treasury shares). Market capitalization in USD is based on the market capitalization in CHF converted at the quarter end CHF/USD exchange rate.

Effects of currency fluctuations

Principal currency translation rates

(USD per unit)	**Average rates Q1 2023**	Average rates Q1 2022	**Period-end rates Mar 31, 2023**	Period-end rates Mar 31, 2022
1 CHF	1.081	1.083	1.095	1.083
1 CNY	0.146	0.158	0.146	0.158
1 EUR	1.073	1.123	1.090	1.117
1 GBP	1.215	1.342	1.240	1.314
100 JPY	0.756	0.861	0.751	0.823
100 RUB	1.369	1.163	1.295	1.202

Currency impact on key figures

The following table provides a summary of the currency impact on key Group figures due to their conversion into US dollars, the Group's reporting currency, of the financial data from entities reporting in non-US dollars. Constant currency (cc) calculations apply the exchange rates of the prior year period to the current period financial data for entities reporting in non-US dollars.

First quarter

	Change in USD % Q1 2023	**Change in constant currencies % Q1 2023**	**Percentage point currency impact Q1 2023**	Change in USD % Q1 2022	Change in constant currencies % Q1 2022	Percentage point currency impact Q1 2022
Total Group						
Net sales to third parties	3	8	-5	1	5	-4
Operating income	0	9	-9	18	26	-8
Net income	3	14	-11	8	15	-7
Basic earnings per share (USD)	9	20	-11	10	17	-7
Core operating income	8	15	-7	3	9	-6
Core net income	11	18	-7	-5	0	-5
Core basic earnings per share (USD)	17	25	-8	-4	2	-6
Innovative Medicines						
Net sales to third parties	3	7	-4	1	4	-3
Operating income	2	11	-9	16	24	-8
Core operating income	11	18	-7	0	5	-5
Sandoz						
Net sales to third parties	4	8	-4	2	8	-6
Operating income	-19	-14	-5	34	42	-8
Core operating income	-2	3	-5	21	26	-5
Corporate						
Operating loss	18	16	2	-25	-30	5
Core operating loss	-75	-78	3	31	27	4

Disclaimer

This press release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995, that can generally be identified by words such as “continue,” “progresses,” “remain,” “growth,” “on track,” “confidence,” “upcoming,” “prioritizing,” “expect,” “continued,” “ongoing,” “optimistic,” “outlook,” “focus,” “pipeline,” “growth,” “potential,” “expected,” “will,” “guidance,” “continuing,” “estimated,” “launch,” “continue,” “to deliver,” “transformation,” “address,” “growing,” “accelerate,” “remains,” “scaling,” “expected,” “driven,” “long-term,” “innovation,” “transformative,” “priority,” “can,” “to develop,” “to experience,” “look forward,” “momentum,” or similar expressions, or by express or implied discussions regarding potential new products, potential new indications for existing products, potential product launches, or regarding potential future revenues from any such products; or regarding potential future, pending or announced transactions; or regarding the research collaboration with Bicycle Therapeutics; or regarding potential future sales or earnings of the Group or any of its divisions; or regarding discussions of strategy, priorities, plans, expectations or intentions, including our transforming into a “pure-play” Innovative Medicines business; or regarding the Group’s liquidity or cash flow positions and its ability to meet its ongoing financial obligations and operational needs; or regarding our planned spin-off of Sandoz. Such forward-looking statements are based on the current beliefs and expectations of management regarding future events and are subject to significant known and unknown risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those set forth in the forward-looking statements. You should not place undue reliance on these statements. In particular, our expectations could be affected by, among other things: liquidity or cash flow disruptions affecting our ability to meet our ongoing financial obligations and to support our ongoing business activities; the impact of a partial or complete failure of the return to normal global healthcare systems including prescription dynamics; global trends toward healthcare cost containment, including ongoing government, payer and general public pricing and reimbursement pressures and requirements for increased pricing transparency; uncertainties regarding potential significant breaches of data security or data privacy, or disruptions of our information technology systems; regulatory actions or delays or government regulation generally, including potential regulatory actions or delays with respect to the development of the products described in this press release; the potential that the benefits and opportunities expected from our planned spin-off of Sandoz may not be realized or may be more difficult or take longer to realize than expected; the uncertainties in the research and development of new healthcare products, including clinical trial results and additional analysis of existing clinical data; our ability to obtain or maintain proprietary intellectual property protection, including the ultimate extent of the impact on Novartis of the loss of patent protection and exclusivity on key products; safety, quality, data integrity, or manufacturing issues; uncertainties involved in the development or adoption of potentially transformational technologies and business models; uncertainties regarding actual or potential legal proceedings, investigations or disputes; our performance on environmental, social and governance measures; general political, economic and business conditions, including the effects of and efforts to mitigate pandemic diseases such as COVID-19; uncertainties regarding future global exchange rates; uncertainties regarding future demand for our products; and other risks and factors referred to in Novartis AG’s current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements as a result of new information, future events or otherwise.

About Novartis

Novartis is reimagining medicine to improve and extend people's lives. We deliver high-value medicines that alleviate society's greatest disease burdens through technology leadership in R&D and novel access approaches. In our quest to find new medicines, we consistently rank among the world's top companies investing in research and development. About 103,000 people of more than 140 nationalities work together to bring Novartis products to nearly 800 million people around the world. Find out more at https://www.novartis.com.

Novartis will conduct a conference call with investors to discuss this news release today at 14:00 Central European time and 8:00 Eastern Time. A simultaneous webcast of the call for investors and other interested parties may be accessed by visiting the Novartis website. A replay will be available after the live webcast by visiting https://www.novartis.com/investors/event-calendar.

Detailed financial results accompanying this press release are included in the condensed interim financial report at the link below. Additional information is provided on Novartis divisions and pipeline of selected compounds in late stage development and a copy of today's earnings call presentation can be found at https://www.novartis.com/investors/event-calendar.

Important dates

June 04, 2023	ASCO Investor Event
June 08, 2023	Sandoz Capital Markets Day – New York
June 12, 2023	Sandoz Capital Markets Day – London
July 18, 2023	Second quarter & Half year 2023 results
October 24, 2023	Third quarter & Nine months 2023 results
November 28, 2023	R&D Day