

Novartis Fourth Quarter and Full Year 2022

Condensed financial report – supplementary data

Novartis Global Communications

Novartis Fourth Quarter and Full Year 2022 Condensed Financial Report – Supplementary Data

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Group

Key Figures

Fourth quarter

		Excluding Roche investment impacts ²					
	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc ¹	Q4 2021 USD m	% change USD	% change cc
Net sales to third parties	12 690	13 229	-4	3	13 229	-4	3
Divisional operating income	2 218	2 854	-22	-13	2 854	-22	-13
Corporate income and expense, net	-269	-292	8	2	-292	8	2
Operating income	1 949	2 562	-24	-14	2 562	-24	-14
As % of net sales	15.4	19.4			19.4		
(Loss)/income from associated companies	-3	2	nm	nm	14 621	nm	nm
Interest expense	-219	-206	-6	-8	-206	- 6	-8
Other financial income and expense	14	-42	nm	nm	-26	nm	nm
Income taxes	-275	-645	57	50	-645	57	50
Net income	1 466	1 671	-12	2	16 306	-91	-90
Basic earnings per share (USD)	0.69	0.75	-8	7	7.29	-91	-89
Net cash flows from operating activities	4 111	3 884	6		3 884	6	
Free cash flow ¹	3 552	3 027	17		3 027	17	
Core ¹							
Core operating income	4 030	3 819	6	15	3 819	6	15
As % of net sales	31.8	28.9			28.9		
Core net income	3 251	3 044	7	17	3 135	4	14
Core basic earnings per share (USD)	1.52	1.36	12	23	1.40	9	19

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 50. Unless otherwise noted, all growth rates in this release refer to same period in prior year.

² A reconciliation of 2021 IFRS results and non-IFRS measures core results and free cash flow to exclude the impacts of the 2021 divestment of our Roche investment can be found

nm = not meaningful

² A reconciliation of 2021 IFRS results and non-IFRS measures core results and free cash flow to exclude the impacts of the 2021 divestment of our Roche investment can be found on page 58 of the Condensed Financial Report. The free cash flow impact represents the dividend received in Q1 2021 from Roche in relation to the distribution of its 2020 net income.

Full year

	FY 2022 USD m	Excluding Re	oche investment ir	mpacts ²		Reported	
		FY 2021 USD m	% change USD	% change cc ¹	FY 2021 USD m	% change USD	% change cc ¹
Net sales to third parties	50 545	51 626	-2	4	51 626	- 2	4
Divisional operating income	10 234	12 288	-17	-8	12 288	-17	-8
Corporate income and expense, net	-1 037	-599	-73	-84	-599	-73	-84
Operating income	9 197	11 689	-21	-13	11 689	-21	-13
As % of net sales	18.2	22.6			22.6		
(Loss)/income from associated companies	-9	-2	nm	nm	15 339	nm	nm
Interest expense	-837	-811	-3	-5	-811	- 3	-5
Other financial income and expense	20	-96	nm	nm	-80	nm	nm
Income taxes	-1 416	-2 119	33	25	-2 119	33	25
Net income	6 955	8 661	-20	-9	24 018	-71	-67
Basic earnings per share (USD)	3.19	3.86	-17	-7	10.71	-70	-66
Net cash flows from operating activities	14 236	14 549	-2		15 071	-6	
Free cash flow ¹	11 945	12 760	-6		13 282	-10	
Core ¹							
Core operating income	16 665	16 588	0	8	16 588	0	8
As % of net sales	33.0	32.1			32.1		
Core net income	13 352	13 099	2	11	14 094	-5	3
Core basic earnings per share (USD)	6.12	5.84	5	14	6.29	-3	6

nm = not meaningful

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 50. Unless otherwise noted, all growth rates in this release refer to same period in prior year.

² A reconciliation of 2021 IFRS results and non-IFRS measures core results and free cash flow to exclude the impacts of the 2021 divestment of our Roche investment can be found on page 58 of the Condensed Financial Report. The free cash flow impact represents the dividend received in Q1 2021 from Roche in relation to the distribution of its 2020 net

Strategy Update

Our focus

During 2022, Novartis unveiled a new focused strategy with our transformation 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 H2 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

Fourth quarter

Net sales

Net sales were USD 12.7 billion (-4%, +3% cc) in the fourth quarter driven by volume growth of 10 percentage points, partly offset by price erosion of 3 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 headquarter and coordination functions, amounted to an expense of USD 269 million compared to an expense of USD 292 million in the fourth quarter of 2021, mainly driven by prior year adjustments to provisions on M&A transactions partly offset by higher restructuring costs and lower contributions from the Novartis Venture Fund.

Operating income

Operating income was USD 1.9 billion (-24%, -14% cc), mainly due to higher restructuring costs (USD 0.6 billion), primarily related to the implementation of the previously announced streamlined organizational model. Operating income margin was 15.4% of net sales, decreasing by 4.0 percentage points (-3.2 percentage points cc).

Core operating income was USD 4.0 billion (+6%, +15% cc) driven by higher sales and productivity, including initial savings from the previously announced streamlined organizational model. Core operating income margin was 31.8% of net sales, increasing by 2.9 percentage points (+3.5 percentage points cc).

Income from associated companies

Income from associated companies was a loss of USD 3 million in the fourth quarter compared to an income of USD 14.6 billion in prior year and core income from associated companies was a loss of USD 3 million in the fourth quarter compared to an income of USD 93 million in prior year. These decreases were due to the divestment of our investment in Roche that closed in the fourth quarter of 2021 where a gain of USD 14.6 billion was recognized.

Interest expense and other financial income/expense

Interest expense amounted to USD 219 million and was broadly in line with the prior year. Other financial income and expense amounted to an income of USD 14 million compared to an expense of USD 26 million in the prior year and core other financial income and expense amounted to an income of USD 54 million compared to an expense of USD 24 million in the prior year quarter, as higher interest income was only partly offset by currency losses.

Income taxes

The tax rate in the fourth quarter was 15.8% compared to 3.8% in the prior year. The current and the prior year fourth quarter tax rate include a favorable adjustment to true-up to the estimated full year tax rate, which was lower than previously estimated. The prior year quarter's tax rate decreased due to the impact of the divestment gain recognized on the sale of our investment in Roche, partly offset by uncertain tax positions and prior year items.

For comparability, excluding these impacts, the prior year rate would have been 15.9%, broadly in line with 15.8% in the current year.

The core tax rate (core taxes as a percentage of core income before tax) was 15.8% compared to 14.9% in the prior year. The current and prior year core tax rates were both favorably impacted by the effect of adjusting to the full year core tax rate, which was less than previously estimated.

Net income, EPS and free cash flow

Net income was USD 1.5 billion (-91%, -90% cc), impacted by Roche income in the prior year of USD 14.6 billion. Excluding the impact of Roche income, net income grew +2% (cc). EPS was USD 0.69 (-91%, -89% cc). Excluding the impact of Roche income, EPS grew +7% (cc).

Core net income was USD 3.3 billion (+4%, +14% cc), mainly driven by growth in core operating income, partly offset by the loss of Roche core income. Excluding the impact of Roche core income, core net income grew +17% (cc). Core EPS was USD 1.52 (+9%, +19% cc), benefiting from lower weighted average number of shares outstanding. Excluding the impact of Roche core income, core EPS grew +23% (cc).

Free cash flow amounted to USD 3.6 billion (+17% USD), mainly driven by higher net cash flows from operating activities and lower purchases of intangible assets.

Full year

Net sales

Net sales were USD 50.5 billion (-2%, +4% cc) in the full year, driven by volume growth of 11 percentage points, partly offset by price erosion of 4 percentage points and the negative impact from generic competition of 3 percentage points.

Corporate income and expense, net

Corporate income and expense, which includes the cost of Group headquarter and coordination functions, amounted to an expense of USD 1.0 billion, compared to an expense of USD 599 million in 2021, mainly driven by higher restructuring costs, lower contributions from the Novartis Venture Fund and prior year income from a fair value adjustment on contingent receivables related to intellectual property rights, partly offset by prior year adjustments to provisions on M&A transactions.

Operating income

Operating income was USD 9.2 billion (-21%, -13% cc), mainly due to higher restructuring (USD 1.2 billion) primarily related to the implementation of the previously announced streamlined organizational model, higher impairments (USD 1.0 billion) and lower divestment gains (USD 0.6 billion). Operating income margin was 18.2% of net sales, decreasing by 4.4 percentage points (-3.8 percentage points cc).

Core operating income was USD 16.7 billion (0%, +8% cc) benefiting from higher sales, partly offset by higher R&D investments. Core operating income margin was 33.0% of net sales, increasing by 0.9 percentage points (+1.3 percentage points cc).

Income from associated companies

Income from associated companies was a loss of USD 9 million compared to an income of USD 15.3 billion in prior year and core income from associated companies was a loss of USD 9 million compared to an income of USD 993 million in prior year. These decreases were due to the divestment of our investment in Roche that closed in the fourth quarter of 2021 where a gain of USD 14.6 billion was recognized.

Interest expense and other financial income/expense

Interest expense amounted to USD 837 million and was broadly in line with the prior year. Other financial income and expense amounted to an income of USD 20 million compared to an expense of USD 80 million in the prior year, as higher interest income was partly offset by financial expenses and currency losses. Core other financial income and expense amounted to an income of USD 141 million compared to an expense of USD 41 million in the prior year as higher interest income was only partly offset by currency losses.

Income taxes

The tax rate was 16.9% compared to 8.1% in the prior year. In the prior year, the tax rate was impacted by the Roche income from associated companies (including the divestment gain recognized on the sale of our investment in Roche in December 2021), the impact of increases in uncertain tax positions and prior year items.

For comparability, excluding these impacts, the prior year tax rate would have been 16.8%, broadly in line with 16.9% in the current year.

The core tax rate (core taxes as a percentage of core income before tax) was 16.3% compared to 15.8% in the prior year. For comparability, excluding Roche Income from associated companies (divested in December 2021), the prior year core tax rate would have been 16.7% compared to 16.3% in the current year, decreasing mainly the result of a change in core profit mix.

Net income, EPS and free cash flow

Net income was USD 7.0 billion (-71%, -67% cc), impacted by Roche income in the prior year. Excluding the impact of Roche income, net income declined -9% (cc). EPS was USD 3.19 (-70%, -66% cc). Excluding the impact of Roche income, EPS declined -7% (cc).

Core net income was USD 13.4 billion (-5%, +3% cc) as growth in core operating income was partly offset by the loss of Roche core income. Excluding the impact of Roche core income, core net income grew +11% (cc). Core EPS was USD 6.12 (-3%, +6% cc), benefiting from lower weighted average number of shares outstanding. Excluding the impact of Roche core income, core EPS grew +14% (cc).

Free cash flow amounted to USD 11.9 billion (-10% USD), mainly due to a decrease in net cash flows from operating activities and lower divestment proceeds, partly offset by lower purchases of property, plant and equipment.

Innovative Medicines

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc
Net sales	10 360	10 704	-3	3	41 296	41 995	- 2	4
Operating income	1 945	2 468	-21	-12	8 786	10 688	-18	-9
As % of net sales	18.8	23.1			21.3	25.5		
Core operating income	3 768	3 596	5	14	15 237	15 215	0	8
As % of net sales	36.4	33.6			36.9	36.2		

Fourth quarter

Net sales

Net sales were USD 10.4 billion (-3%, +3% cc) with volume contributing 11 percentage points to growth. Generic competition had a negative impact of 5 percentage points. Pricing had a negative impact of 3 percentage points, including approximately 1 percentage point impact from a revenue deduction true-up for *Cosentyx* in the US, which was related to prior quarters in 2022. Sales growth for the quarter was also negatively impacted by the prior year reclassification of contract manufacturing from other revenues to sales. Excluding the contract manufacturing reclassification impact, sales would have grown +4% (cc). Sales in the US were USD 4.2 billion (+7%) and in the rest of the world USD 6.2 billion (-9%, +1% cc).

Sales growth was mainly driven by continued strong performance from *Entresto* (USD 1.3 billion, +36%, +44% cc), *Kesimpta* (USD 369 million, +151%, +157% cc), *Pluvicto* (USD 179 million) and *Kisqali* (USD 357 million, +25%, +33% cc), partly offset by generic competition mainly for *Gilenya*, *Exjade* and *Afinitor* and the *Cosentyx* US revenue deduction true-up.

In the US (USD 4.2 billion, +7%), sales growth was mainly driven by *Kesimpta*, *Entresto* and *Pluvicto*, partly offset by the impact of generic competition mainly on *Gilenya*. In Europe (USD 3.4 billion, -10%, -1% cc), sales decline was driven by increased generic competition for *Gilenya* and *Exjade*, partly offset by growth for *Entresto* and *Kesimpta*. Emerging Growth Markets grew +7% (cc, -2% USD), with China sales USD 0.6 billion (-9%, +1% cc) in which *Entresto* growth was offset by Volume-Based Procurement impact on *Diovan* and *Exforge*.

Operating income

Operating income was USD 1.9 billion (-21%, -12% cc), driven by higher restructuring and impairments, partly offset by higher gross margin and lower SG&A investments. Operating income margin was 18.8% of net sales, decreasing 4.3 percentage points (-3.4 percentage points in cc).

Core adjustments were USD 1.8 billion, mainly due to amortization, restructuring and impairments, compared to USD 1.1 billion in prior year. Core adjustments increased compared to prior year, mainly due to higher restructuring and impairments, partly offset by contingent consideration adjustment.

Core operating income was USD 3.8 billion (+5%, +14% cc), mainly driven by higher gross margin and lower SG&A investments. Core operating income margin was 36.4% of net sales, increasing 2.8 percentage points (+3.5 percentage points cc). Other revenue as a percentage of sales increased by 0.5 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 0.2 percentage points (cc). Core SG&A expenses as a percentage of net sales decreased by 2.0 percentage points (cc). Core other income and expense as a percentage of net sales increased the margin by 0.3 percentage points (cc).

Full year

Net sales

Net sales were USD 41.3 billion (-2%, +4% cc) with volume contributing 12 percentage points to growth. Generic competition had a negative impact of 4 percentage points. Pricing had a negative impact of 4 percentage points. Sales in the US were USD 15.9 billion (+6%) and in the rest of the world USD 25.4 billion (-6%, +3% cc).

Sales growth was mainly driven by continued strong growth from *Entresto* (USD 4.6 billion, +31%, +37% cc), *Kesimpta* (USD 1.1 billion, +194%, +200% cc), *Kisqali* (USD 1.2 billion, +31%, +38% cc), *Pluvicto* (USD 271 million) and *Cosentyx*

(USD 4.8 billion, +1%, +5% cc), partly offset by generic competition mainly for *Gilenya*, *Afinitor/Votubia* and *Gleevec/Glivec*.

In the US (USD 15.9 billion +6%), sales growth was mainly driven by *Entresto*, *Kesimpta* and *Pluvicto*, partly offset by the impact of generic competition on *Afinitor/Votubia* and *Gilenya*. In Europe (USD 13.6 billion, –9%, +1% cc) sales growth was driven by *Entresto*, *Kisqali* and *Kesimpta*, partly offset by increased generic competition for *Gilenya*. Emerging Growth Markets grew +2% (+9% cc), with China sales USD 2.9 billion (+3%, +7% cc) driven by *Cosentyx*.

Operating income

Operating income was USD 8.8 billion (-18%, -9% cc), driven by higher impairments, restructuring, lower divestment gains and higher R&D expenses, partly offset by higher gross margin. Operating income margin was 21.3% of net sales, decreasing 4.2 percentage points (-3.4 percentage points in cc).

Core adjustments were USD 6.5 billion, mainly due to amortization, impairments and restructuring, compared to USD 4.5 billion in prior year. Core adjustments increased compared to prior year, mainly due to higher impairments and restructuring.

Core operating income was USD 15.2 billion (0%, +8% cc), mainly driven by higher gross margin, partly offset by higher R&D investments. Core operating income margin was 36.9% of net sales, increasing 0.7 percentage points (+1.3 percentage points cc). Revenues as a percentage of sales increased by 0.1 percentage points (cc). Core cost of goods sold as a percentage of sales was in-line with the prior year. Core R&D expenses as a percentage of net sales increased by 0.2 percentage points (cc). Core SG&A expenses as a percentage of net sales decreased by 1.4 percentage points (cc). Core other income and expense as a percentage of net sales was in-line with the prior year.

PRODUCT COMMENTARY (RELATING TO Q4 PERFORMANCE)

CARDIOVASCULAR

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc
Cardiovascular								
Entresto	1 291	949	36	44	4 644	3 548	31	37
Leqvio	42	4	nm	nm	112	12	nm	nm
Total Cardiovascular	1 333	953	40	47	4 756	3 560	34	40

nm = not meaningful

Entresto (USD 1,291 million, +36%, +44% cc) sustained robust demand-led growth, with increased patient share across all geographies. Guidelines position *Entresto* as the first choice RASi versus ACEi/ARB in patients with HFrEF. *Entresto* benefits from the adoption of guideline-directed medical therapy for these patients in all geographies. In the US, *Entresto* benefits from being added to guidelines for patients with HFpEF (with LVEF below normal). In China and Japan, *Entresto* volume growth is fueled by increased penetration in hypertension in addition to growth in heart failure. It is estimated that around 10 million patients are on treatment with *Entresto*. In the US, Novartis is in ANDA litigation with generic manufacturers.

Leqvio (USD 42 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 eleven months after launch. *Leqvio* in the US has been assigned a unique Healthcare Common Procedure Coding System code (J-code) and average sales price. *Leqvio* is the first and only small interfering RNA (siRNA) therapy to lower LDL cholesterol approved in the US. *Leqvio* is now approved in 70 countries. Novartis obtained global rights to develop, manufacture and commercialize *Leqvio* under a license and collaboration agreement with Alnylam Pharmaceuticals.

IMMUNOLOGY

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc
Immunology								
Cosentyx	1 080	1 243	-13	-9	4 788	4 718	1	5
Xolair	323	373	-13	-3	1 365	1 428	-4	6
llaris	301	284	6	14	1 133	1 059	7	15
Other					1		nm	nm
Total Immunology	1 704	1 900	-10	-5	7 287	7 205	1	7

Net sales reflect *Xolair* sales for all indications.

Cosentyx (USD 1,080 million, –13%, –9% cc) continued volume growth across key geographies, offset by a revenue deduction true-up in the US (mainly due to higher than expected Medicaid patient mix), which was related to prior quarters in 2022. Ex-US sales grew +5% (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 960,000 patients worldwide. For the full year, *Cosentyx* grew +5% (cc) worldwide.

Xolair (USD 323 million, -13%, -3% cc) sales declined, with growth in Emerging Growth Markets offset by lower sales in other markets. 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.

llaris (USD 301 million, +6%, +14% cc) showed continued growth across all geographies. Contributors to growth include the adult-onset Still's disease indication, together with the other adult rheumatology indications in the US and Europe, as well as strong performance for the Periodic Fevers Syndrome indications in Japan.

NEUROSCIENCE

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc
Neuroscience								
Gilenya	346	656	-47	-44	2 013	2 787	-28	-24
Zolgensma	309	342	-10	-5	1 370	1 351	1	5
Kesimpta	369	147	151	157	1 092	372	194	200
Mayzent	99	81	22	28	357	281	27	32
Aimovig	59	59	0	9	218	215	1	11
Other		1	nm	nm	1	1	0	nm
Total Neuroscience	1 182	1 286	-8	-4	5 051	5 007	1	5

nm = not meaningful

Gilenya (USD 346 million, -47%, -44% cc) sales declined due to generic pressure mainly in the US and Europe. Novartis is in litigation in the US on the method of treatment patent, and in Europe on the dosing regimen patent, against generic manufacturers. In June 2022, an appeals court held the *Gilenya* US dosing regimen patent invalid. Novartis has filed a petition seeking further review with the US Supreme Court.

Zolgensma (USD 309 million, –10%, –5% cc) sales declined due to timing of access and reimbursement decisions, as well as timing of prior year patient bolus in certain markets. Quarter on quarter sales are relatively stable reflecting that the addressable market is now mainly incident patients, having launched in most major markets. *Zolgensma* is now approved in 47 countries.

Kesimpta (USD 369 million, +151%, +157% cc) sales growth was driven by strong launch uptake, access and increased demand. *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 80 countries with more than 36,000 patients treated.

Mayzent (USD 99 million, +22%, +28% cc) sales grew across key geographies. 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 59 million, ex-US, ex-Japan 0%, +9% cc) sales grew (cc) in Europe and Emerging Growth Markets. *Aimovig* is reimbursed in 32 markets and has been prescribed to over 759,000 patients worldwide. Novartis reached an agreement in Germany by which *Aimovig* is reimbursed as a 1st line prophylactic migraine treatment based on the HER-MES trial.

SOLID TUMORS

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc
Solid Tumors								
Tafinlar + Mekinist 1	465	458	2	8	1 770	1 693	5	11
Kisqali	357	285	25	33	1 231	937	31	38
Votrient	103	139	-26	-21	474	577	-18	-13
Lutathera	128	115	11	15	471	475	-1	3
Piqray	112	87	29	30	373	329	13	14
Pluvicto	179		nm	nm	271		nm	nm
Tabrecta	36	27	33	35	133	90	48	48
Total Solid Tumors	1 380	1 111	24	30	4 723	4 101	15	21

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

Tafinlar + Mekinist (USD 465 million, +2%, +8% 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. *Tafinlar + Mekinist* remains the worldwide targeted therapy leader in BRAF+ melanoma.

Kisqali (USD 357 million, +25%, +33% 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. *Kisqali* has proven overall survival benefit across all three Phase III trials of the MONALEESA program regardless of menopausal status, line of therapy, site or number of metastases, endocrine resistance, or endocrine partner. Novartis is in US ANDA litigation with generic manufacturers.

Votrient (USD 103 million, -26%, -21% cc) sales declined due to increased competition, especially from immuno-oncology agents in metastatic renal cell carcinoma.

Lutathera (USD 128 million, +11%, +15% cc) sales grew across all geographies, with approximately 500 centers actively treating patients globally.

Pigray (USD 112 million, +29%, +30% cc) sales grew mainly in the US, benefiting from indication expansion into PIK3CA-related overgrowth spectrum (PROS). *Pigray* 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.

Pluvicto (USD 179 million) strong US launch performance, with more than 160 active centers. *Pluvicto* is the first and only radioligand therapy approved by the FDA for the treatment of progressive, PSMA-positive metastatic castration-resistant prostate cancer, who have already been treated with other anticancer treatments (ARPI and taxane-based chemotherapy).

Tabrecta (USD 36 million, +33%, +35% cc) sales grew mainly in the US and Europe, as the first therapy approved by the FDA to specifically target metastatic NSCLC with a mutation that leads to MET exon 14 skipping (METex14).

HEMATOLOGY

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc
Hematology								
Promacta/Revolade	540	518	4	11	2 088	2 016	4	9
Tasigna	475	508	-6	0	1 923	2 060	-7	-1
Jakavi	388	408	-5	8	1 561	1 595	-2	9
Kymriah	139	143	-3	5	536	587	-9	-2
Adakveo	51	43	19	19	194	164	18	19
Scemblix	52	7	nm	nm	149	7	nm	nm
Other					1	1	0	nm
Total Hematology	1 645	1 627	1	9	6 452	6 430	0	7

nm = not meaningful

Promacta/Revolade (USD 540 million, +4%, +11% cc) showed growth across most 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 475 million, -6%, 0% cc) sales were stable (cc), with decline in the US, Europe and Japan, offset by growth in Emerging Growth Markets.

Jakavi (USD 388 million, -5%, +8% cc) sales grew (cc) mainly in Europe, Emerging Growth Markets and Japan, driven by strong demand in both the myelofibrosis and polycythemia vera indications.

Kymriah (USD 139 million, -3%, +5% cc) sales grew (cc) in Emerging Growth Markets and Japan, partly offset by decline in the US and Europe, due to lower DLBCL demand, mainly driven by competitive entry into earlier line of treatment.

Adakveo (USD 51 million, +19%, +19% cc) continued to grow worldwide, reaching more than 11,800 patients with vaso-occlusive crises caused by sickle cell disease to date.

Scemblix (USD 52 million) continued its strong launch uptake demonstrating the high unmet need in CML, particularly patients previously treated with 2 or more tyrosine kinase inhibitors, or with the T315I mutation. In October 2022, US FDA converted the accelerated approval of *Scemblix* to a full approval, confirming the clinical benefit after longer exposure.

OTHER PROMOTED BRANDS

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc
Other Promoted Brands								
Lucentis	398	508	-22	-12	1 874	2 160	-13	-4
Xiidra	145	134	8	8	487	468	4	4
Ultibro Group	113	148	-24	-13	479	584	-18	-9
Beovu	49	51	-4	7	203	186	9	18
Other respiratory	26	16	63	69	84	53	58	79
Total Other Promoted Brands	731	857	-15	-6	3 127	3 451	-9	-1
Total Promoted Brands ¹	7 975	7 734	3	10	31 396	29 754	6	12

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).

Lucentis (USD 398 million, -22%, -12% cc) sales declined in Europe, Japan and Emerging Growth Markets mainly due to competition.

Xiidra (USD 145 million, +8%, +8% cc) sales grew mainly in the US due to favorable revenue deductions. In the US, Novartis is in ANDA litigation with generic manufacturers.

Ultibro **Group** (USD 113 million, –24%, –13% cc) sales declined mainly in Europe, Emerging Growth Markets due to competition. *Ultibro* Group consists of *Ultibro Breezhaler*, *Seebri Breezhaler* and *Onbrez Breezhaler*.

Beovu (USD 49 million, -4%, +7% cc) sales grew (cc) in Europe, Emerging Growth Markets and Japan, partly offset by decline in the US.

ESTABLISHED BRANDS

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc
Established Brands								
Sandostatin	305	345	-12	-8	1 238	1 413	-12	-10
Galvus Group	209	278	-25	-16	859	1 092	-21	-12
Gleevec/Glivec	175	233	-25	-18	745	1 024	-27	-22
Exforge Group	159	197	-19	-12	743	901	-18	-12
Diovan Group	142	189	-25	-16	652	773	-16	-9
Afinitor/Votubia	106	174	-39	-32	512	938	-45	-41
Voltaren/Cataflam	81	97	-16	-4	334	373	-10	0
Zortress/Certican	80	110	-27	-18	329	431	-24	-14
Exjade/Jadenu	61	129	-53	-48	323	563	-43	-38
Neoral/Sandimmun(e)	74	89	-17	-6	310	368	-16	-8
Contract manufacturing	82	108	-24	-23	214	108	98	110
Other	911	1 021	-11	-6	3 641	4 257	-14	-9
Total Established Brands	2 385	2 970	-20	-13	9 900	12 241	-19	-13

Sandostatin (USD 305 million, -12%, -8% cc) declined across all geographies due to ongoing competitive pressure, including generic competition ex-US.

Galvus Group (USD 209 million, -25%, -16% cc) declined in Europe, Japan and Emerging Growth Markets.

Gleevec/Glivec (USD 175 million, -25%, -18% cc) declined due to increased generic competition.

Exforge Group (USD 159 million, -19%, -12% cc) declined across all geographies.

Diovan Group (USD 142 million, -25%, -16% cc) declined in Emerging Growth Markets, Europe and Japan due to generic competition.

Afinitor/Votubia (USD 106 million, -39%, -32% cc) declined in the US and Europe driven by generic competition.

Voltaren/Cataflam (USD 81 million, -16%, -4% cc) declined in Emerging Growth Markets.

Zortress/Certican (USD 80 million, -27%, -18% cc) declined in the US and Japan.

Exjade/Jadenu (USD 61 million, -53%, -48% cc) declined due to pressure from generic competition.

Neoral/Sandimmun(e) (USD 74 million, -17%, -6% cc) declined mainly in Japan and Europe.

Sandoz

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc
Net sales	2 330	2 525	-8	0	9 249	9 631	-4	4
Operating income	273	386	-29	-20	1 448	1 600	-10	-2
As % of net sales	11.7	15.3			15.7	16.6		
Core operating income	391	528	-26	-18	1 903	2 064	-8	-1
As % of net sales	16.8	20.9			20.6	21.4		

Fourth quarter

Net sales

Sandoz net sales were USD 2.3 billion (-8%, 0% cc), with volume contributing 5 percentage points to growth. Pricing had a negative impact of 5 percentage points. Sales were negatively impacted by a prior year biopharmaceuticals contract manufacturing revenue reclassification. Excluding this impact, overall Sandoz sales would have grown +1% (cc).

Sales in Europe were USD 1.3 billion (-7%, +3% cc), in the US USD 429 million (-10%), in Asia / Africa / Australasia USD 387 million (-14%, -4% cc) and in Canada and Latin America USD 225 million (+4%, +10% cc). Ex-US sales grew +3% (cc).

Retail sales were USD 1.7 billion (-9%, -1% cc). Total Anti-Infectives sales were USD 329 million (-2%, +5% cc).

Global sales of Biopharmaceuticals grew to USD 517 million (-7%, +3% cc), with growth in Europe, Canada and Latin America.

Operating income

Operating income was USD 273 million (-29%, -20% cc), with the decline mainly due to higher SG&A and lower gross margin from inflationary pressures on input costs and the impact of prior year milestone income. Operating income margin was 11.7% of net sales, decreasing 3.6 percentage points (-3.0 percentage points in cc).

Core adjustments were USD 118 million, including USD 54 million of amortization. Prior year core adjustments were USD 142 million including USD 61 million of amortization. The change in core adjustments compared to prior year was mainly driven by lower impacts from manufacturing footprint changes.

Core operating income was USD 391 million (-26%, -18% cc), with the decline mainly due to higher SG&A and lower gross margin from inflationary pressures on input costs and the impact of prior year milestone income as well as lower divestment income. Core operating margin was 16.8% of net sales, decreasing by 4.1 percentage points (-3.8 percentage points cc). Core gross margin as a percentage of sales decreased by 1.5 percentage points (cc). Core R&D expenses as a percentage of net sales increased by 0.2 percentage points (cc). Core SG&A expenses as a percentage of net sales increased by 1.6 percentage points (cc). Core other income and expense decreased the margin by 0.5 percentage points (cc), mainly due to lower divestment income.

Full year

Net sales

Sandoz net sales were USD 9.2 billion (-4%, +4% cc) with volume contributing 10 percentage points to growth. Pricing had a negative impact of 6 percentage points.

Sales in Europe were USD 4.9 billion (-7%, +4% cc), in the US USD 1.8 billion (-4%) in Asia / Africa / Australasia USD 1.6 billion (-3%, +6% cc) and in Canada and Latin America USD 969 million (+11%, +15% cc) driven by volume increases and tender wins.

Retail sales were USD 6.8 billion (-4%, +4% cc), growing across all regions ex-US. Total Anti-Infectives sales were USD 1.2 billion (+2%, +10% cc).

Global sales of Biopharmaceuticals grew to USD 2.1 billion (-1%, +9% cc), growing across all regions.

Operating income

Operating income was USD 1.4 billion (-10%, -2% cc), with the decline mainly due to higher SG&A investments to drive higher sales and inflationary pressures on input costs, which were partly offset by higher sales. Operating income margin was 15.7% of net sales, decreasing by 0.9 percentage points (-1.0 percentage points in cc).

Core adjustments were USD 455 million, including USD 221 million of amortization. Prior year core adjustments were USD 464 million, including USD 236 million of amortization.

Core operating income was USD 1.9 billion (-8%, -1% cc), with the decline mainly due to higher SG&A, partly offset by higher sales. Core operating margin was 20.6% of net sales, decreasing by 0.8 percentage points (-1.1 percentage points cc). Core gross margin as a percentage of sales decreased by 0.3 percentage points (cc), due to higher inflation and input costs. Core R&D expenses as a percentage of net sales decreased by 0.5 percentage points (cc). Core SG&A expenses increased by 0.9 percentage points (cc). Core other income and expense decreased margin by 0.4 percentage points (cc).

Group Cash Flow and Balance Sheet

Cash Flow

Fourth quarter

Net cash flows from operating activities amounted to USD 4.1 billion, compared with USD 3.9 billion in the prior year quarter. This increase was mainly driven by lower income taxes paid and lower payments out of provisions, partly offset by unfavorable changes in working capital.

Net cash outflows used in investing activities amounted to USD 1.5 billion, compared with USD 4.6 billion net cash inflows in the prior year quarter.

The current year quarter cash outflows were driven by USD 0.9 billion for net purchases of marketable securities, commodities and time deposits; USD 0.4 billion for purchases of property, plant and equipment; and USD 0.3 billion for purchases of intangible assets. These cash outflows were partly offset by cash inflows of USD 0.1 billion from the sale of intangible assets.

In the prior year quarter, net cash inflows from investing activities of USD 4.6 billion were driven by proceeds of USD 20.7 billion from the divestment of our investment in Roche; USD 0.7 billion 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 mainly by USD 15.6 billion cash outflows for purchases of marketable securities and time deposits, mainly due to the investment of a portion of the proceeds from the divestment of our investment in Roche; USD 0.3 billion for acquisitions and divestments of businesses, net (including the acquisition of GSK's cephalosporin antibiotics business for USD 351 million); and USD 1.0 billion for purchases of intangible assets, financial assets and of property, plant and equipment.

Net cash outflows used in financing activities amounted to USD 4.0 billion, compared with USD 3.3 billion in the prior year quarter.

The current year quarter cash outflows were driven by USD 2.7 billion for net treasury share transactions and USD 1.2 billion from the net decrease in current financial debts. Payments of lease liabilities and other financing cash flows resulted in a net cash outflow of USD 0.1 billion.

In the prior year quarter, net cash outflows used in financing activities of USD 3.3 billion were driven by USD 2.4 billion net decrease in current financial debts; USD 0.7 billion for the repayment of a bond denominated in euro (notional amount of EUR 0.6 billion) at maturity; and USD 0.1 billion for net treasury share transactions. Payments of lease liabilities amounted to USD 0.1 billion.

Free cash flow amounted to USD 3.6 billion (+17% USD), compared with USD 3.0 billion in the prior year quarter, mainly driven by higher net cash flows from operating activities and lower purchases of intangible assets.

Full year

Net cash flows from operating activities amounted to USD 14.2 billion, compared with USD 15.1 billion in 2021. This decrease was mainly due to unfavorable changes in working capital and lower dividends from associated companies (2021 included the USD 0.5 billion dividends received from our investment in Roche, which was divested in the fourth quarter of 2021), partly offset by lower income taxes paid and favorable hedging results.

Net cash inflows from investing activities amounted to USD 1.5 billion, compared with USD 4.2 billion in 2021.

The current year cash inflows were driven by net proceeds of USD 4.7 billion from the sale of marketable securities, commodities and time deposits; USD 0.5 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 1.5 billion for purchases of intangible assets; USD 1.2 billion for purchases of property, plant and equipment; USD 0.1 billion for purchases of financial assets; and USD 0.9 billion for acquisitions and divestments of businesses, net (primarily the acquisition of Gyroscope Therapeutics Holdings plc for USD 0.8 billion).

In 2021, net cash inflows from investing activities of USD 4.2 billion were driven by proceeds of USD 20.7 billion from the divestment of our investment in Roche; USD 2.3 billion from the sale of marketable securities, commodities and time deposits; and USD 1.4 billion from the sale of intangible assets, financial assets and property, plant and equipment. These cash inflows were partly offset by USD 16.4 billion cash outflows for purchases of marketable securities and time deposits, mainly due to the investment of a portion of the proceeds from the divestment of our

investment in Roche; USD 1.6 billion for purchases of intangible assets (including the upfront payment to in-license tislelizumab from an affiliate of BeiGene, Ltd); USD 1.4 billion for purchases of property, plant and equipment; USD 0.6 billion for acquisitions and divestments of businesses, net (including the acquisition of GSK's cephalosporin antibiotics business for USD 351 million); and USD 0.2 billion for purchases of financial assets.

Net cash outflows used in financing activities amounted to USD 20.6 billion, compared with USD 16.3 billion in 2021.

The current year cash outflows were mainly driven by USD 10.6 billion for net treasury share transactions; USD 7.5 billion for the dividend payment; USD 2.5 billion in aggregate for the repayment of two US dollar bonds; and USD 0.3 billion payments of lease liabilities. These cash outflows were partly offset by cash inflows of USD 0.3 billion from the net increase in current financial debts.

In 2021, net cash outflows used in financing activities of USD 16.3 billion were driven by USD 7.4 billion for the dividend payment; USD 3.0 billion for net treasury share transactions; USD 3.5 billion net decrease in current financial debts; and USD 2.2 billion for the repayment of two bonds denominated in euro (notional amount of EUR 1.25 billion and of EUR 0.6 billion) at maturity. Payments of lease liabilities and other financing cash flows resulted in a net cash outflow of USD 0.2 billion.

Free cash flow amounted to USD 11.9 billion (-10% USD), compared with USD 13.3 billion in 2021, mainly due to a decrease in net cash flows from operating activities and lower divestment proceeds, partly offset by lower purchases of property, plant and equipment.

Balance sheet

Assets

Total non-current assets of USD 80.5 billion decreased by USD 5.5 billion compared to December 31, 2021.

Intangible assets other than goodwill decreased by USD 2.5 billion as additions (including from the acquisition of Gyroscope Therapeutics Holdings plc) were more than offset by amortization, impairments and unfavorable currency translation adjustments.

Goodwill decreased by USD 0.3 billion, mainly due to unfavorable currency translation adjustments.

Property, plant and equipment decreased by USD 0.8 billion as net additions were more than offset by depreciation, unfavorable currency translation adjustments and impairments.

Financial assets decreased by USD 0.6 billion, driven mainly by fair value losses on listed equity and fund investments.

Other non-current assets decreased by USD 1.1 billion driven by the decrease of the prepaid post-employment benefit plans of USD 0.9 billion, resulting mainly from the pension accounting effects from increases in actuarial discount rates.

Right-of-use assets, investments in associated companies and deferred tax assets were broadly in line with December 31, 2021.

Total current assets of USD 36.9 billion at December 31, 2022 decreased by USD 8.8 billion compared to December 31, 2021.

Cash and cash equivalents decreased by USD 4.9 billion, mainly due to the dividend payment, the purchase of treasury shares and net repayments of financial debt, partly offset by the cash generated from operating activities and from investing activities, which includes the net proceeds from the sales of marketable securities, commodities and, time deposits.

Marketable securities, commodities, time deposits and derivative financial instruments decreased by USD 4.5 billion mainly driven by the net sales of marketable securities, commodities and time deposits.

Inventories increased by USD 0.5 billion and trade receivables, income tax receivables and other current assets were broadly in line with December 31, 2021.

Liabilities

Total non-current liabilities of USD 29.4 billion decreased by USD 4.4 billion compared to December 31, 2021.

Non-current financial debts decreased by USD 2.7 billion, mainly due to the reclassification of USD 2.3 billion from non-current to current financial debts of two EUR denominated bonds with notional amounts of EUR 750 million and EUR 1.25 billion maturing in 2023 and favorable foreign currency translation adjustments of USD 0.4 billion.

Provisions and other non-current liabilities decreased by USD 1.3 billion, mainly driven by decreases in accrued liabilities for employee benefits of USD 1.2 billion (primarily due to a decrease in accrued liabilities for defined benefit pension plans of USD 0.9 billion, resulting from the pension accounting effects from increases in actuarial discount rates), and in contingent consideration of USD 0.3 billion, a reclassification of non-current legal matters provisions to current portion of USD 0.2 billion, partly offset by the increase in other non-current liabilities of USD 0.4 billion.

Deferred tax liabilities decreased by USD 0.4 billion and non-current lease liabilities were broadly in line with December 31, 2021.

Total current liabilities of USD 28.7 billion decreased by USD 1.6 billion compared to December 31, 2021.

Provisions and other current liabilities decreased by USD 0.9 billion, mainly driven by the decrease in the commitment for repurchase of own shares liability of USD 2.8 billion, partly offset by increases in restructuring provisions of USD 0.8 billion (primarily due to the initiative announced in April 2022 to implement a new streamlined organizational model), in provisions for legal matters of USD 0.5 billion, including a USD 0.2 billion reclassification from non-current provisions for legal matters, and in provisions for revenue deductions of USD 0.3 billion.

Current financial debts and derivative financial instruments decreased by USD 0.4 billion, mainly due to the repayment of two US dollar bonds of USD 1.0 billion and USD 1.5 billion, the closure during the third quarter of 2022 of the interest-bearing accounts of employees payable on demand, which amounted to USD 1.8 billion at December 31, 2021, and favorable currency translation adjustments, partly offset by the reclassification from non-current to current financial debts of USD 2.3 billion and an increase of USD 1.9 billion in commercial paper.

Trade payables decreased by USD 0.4 billion and current lease liabilities and current income tax liabilities were broadly in line with December 31, 2021.

Equity

The Group's equity decreased by USD 8.4 billion to USD 59.4 billion at December 31, 2022 compared to December 31, 2021.

This decrease was mainly due to the cash-dividend payment of USD 7.5 billion, purchase of treasury shares of USD 10.9 billion, unfavorable currency translation differences of USD 0.5 billion and fair value adjustments on equity securities of USD 0.4 billion. This was partially offset by the net income of USD 7.0 billion, decrease of the treasury share repurchase obligation of USD 2.8 billion, and equity-based compensation of USD 0.9 billion.

Net debt and debt/equity ratio

The Group's liquidity amounted to USD 18.9 billion at December 31, 2022, compared to USD 28.3 billion at December 31, 2021. Total non-current and current financial debts, including derivatives, amounted to USD 26.2 billion at December 31, 2022 compared to USD 29.2 billion at December 31, 2021.

The debt/equity ratio increased to 0.44:1 at December 31, 2022 compared to 0.43:1 at December 31, 2021. As of December 31, 2022 the net debt was USD 7.2 billion, compared to USD 0.9 billion at December 31, 2021.

Innovation Review

Benefiting from our continued focus on innovation, Novartis has one of the industry's most innovative and inventive pipelines with ~150 projects in clinical development.

Selected Innovative Medicines approvals: US, EU and Japan in Q4

Product	Active ingredient/ Descriptor	Indication	Region
Pluvicto	lutetium (¹⁷⁷ Lu) vipivotide tetraxetan	Metastatic castration-resistant prostate cancer, post-taxane	EU - Dec

Selected Innovative Medicines projects awaiting regulatory decisions

		Con	npleted submissi	ons		
Product	Indication	US	EU	Japan	News update	
Cosentyx	300mg auto-injector and pre-filled syringe	Q4 2022	Approved	Approved	- US resubmission	
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			
Jakavi	Acute graft-versus-host disease (GvHD)		Approved	Q1 2021	- US filing by Incyte	
	Chronic GvHD		Approved	Q1 2021	- US filing by Incyte	
SEG101 (crizanlizumab)	Sickle cell disease, pediatrics				Results from the ongoing global Ph3 STAND study did not show superiority compared to placebo; health authorities have been informed	
VDT482 (tislelizumab)	2L Esophageal cancer (ESCC)	Q3 2021	Q1 2022		 FDA deferred action pending completion of required inspections 	
	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	
	Lupus nephritis	≥2026	3	

Compound/ product	Potential indication/ Disease area	First planned submissions	Current Phase	News update
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	
KAF156 (ganaplacide)	Malaria, uncomplicated	≥2026	2	 FDA Orphan Drug designation FDA Fast Track designation for the ganaplacide-containing combination therapy
Kisqali + endocrine therapy	Hormone receptor-positive (HR+)/human epidermal growth factor receptor 2-negative (HER2-) early breast cancer (adjuvant)	2023	3	
Leqvio	Secondary prevention of cardiovascular events in patients with elevated levels of LDL-C	≥2026 C	3	
LMI070 (branaplam)	Huntington's disease		2	 Program discontinued based on an overall assessment of potential benefit-risk from the Ph2b VIBRANT-HD study
LNA043	Osteoarthritis	≥2026	2	- FDA Fast Track designation
LNP023 (iptacopan)	Paroxysmal nocturnal hemoglobinuria	2023	3	 FDA, EU Orphan Drug designation FDA Breakthrough Therapy designation Ph3 APPLY-PNH full data presentation at ASH Ph3 APPOINT-PNH trial met primary endpoint
	IgA nephropathy	2024	3	 EU Orphan Drug designation Few months submission delay but readout confirmed for 2023 (Slightly slower recruitment than planned)
	C3 glomerulopathy	2024	3	- EU Orphan Drug designation - EU PRIME designation - FDA Rare Pediatric designation - China Breakthrough Therapy designation - Few months submission delay but readout confirmed for 2023 (Slightly slower recruitment than planned)
	Membranous nephropathy		2	 Program discontinued (uncompelling competitive profile)
	IC-MPGN	≥2026	3	- Ph3 start planned in H2 2023
	Atypical haemolytic uraemic syndrome	≥2026	3	- Recruitment slower than anticipated
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	
177Lu-NeoB	Multiple solid tumors	≥2026	1	
LXE408	Visceral leishmaniasis	≥2026	2	
MBG453 (sabatolimab)	Myelodysplastic syndrome	2024	3	FDA Fast Track designationEU 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	Triple negative breast cancer		3	 Project will be discontinued to prioritize other key programs in portfolio
	Human epidermal growth factor receptor 2-positive (HER2+) advanced breast cancer		3	 Project will be discontinued to prioritize other key programs in portfolio
	Ovarian cancer	2023	3	
Pluvicto	Metastatic castration-resistant prostate cancer pre-taxane	2023	3	 Ph3 PSMAfore trial met primary endpoint
	Metastatic hormone sensitive prostate cancer	2024	3	
PPY988 (GT005)	Geographic atrophy	≥2026	2	- Gyroscope acquisition

Compound/ product	Potential indication/ Disease area	First planned submissions	Current Phase	News update
QGE031 (ligelizumab)	Food allergy	≥2026	3	Optimized clinical program strategy to maximize potential
SAF312 (libvatrep)	Chronic ocular surface pain	≥2026	2	
Scemblix	1L Chronic myeloid leukemia	2025	3	- Ph3 ASC4FIRST trial completed 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
VAY736 (ianalumab)	Auto-immune hepatitis	≥2026	2	
	Sjögren's syndrome	≥2026	3	- FDA Fast Track designation
	Lupus nephritis	≥2026	3	
	Systemic lupus erythematosus	≥2026	2	
	1L Immune thrombocytopenia	≥2026	3	- Ph3 study VAYHIT1 initiating
	2L Immune thrombocytopenia	≥2026	3	- Ph3 study VAYHIT2 initiating
	warm Autoimmune hemolytic anemia	≥2026	3	- Ph3 study VAYHIA initiated
VDT482 (tislelizumab)	1L Nasopharyngeal carcinoma	2023	3	- FDA Orphan designation
	1L Gastric cancer	2023	3	
	1L ESCC	2023	3	
	Localized ESCC	2024	3	- Protocol amendment
	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	≥2026	1	
Xolair	Food allergy	2023	3	
YTB323	1L High-risk large B-cell lymphoma	≥2026	2	- Development plan update
XXB750	Hypertension	≥2026	2	- Ph2b initiated

Selected Sandoz approvals and pipeline projects

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

Condensed Consolidated Financial Statements

Consolidated income statements

Fourth quarter (unaudited)

(USD millions unless indicated otherwise)	Note	Q4 2022	Q4 2021
Net sales to third parties	11	12 690	13 229
Other revenues	11	397	293
Cost of goods sold		-4 073	-3 976
Gross profit		9 014	9 546
Selling, general and administration		-3 747	-3 985
Research and development		-2 442	-2 409
Other income		172	371
Other expense		-1 048	-961
Operating income		1 949	2 562
(Loss)/income from associated companies	3	-3	14 621
Interest expense		-219	-206
Other financial income and expense		14	-26
Income before taxes		1 741	16 951
Income taxes		-275	-645
Net income		1 466	16 306
Attributable to:			
Shareholders of Novartis AG		1 466	16 308
Non-controlling interests		0	-2
Weighted average number of shares outstanding - Basic (million)		2 135	2 237
Basic earnings per share (USD) ¹		0.69	7.29
Weighted average number of shares outstanding – Diluted (million)		2 150	2 253
Diluted earnings per share (USD) 1		0.68	7.24

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

Consolidated income statements

Full year (audited)

(USD millions unless indicated otherwise)	Note	FY 2022	FY 2021
Net sales to third parties	11	50 545	51 626
Other revenues	11	1 283	1 251
Cost of goods sold		-15 486	-15 867
Gross profit		36 342	37 010
Selling, general and administration		-14 253	-14 886
Research and development		-9 996	-9 540
Other income		805	1 852
Other expense		-3 701	-2 747
Operating income		9 197	11 689
(Loss)/income from associated companies	3	-9	15 339
Interest expense		-837	-811
Other financial income and expense		20	-80
Income before taxes		8 371	26 137
Income taxes		-1 416	-2 119
Net income		6 955	24 018
Attributable to:			
Shareholders of Novartis AG		6 955	24 021
Non-controlling interests		0	-3
Weighted average number of shares outstanding – Basic (million)		2 181	2 243
Basic earnings per share (USD) ¹		3.19	10.71
Weighted average number of shares outstanding - Diluted (million)		2 197	2 260
Diluted earnings per share (USD) 1		3.17	10.63

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

Consolidated statements of comprehensive income

Fourth quarter (unaudited)

(USD millions)	Q4 2022	Q4 2021
Net income	1 466	16 306
Other comprehensive income		
Items that are or may be recycled into the consolidated income statement		
Novartis share of other comprehensive income recognized by associated companies, net of taxes		3
Net investment hedge, net of taxes	-118	89
Currency translation effects, net of taxes	1 652	-2 699
Total of items that are or may be recycled	1 534	-2 607
Items that will never be recycled into the consolidated income statement		
Actuarial (losses)/gains from defined benefit plans, net of taxes	-1 920	6
Fair value adjustments on equity securities, net of taxes	-97	-48
Total of items that will never be recycled	-2 017	-42
Total comprehensive income	983	13 657
Attributable to:		
Shareholders of Novartis AG	980	13 660
	0	-3
Non-controlling interests Full year (audited)	3	-5
	FY 2022	FY 2021
Full year (audited)		
Full year (audited) (USD millions)	FY 2022	FY 2021
Full year (audited) (USD millions) Net income	FY 2022	FY 2021
Full year (audited) (USD millions) Net income Other comprehensive income	FY 2022	FY 2021
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement	FY 2022	FY 2021 24 018
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement Novartis share of other comprehensive income recognized by associated companies, net of taxes	FY 2022 6 955	FY 2021 24 018 46
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement Novartis share of other comprehensive income recognized by associated companies, net of taxes Net investment hedge, net of taxes	FY 2022 6 955	FY 2021 24 018 46 216
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement Novartis share of other comprehensive income recognized by associated companies, net of taxes Net investment hedge, net of taxes Currency translation effects, net of taxes	FY 2022 6 955 91 -450	FY 2021 24 018 46 216 -4 762
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement Novartis share of other comprehensive income recognized by associated companies, net of taxes Net investment hedge, net of taxes Currency translation effects, net of taxes Total of items that are or may be recycled	FY 2022 6 955 91 -450	FY 2021 24 018 46 216 -4 762
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement Novartis share of other comprehensive income recognized by associated companies, net of taxes Net investment hedge, net of taxes Currency translation effects, net of taxes Total of items that are or may be recycled Items that will never be recycled into the consolidated income statement	FY 2022 6 955 91 -450 -359	FY 2021 24 018 46 216 -4 762 -4 500
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement Novartis share of other comprehensive income recognized by associated companies, net of taxes Net investment hedge, net of taxes Currency translation effects, net of taxes Total of items that are or may be recycled Items that will never be recycled into the consolidated income statement Actuarial (losses)/gains from defined benefit plans, net of taxes	91 -450 -359	FY 2021 24 018 46 216 -4 762 -4 500 1 809
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement Novartis share of other comprehensive income recognized by associated companies, net of taxes Net investment hedge, net of taxes Currency translation effects, net of taxes Total of items that are or may be recycled Items that will never be recycled into the consolidated income statement Actuarial (losses)/gains from defined benefit plans, net of taxes Fair value adjustments on equity securities, net of taxes	91 -450 -359 -103 -382	FY 2021 24 018 46 216 -4 762 -4 500 1 809 194
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement Novartis share of other comprehensive income recognized by associated companies, net of taxes Net investment hedge, net of taxes Currency translation effects, net of taxes Total of items that are or may be recycled Items that will never be recycled into the consolidated income statement Actuarial (losses)/gains from defined benefit plans, net of taxes Fair value adjustments on equity securities, net of taxes Total of items that will never be recycled	91 -450 -359 -103 -382 -485	FY 2021 24 018 46 216 -4 762 -4 500 1 809 194 2 003
Full year (audited) (USD millions) Net income Other comprehensive income Items that are or may be recycled into the consolidated income statement Novartis share of other comprehensive income recognized by associated companies, net of taxes Net investment hedge, net of taxes Currency translation effects, net of taxes Total of items that are or may be recycled Items that will never be recycled into the consolidated income statement Actuarial (losses)/gains from defined benefit plans, net of taxes Fair value adjustments on equity securities, net of taxes Total of items that will never be recycled Total comprehensive income	91 -450 -359 -103 -382 -485	FY 2021 24 018 46 216 -4 762 -4 500 1 809 194 2 003

Consolidated balance sheets

(USD millions)	Note	Dec 31, 2022 (audited)	Dec 31, 2021 (audited)
Assets		((======================================
Non-current assets			
Property, plant and equipment	11	10 764	11 545
Right-of-use assets		1 431	1 561
Goodwill	11	29 301	29 595
Intangible assets other than goodwill	11	31 644	34 182
Investments in associated companies		143	205
Deferred tax assets		3 739	3 743
Financial assets		2 411	3 036
Other non-current assets	4	1 110	2 210
Total non-current assets		80 543	86 077
Current assets			
Inventories		7 175	6 666
Trade receivables		8 066	8 005
Income tax receivables		268	278
Marketable securities, commodities, time deposits and derivative financial instruments		11 413	15 922
Cash and cash equivalents		7 517	12 407
Other current assets		2 471	2 440
Total current assets		36 910	45 718
Total assets		117 453	131 795
Equity Share capital Treasury shares		890 -92	901
Reserves		58 544	66 802
Equity attributable to Novartis AG shareholders		59 342	67 655
Non-controlling interests		81	167
Total equity		59 423	67 822
Liabilities			
Non-current liabilities			
Financial debts		20 244	22 902
Lease liabilities		1 538	1 621
Deferred tax liabilities		2 686	3 070
Provisions and other non-current liabilities		4 906	6 172
Total non-current liabilities		29 374	33 765
Current liabilities			
Trade payables		5 146	5 553
		3 140	3 333
Financial debts and derivative financial instruments	5	5 931	
Financial debts and derivative financial instruments Lease liabilities	5		6 295
	5	5 931	6 295 275
Lease liabilities	5	5 931 251	6 295 275 2 415
Lease liabilities Current income tax liabilities	5	5 931 251 2 533	6 295 275 2 415 15 670
Lease liabilities Current income tax liabilities Provisions and other current liabilities	5	5 931 251 2 533 14 795	6 295 275 2 415 15 670 30 208 63 973

Consolidated statements of changes in equity

Fourth quarter (unaudited)

(USD millions)	Note	Share capital	Treasury shares	Reser Retained earnings	Total value	Issued share capital and reserves attributable to Novartis shareholders	Non- controlling interests	Total equity
Total equity at October 1, 2022	. 1010	890	-70	64 543	-4 543	60 820	78	60 898
Net income				1 466		1 466	0	1 466
Other comprehensive income					-486	-486	3	-483
Total comprehensive income				1 466	-486	980	3	983
Purchase of treasury shares			-22	-2 685		-2 707		-2 707
Exercise of options and employee transactions				-1		-1		-1
Equity-based compensation			0	203		203		203
Taxes on treasury share transactions				2		2		2
Fair value adjustments on financial assets sold				1	-1			
Value adjustments related to divestments				-34	34			
Other movements	6.3			45		45		45
Total of other equity movements			-22	-2 469	33	-2 458		-2 458
Total equity at December 31, 2022		890	-92	63 540	-4 996	59 342	81	59 423

				Reser	ves	Issued share capital and reserves		
(USD millions)	Note	Share capital	Treasury shares	Retained earnings	Total value adjustments	attributable to Novartis shareholders	Non- controlling interests	Total equity
Total equity at October 1, 2021		901	-47	57 437	-1 520	56 771	166	56 937
Net income				16 308		16 308	-2	16 306
Other comprehensive income				3	-2 651	-2 648	-1	-2 649
Total comprehensive income				16 311	-2 651	13 660	-3	13 657
Purchase of treasury shares			-1	-224		-225		-225
Equity-based compensation				247		247		247
Taxes on treasury share transactions				1		1		1
Increase of treasury share repurchase obligation under a share buyback trading plan	6.1			-2 809		-2 809		-2 809
Transaction costs, net of taxes	6.2			2		2		2
Fair value adjustments on financial assets sold				-46	46			
Value adjustments related to divestments				62	-62			
Impact of change in ownership of consolidated entities	3			-3		-3	4	1
Other movements	6.3			11		11		11
Total of other equity movements			-1	-2 759	-16	-2 776	4	-2 772
Total equity at December 31, 2021		901	-48	70 989	-4 187	67 655	167	67 822

Consolidated statements of changes in equity

Full year (audited)

(USD millions) Total equity at January 1, 2022	Note	Share capital	Treasury shares	Reser Retained earnings 70 989	Total value	Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
Net income				6 955		6 955	0	6 955
Other comprehensive income					-839	-839	-5	-844
Total comprehensive income				6 955	-839	6 116	-5	6 111
Dividends				-7 506		-7 506		-7 506
Purchase of treasury shares			-66	-10 844		-10 910		-10 910
Reduction of share capital		-11	15	-4				
Exercise of options and employee transactions			1	87		88		88
Equity-based compensation			6	848		854		854
Shares delivered to Alcon employees as a result of the Alcon spin-off			0	5		5		5
Taxes on treasury share transactions				14		14		14
Decrease of treasury share repurchase obligation under a share buyback trading plan	6.1			2 809		2 809		2 809
Changes in non-controlling interests							-81	-81
Value adjustments on financial assets sold				4	-4			
Value adjustments related to divestments				-34	34			
Other movements	6.3			217		217		217
Total of other equity movements		-11	-44	-14 404	30	-14 429	-81	-14 510
Total equity at December 31, 2022		890	-92	63 540	-4 996	59 342	81	59 423

(USD millions)	Note	Share capital	Treasury shares	Reser Retained earnings	Total value	Issued share capital and reserves attributable to Novartis shareholders	Non- controlling interests	Total equity
Total equity at January 1, 2021		913	-53	57 157	-1 419	56 598	68	56 666
Net income				24 021		24 021	-3	24 018
Other comprehensive income				46	-2 539	-2 493	-4	-2 497
Total comprehensive income				24 067	-2 539	21 528	-7	21 521
Dividends				-7 368		-7 368		-7 368
Purchase of treasury shares			-18	-2 902		-2 920		-2 920
Reduction of share capital		-12	18	-6				
Exercise of options and employee transactions			0	39		39		39
Equity-based compensation			5	740		745		745
Shares delivered to Alcon employees as a result of the Alcon spin-off			0	17		17		17
Taxes on treasury share transactions				1		1		1
Increase of treasury share repurchase obligation under a share buyback trading plan	6.1			-1 040		-1 040		-1 040
Transaction costs, net of taxes	6.2			12		12		12
Changes in non-controlling interests							-1	-1
Fair value adjustments on financial assets sold				164	-164			
Value adjustments related to divestments				65	-65			
Impact of change in ownership of consolidated entities	es			-5	0	-5	107	102
Other movements	6.3			48		48		48
Total of other equity movements		-12	5	-10 235	-229	-10 471	106	-10 365
Total equity at December 31, 2021		901	-48	70 989	-4 187	67 655	167	67 822

Consolidated statements of cash flows

Fourth quarter (unaudited)

(USD millions)	Note	Q4 2022	Q4 2021
Net income		1 466	16 306
Adjustments to reconcile net income to net cash flows from operating activities			
Reversal of non-cash items and other adjustments	8.1	2 960	-11 941
Dividends received from associated companies and others			2
Interest received		133	5
Interest paid		-221	-206
Other financial receipts		-18	
Other financial payments		-7	14
Income taxes paid		-416	-883
Net cash flows from operating activities before working capital and provision changes		3 897	3 297
Payments out of provisions and other net cash movements in non-current liabilities		-371	-589
Change in net current assets and other operating cash flow items	8.2	585	1 176
Net cash flows from operating activities		4 111	3 884
Purchases of property, plant and equipment		-397	-460
Proceeds from sale of property, plant and equipment		103	74
Purchases of intangible assets		-250	-517
Proceeds from sale of intangible assets		5	84
Purchases of financial assets		-31	-67
Proceeds from sale of financial assets		11	34
Purchases of other non-current assets			-5
Proceeds from sale of other non-current assets			0
Acquisitions and divestments of interests in associated companies, net		-2	20 675
Acquisitions and divestments of businesses, net	8.3	-9	-343
Purchases of marketable securities, commodities and time deposits		-10 548	-15 567
Proceeds from sale of marketable securities, commodities and time deposits		9 651	655
Net cash flows (used in)/from investing activities from continuing operations		-1 467	4 563
Net cash flows (used in)/from investing activities		-1 467	4 563
Acquisitions of treasury shares		-2 678	-148
Increase in non-current financial debts		2	16
Repayments of the current portion of non-current financial debts			-696
Change in current financial debts		-1 202	-2 350
Payments of lease liabilities		-72	-80
Impact of change in ownership of consolidated entities			1
Other financing cash flows, net		-44	6
Net cash flows used in financing activities from continuing operations		-3 994	-3 251
Net cash flows used in financing activities		-3 994	-3 251
Net change in cash and cash equivalents before effect of exchange rate changes		-1 350	5 196
Effect of exchange rate changes on cash and cash equivalents		141	0
Net change in cash and cash equivalents		-1 209	5 196
Cash and cash equivalents at October 1		8 726	7 211
Cash and cash equivalents at December 31		7 517	12 407

Consolidated statements of cash flows

Full year (audited)

(USD millions)	Note	FY 2022	FY 2021
Net income		6 955	24 018
Adjustments to reconcile net income to net cash flows from operating activities			
Reversal of non-cash items and other adjustments	8.1	11 546	-5 299
Dividends received from associated companies and others		1	525
Interest received		254	13
Interest paid		-696	-664
Other financial receipts		71	
Other financial payments		-32	-302
Income taxes paid		-1 975	-2 342
Net cash flows from operating activities before working capital and provision changes		16 124	15 949
Payments out of provisions and other net cash movements in non-current liabilities		-885	-1 119
Change in net current assets and other operating cash flow items	8.2	-1 003	241
Net cash flows from operating activities		14 236	15 071
Purchases of property, plant and equipment		-1 198	-1 378
Proceeds from sale of property, plant and equipment		167	240
Purchases of intangible assets		-1 473	-1 593
Proceeds from sale of intangible assets		202	748
Purchases of financial assets		-121	-191
Proceeds from sale of financial assets		133	442
Purchases of other non-current assets		-1	-61
Proceeds from sale of other non-current assets			4
Acquisitions and divestments of interests in associated companies, net		-24	20 669
Acquisitions and divestments of businesses, net	8.3	-879	-567
Purchases of marketable securities, commodities and time deposits		-34 695	-16 403
Proceeds from sale of marketable securities, commodities and time deposits		39 357	2 298
Net cash flows from investing activities from continuing operations		1 468	4 208
Net cash flows from investing activities		1 468	4 208
Dividends paid to shareholders of Novartis AG		-7 506	-7 368
Acquisitions of treasury shares		-10 652	-3 057
Proceeds from exercised options and other treasury share transactions, net		100	53
Increase in non-current financial debts		16	16
Repayments of the current portion of non-current financial debts		-2 575	-2 162
Change in current financial debts		295	-3 524
Payments of lease liabilities		-295	-316
Impact of change in ownership of consolidated entities			-3
Other financing cash flows, net		55	97
Net cash flows used in financing activities from continuing operations		-20 562	-16 264
Net cash flows used in financing activities		-20 562	-16 264
Net change in cash and cash equivalents before effect of exchange rate changes		-4 858	3 015
Effect of exchange rate changes on cash and cash equivalents		-32	-266
Net change in cash and cash equivalents		-4 890	2 749
Cash and cash equivalents at January 1		12 407	9 658
Cash and cash equivalents at December 31		7 517	12 407

Notes to the Condensed Consolidated Financial Statements for the three-month interim period (unaudited) and year ended December 31, 2022 (audited)

1. Basis of preparation

These Condensed Consolidated Financial Statements for the three-month and year ended December 31, 2022, 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 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 results of operations since the date of acquisition are not material.

Significant transactions in 2021

Sandoz – acquisition of GSK's cephalosporin antibiotics business

On February 10, 2021, Sandoz entered into an agreement with certain subsidiaries of GlaxoSmithKline plc (GSK) for the acquisition of the GSK's cephalosporin antibiotics business.

Under the agreement, Sandoz acquired the global rights to three established brands (Zinnat*, Zinacef* and Fortum*) in more than 100 markets. It excluded the rights in the US, Australia and Germany to certain of those brands, which were previously divested by GSK, and the rights in India, Pakistan, Egypt, Japan (to certain of the brands) and China, which will be retained by GSK. The transaction closed on October 8, 2021.

The purchase price consisted of a USD 350 million upfront payment paid at closing and potential milestone payments up to USD 150 million, which GSK will be eligible to receive upon the achievement of certain annual sales milestones for the portfolio.

The fair value of the total purchase consideration was USD 415 million. The amount consisted of a payment of USD 351 million, including purchase price adjustments, and the fair value of contingent consideration of USD 64 million, which GSK is eligible to receive upon the achievement of specified milestones. The purchase price allocation resulted in net identifiable assets of USD 308 million, consisting of USD 292 million intangible assets and USD 16 million deferred tax assets. Goodwill amounted to USD 107 million.

The 2021 results of operations since the date of acquisition were not material.

Corporate – divestment of the investment in Roche Holding AG

On November 3, 2021, Novartis entered into a Share Repurchase Agreement with Roche Holding AG under which Novartis agreed to sell 53.3 million (approximately 33.3%) bearer shares of Roche Holding AG voting shares in a bilateral transaction to Roche Holding AG for a total consideration of USD 20.7 billion. As a result, Novartis discontinued the use of equity method accounting starting from November 3, 2021.

The transaction closed on December 6, 2021. In the fourth quarter of 2021, Novartis realized a gain of USD 14.6 billion, recorded in income from associated companies.

4. Other non-current assets

(USD millions)	Dec 31, 2022	Dec 31, 2021
Deferred compensation plans	419	520
Prepaid post-employment benefit plans	491	1 415
Other non-current assets	200	275
Total other non-current assets	1 110	2 210

5. Financial debt

In the second quarter of 2022, Novartis repaid the 2.4% coupon bond with a notional amount of USD 1.0 billion issued in 2017 by Novartis Capital Corporation, New York, United States, in advance of its maturity date at no additional cost. In the third quarter of 2022, Novartis repaid the 2.4% coupon bond with a notional amount of USD 1.5 billion issued in 2012 by Novartis Capital Corporation, New York, United States, in accordance with its terms.

During the third quarter of 2022, Novartis closed the interest-bearing accounts of employees payable on demand, and paid out USD 0.9 billion to the respective beneficiaries on October 3, 2022. The net cash outflows from interest-bearing accounts of employees payable on demand were reported within the line change in current financial debts in the consolidated statements of cash flows.

6. Summary of equity attributable to Novartis AG shareholders

		Number of outsta (in millio	-	Issued share capital and reserves attributable to Novartis AG shareholders (in USD millions)	
	Note	2022	2021	FY 2022	FY 2021
Balance at beginning of year		2 234.9	2 256.8	67 655	56 598
Shares acquired to be canceled		-126.2	-30.7	-10 787	-2 775
Other share purchases		-1.4	-1.5	-123	-145
Exercise of options and employee transactions		1.9	0.6	88	39
Equity-based compensation		10.4	9.6	854	745
Shares delivered to Alcon employees as a result of the Alcon spin-off		0.0	0.1	5	17
Taxes on treasury share transactions				14	1
Decrease/(increase) of treasury share repurchase obligation under a share buyback trading plan	6.1			2 809	-1 040
Transaction costs, net of taxes	6.2				12
Dividends				-7 506	-7 368
Net income of the period attributable to shareholders of Novartis AG				6 955	24 021
Other comprehensive income attributable to shareholders of Novartis AG				-839	-2 493
Impact of change in ownership of consolidated entities					-5
Other movements	6.3			217	48
Balance at December 31		2 119.6	2 234.9	59 342	67 655

6.1. 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 December 31, 2022, these waiting period conditions were not applicable and as a result, there was no requirement to record a liability under this arrangement as of December 31, 2022.

6.2. Transaction costs, that were directly attributable to the distribution (spin-off) of Alcon Inc. to Novartis AG shareholders and that would otherwise have been avoided, were recorded to equity.

6.3. Other movements include, for subsidiaries in hyperinflationary economies, the impact of the restatement of the equity balances of the current year as well as restatement of the non-monetary assets and liabilities with the general price index at the beginning of the period. See Note 7 for additional disclosures.

7. Financial instruments

Fair value by hierarchy

The following table illustrates the three hierarchical levels for valuing financial instruments at fair value as of December 31, 2022, and December 31, 2021. 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		Tot	al		
(USD millions)	Dec 31, 2022	Dec 31, 2021						
Financial assets								
Cash and cash equivalents								
Debt securities		2 010						2 010
Total cash and cash equivalents at fair value		2 010						2 010
Marketable securities								
Debt securities		2 719	9	22			9	2 741
Derivative financial instruments			204	105			204	105
Total marketable securities and derivative financial instruments at fair value		2 719	213	127			213	2 846
Current contingent consideration receivables					43		43	
Long-term financial investments								
Debt and equity securities	473	1 080	10		699	617	1 182	1 697
Fund investments	20	28			261	338	281	366
Non-current contingent consideration receivables					607	641	607	641
Total long-term financial investments at fair value	493	1 108	10		1 567	1 596	2 070	2 704
Associated companies at fair value through profit or loss					129	192	129	192
Financial liabilities								
Current contingent consideration liabilities					-131	-119	-131	-119
Derivative financial instruments			-55	-68			-55	-68
Total current financial liabilities at fair value			-55	-68	-131	-119	-186	-187
Non-current contingent consideration liabilities					-704	-956	-704	-956
Other financial liabilities					-232	-19	-232	-19
Total non-current financial liabilities at fair value					-936	-975	-936	-975

During 2022, there was one transfer of equity securities from Level 3 to Level 1 for USD 44 million due to an Initial Public Offering. There were no transfers across levels in the fourth quarter of 2022.

The fair value of straight bonds amounted to USD 20.3 billion at December 31, 2022 (USD 27.1 billion at December 31, 2021) compared with the carrying amount of USD 20.3 billion at December 31, 2022 (USD 25.3 billion at December 31, 2021). 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 December 31, 2022 (USD 2.7 billion at December 31, 2021) 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 1.0 billion at December 31, 2022 (USD 1.0 billion at December 31,

2021) is included in the line "Provisions and other non-current liabilities" of the consolidated balance sheet.

Foreign currency exchange rate risk

Subsidiaries whose functional currencies have experienced a cumulative inflation rate of more than 100% over the past three years apply the rules of IAS 29 "Financial reporting in Hyperinflationary Economies." The hyperinflationary economies in which Novartis operates are Argentina, Venezuela and Turkey. Venezuela and Argentina were hyperinflationary for all periods presented, and Turkey became hyperinflationary effective May 1, 2022, requiring retroactive implementation of hyperinflation accounting as of January 1, 2022. The impacts of applying IAS 29 were not significant in all periods presented.

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.

8. Details to the consolidated statements of cash flows

8.1. 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)	Q4 2022	Q4 2021
Depreciation, amortization and impairments on:		
Property, plant and equipment	400	440
Right-of-use assets	77	80
Intangible assets	1 471	999
Financial assets 1	-28	12
Change in provisions and other non-current liabilities	508	100
Gains on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	-128	-23
Equity-settled compensation expense	197	195
Loss/(income) from associated companies ²	3	-14 621
Income taxes	275	645
Net financial expense	205	232
Other	-20	
Total	2 960	-11 941

¹ Includes fair value changes

² The fourth quarter 2021 included the gain of USD 14.6 billion recognized from the divestment of the Group's investment in Roche (see Note 3).

(USD millions)	FY 2022	FY 2021
Depreciation, amortization and impairments on:		
Property, plant and equipment	1 570	1 489
Right-of-use assets	303	318
Intangible assets	5 308	4 306
Financial assets ¹	260	-38
Change in provisions and other non-current liabilities	1 403	896
Gains on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	-333	-677
Equity-settled compensation expense	823	736
Loss/(income) from associated companies ²	9	-15 339
Income taxes	1 416	2 119
Net financial expense	817	891
Other	-30	
Total	11 546	-5 299

¹ Includes fair value changes

In the fourth quarter of 2022, there were no additions to intangible assets with deferred payments. In the fourth quarter of 2021, other than through business combinations, there were also no additions to intangible assets with deferred payment terms. In the fourth quarter of 2022, there were USD 60 million (Q4 2021: USD 100 million) additions to right-of-use assets recognized.

In 2022, other than through business combinations, there were USD 635 million additions to intangible assets with deferred payments. In 2022, there were USD 247 million (2021: USD 321 million) additions to right-of-use assets recognized.

² 2021 included the gain of USD 14.6 billion recognized from the divestment of the Group's investment in Roche (see Note 3).

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

(USD millions)	Q4 2022	Q4 2021	FY 2022	FY 2021
(Increase)/decrease in inventories	-29	165	-830	81
Decrease/(increase) in trade receivables	463	176	-589	-389
Increase/(decrease) in trade payables	202	552	-48	-21
Change in other current and non-current assets	4	251	-194	-202
Change in other current liabilities	-55	32	658	772
Other adjustments, net		0		0
Total	585	1 176	-1 003	241

8.3. 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)	Q4 2022	Q4 2021	FY 2022	FY 2021
Net assets recognized as a result of acquisitions of businesses		-415	-1 077	-735
Fair value of previously held equity interests	-1		21	42
Contingent consideration payable, net		59	205	59
Payments, deferred consideration and other adjustments, net		-2	-13	1
Cash flows used for acquisitions of businesses	-1	-358	-864	-633
Cash flows (used for)/from divestments of businesses, net 1	-8	15	-15	66
Cash flows used for acquisitions and divestments of businesses, net	-9	-343	-879	-567

¹ In 2022, USD 15 million (Q4 2022: USD 8 million) net cash outflows from divestments of businesses included USD 20 million (Q4 2022: nil) reduction to cash and cash equivalents due to the derecognized cash and cash equivalents following a loss of control of a company upon expiry of an option to purchase the company, partly offset by USD 5 million net cash inflows (Q4 2022: USD 8 million net cash outflows) from business divestments in 2022 and in prior years.

Notes 3 and 9 provide further information regarding acquisitions and divestments of businesses. All acquisitions were for cash.

In 2022, the net identifiable assets of divested businesses amounted to USD 173 million (Q4 2022: USD 33 million), comprised of non-current assets of USD 132 million (Q4 2022: USD 14 million), current assets of USD 131 million (Q4 2022: USD 48 million), including USD 71 million (Q4 2022: USD 42 million) cash and cash equivalents and of non-current and current liabilities of USD 72 million (Q4 2022: USD 29 million). The deferred sale price receivable and other adjustments amounted to USD 41 million (Q4 2022: USD 19 million). In 2021, USD 66 million (Q4 2021: USD 15 million) (Q4 2021:

9. Acquisitions of businesses

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

(USD millions)	FY 2022	FY 2021
Property, plant and equipment	13	
Right-of-use assets	12	
Currently marketed products		292
Acquired research and development	1 209	262
Other intangible assets		98
Deferred tax assets	56	28
Trade receivables and financial and other current assets	5	1
Cash and cash equivalents	89	10
Deferred tax liabilities	-300	-74
Current and non-current financial debts		-1
Current and non-current lease liabilities	-12	
Trade payables and other liabilities	-67	-4
Net identifiable assets acquired	1 005	612
Acquired cash and cash equivalents	-89	-10
Non-controlling interests		-105
Goodwill	161	238
Net assets recognized as a result of acquisitions of businesses	1 077	735

Note 3 details significant acquisitions of businesses, specifically, the acquisition of Gyroscope in the first quarter of 2022 and the acquisition of GSK's cephalosporin antibiotic business in 2021. The goodwill arising out of the Gyroscope acquisition is mainly attributable to the

accounting for deferred tax liabilities on acquired assets and the assembled workforce. The goodwill for 2021 acquisition relates to buyer-specific synergies and the assembled workforce. In 2022, no goodwill (2021: USD 107 million) is tax deductible.

10. 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 2021 Annual Report and 2021 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 January 31, 2023, of significant developments in those proceedings, as well as any new significant proceedings commenced since the date of the 2021 Annual Report and 2021 Form 20-F.

Investigations and related litigations

Southern District of New York (S.D.N.Y.) *Gilenya* marketing practices investigation and litigation

In 2013, Novartis Pharmaceuticals Corporation (NPC) received a civil investigative demand from the United States Attorney's Office for the S.D.N.Y. requesting the production of documents and information relating to marketing practices for *Gilenya*, including the remuneration of healthcare providers in connection therewith. In 2017, the S.D.N.Y. and New York State declined to intervene in claims raised by an individual relator in a qui tam complaint. In 2022, NPC's motion to dismiss this complaint was granted, which was appealed. The claims are being vigorously contested.

Government generic pricing antitrust investigations, antitrust class actions

Since 2016, Sandoz Inc. has received a grand jury subpoena and a civil investigative demand and interrogatories from the Antitrust and Civil Divisions of the US Department of Justice (DOJ) into alleged price fixing and market allocation of generic drugs in the United States as well as alleged federal False Claims Act (FCA) violations. Sandoz Inc. also received a subpoena and interrogatories from the Attorney General of the State of Connecticut in connection with a similar States' investigation. 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. 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. Under the terms of that agreement, Sandoz Inc. will continue to take steps to enhance its compliance program, employee training and monitoring, and will continue to cooperate with the US government's ongoing investigation into the generic pharmaceutical industry. Sandoz Inc. also finalized a resolution with the DOJ Civil Division and in 2021 paid USD 185 million, which includes interest from the date of the agreement in principle, to settle related claims arising under the 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 resolution with the DOJ resolves 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 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 connection with an investigation into whether Novartis entities, F. Hoffmann-La Roche AG, Genentech Inc. and Roche S.p.A. colluded to artificially preserve the market positions of Avastin® and Lucentis, in 2014 the Italian Competition Authority (ICA) imposed a fine equivalent to USD 125 million on the Novartis entities. Novartis paid the fine, subject to the right to later claim recoupment, and appealed before the Consiglio di Stato (CdS). In 2014 and 2015, the Italian Ministry of Health and the Lombardia region sent letters with payment requests for a total equivalent of approximately USD 1.3 billion in damages from Novartis and Roche entities based on these allegations. In 2019, the CdS upheld the ICA decision and fine. Following that CdS decision, several additional Italian regions and hospitals sent letters claiming damages for an aggregate amount of approximately USD 330 million. None of these claims have been asserted in legal proceedings and no further letters have been sent since. Novartis continues to appeal the CdS decision. 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 is appealing the FCA's decision. Novartis is the subject of similar investigations and proceedings involving competition authorities in Belgium and Greece and is currently in the appeal process in Turkey. Novartis continues to vigorously contest all claims in all those countries. Novartis is also challenging policies and regulations allowing off-label/unlicensed use and reimbursement for economic reasons in Turkey.

Greece Investigation

The Greek authorities are investigating legacy allegations of potentially inappropriate economic benefits to HCPs, government officials and others in Greece. These authorities include the Greek Coordinating Body for Inspection and Control, and the Greek Body of Prosecution of Financial Crime (SDOE), from which the Company received a summons in 2018 and 2020. Novartis has cooperated in these investigations. In 2021, SDOE imposed on Novartis Hellas a fine equivalent to approximately USD 1.2 million, which Novartis Hellas has appealed. In 2022, the Greek State served a civil lawsuit on Novartis Hellas, seeking approximately USD 225 million for moral damages allegedly arising from the conduct that was the subject of the Company's 2020 settlement with the DOJ regarding allegations of inappropriate economic benefits in Greece that was disclosed in the 2020 Annual Report and 2020 Form 20-F. The claims are being vigorously contested.

340B Drug Pricing Program investigation

In 2021, NPC received a notification from the US Health Resources and Services Administration (HRSA) which stated that HRSA believes NPC's contract pharmacy policy violates the 340B statute and threatened potential enforcement action. NPC subsequently sued HRSA in the USDC for the District of Columbia to challenge HRSA's determination and to enjoin HRSA from taking action with respect to NPC's contract pharmacy policy. HRSA then referred the matter regarding NPC's contract pharmacy policy to OIG, which could result in the imposition of civil monetary penalties on NPC. The USDC issued a decision rejecting HRSA's interpretation of the 340B statute, vacating the violation notification and remanding the matter to HRSA. HRSA appealed, and the United States Court of Appeals for the DC Circuit heard argument on the case in 2022. In addition, in 2021, Emory University Hospital Midtown filed an Administrative Dispute Resolution (ADR) proceeding against NPC, seeking the return of alleged overcharges resulting from NPC's contract pharmacy policy. NPC has moved to dismiss the proceeding pending resolution of the HRSA litigation. Finally, also in 2021, NPC received a civil investigative subpoena from the Office of the Attorney General of the State of Vermont requesting the production of documents and information concerning NPC's participation in the 340B Drug Pricing Program in Vermont; NPC provided documents and information to the Office of the Attorney General.

Swiss and EU investigation

In September 2022, the Swiss Competition Commission (COMCO) initiated an investigation of Novartis acquisition of certain patents from Genentech in April 2020 and their subsequent enforcement against Eli Lilly and other parties, allegedly in an attempt to protect *Cosentyx* from competing products. COMCO is investigating whether enforcement of the patents violates the Swiss Cartel Act. The European Commission also requested information from Novartis regarding this matter. Novartis is cooperating with the authorities and will vigorously contest any allegations.

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. These settlements are subject to mutually agreeable terms, finalization of documentation and, in some cases, court approval.

Product liability litigation

Taxotere® (docetaxel)

Sandoz is a defendant in more than 3 100 US product liability actions involving Taxotere® (docetaxel), an oncology product, many of which have been transferred to a multidistrict litigation in the Eastern District of Louisiana. The complaints allege misleading marketing and that Sanofi, as innovator, and several 505(b)(2) NDA holders (including Sandoz) failed to warn of the risk of permanent alopecia/hair loss. In 2022, actions involving claims related to alleged eye injuries caused by the use of Taxotere® were coordinated in a separate multidistrict litigation in the Eastern District of Louisiana. The claims are being vigorously contested.

Amiodarone

Sandoz entities are named in two multi-plaintiff US product liability cases involving amiodarone, a cardiac drug indicated to treat life-threatening arrhythmias that have not responded to other treatment. The complaints allege failure to warn, off-label promotion, and failure to include medication guides to pharmacies. The claims are being vigorously contested.

Tasigna

NPC is a defendant in more than 400 US product liability actions involving *Tasigna*, alleging that the product

caused various cardiovascular effects and that NPC failed to provide adequate warnings about those alleged side effects. State court actions are pending in a multicounty litigation in Bergen County, New Jersey, and federal cases are pending in a multidistrict litigation in the Middle District of Florida. The claims are being vigorously contested.

Other matters

Shareholder derivative lawsuit

In 2021, NPC, Sandoz Inc., Novartis Capital Corporation and certain present and former directors and officers of Novartis were named as defendants, and Novartis was named as a nominal defendant, in a purported shareholder derivative lawsuit filed in New York state court. The plaintiffs, derivatively as purported Novartis shareholders on behalf of Novartis, seek damages and other remedies based on alleged conduct by the corporate and individual defendants. In 2022, the court granted Novartis motion to dismiss the lawsuit, which the plaintiffs have appealed.

In addition to the matters described above, there have been other developments in the other legal matters described in Note 20 to the Consolidated Financial Statements contained in our 2021 Annual Report and 2021 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.

Concluded legal matters

Average Wholesale Price (AWP) litigation – Concluded matter

Lawsuits were brought, the latest in February 2016, by various US state governmental entities and private parties against various pharmaceutical companies, including NPC, alleging that they fraudulently overstated the AWP that is or has been used by payers, including state Medicaid agencies, to calculate reimbursements to healthcare providers. In 2022, NPC settled a putative class action brought by private payers in New Jersey, which resolved the last AWP lawsuit. This matter is now concluded.

Entresto matter - Concluded matter

In 2021, NPC received a civil investigative demand from the DOJ seeking information from 2016 to the present regarding the marketing and pricing of *Entresto*, including remuneration provided to HCPs. In December 2022, the DOJ advised that it has no additional requests and that the matter is considered closed. This matter is now concluded.

South Korea investigation - Concluded matter

In 2016, the Seoul Western District Prosecutor initiated a criminal investigation into, among other things, allegations that Novartis Korea utilized medical journals to provide inappropriate economic benefits to healthcare professionals (HCPs). This resulted in a non-material fine, which the prosecutor appealed. In 2021, the appellate court upheld the fine, and the prosecutor appealed that decision. In January 2023, the Supreme Court dismissed the appeal. This matter is now concluded.

11. 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.

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

Segmentation – Consolidated income statements

Fourth quarter

	Innov Medi	ative cines	San	doz	Corp (including el		Gro	oup
(USD millions)	Q4 2022	Q4 2021	Q4 2022	Q4 2021	Q4 2022	Q4 2021	Q4 2022	Q4 2021
Net sales to third parties	10 360	10 704	2 330	2 525			12 690	13 229
Sales to other segments	193	184	61	42	-254	-226		
Net sales	10 553	10 888	2 391	2 567	-254	-226	12 690	13 229
Other revenues	390	281	7	10		2	397	293
Cost of goods sold	-3 026	-2 873	-1 300	-1 341	253	238	-4 073	-3 976
Gross profit	7 917	8 296	1 098	1 236	-1	14	9 014	9 546
Selling, general and administration	-3 036	-3 274	-565	-568	-146	-143	-3 747	-3 985
Research and development	-2 216	-2 169	-226	-240			-2 442	-2 409
Other income	106	186	17	50	49	135	172	371
Other expense	-826	-571	-51	-92	-171	-298	-1 048	-961
Operating income	1 945	2 468	273	386	-269	-292	1 949	2 562
as % of net sales	18.8%	23.1%	11.7%	15.3%			15.4%	19.4%
(Loss)/income from associated companies	-1	4			-2	14 617	-3	14 621
Interest expense							-219	-206
Other financial income and expense							14	-26
Income before taxes							1 741	16 951
Income taxes							-275	-645
Net income							1 466	16 306

¹ Eliminations mainly relate to the elimination of sales to other segments and the corresponding cost of goods sold.

		Innovative Medicines		Sandoz		Corporate (including eliminations) ¹		oup
(USD millions)	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021
Net sales to third parties	41 296	41 995	9 249	9 631			50 545	51 626
Sales to other segments	825	795	205	180	-1 030	-975		
Net sales	42 121	42 790	9 454	9 811	-1 030	-975	50 545	51 626
Other revenues	1 249	1 179	28	61	6	11	1 283	1 251
Cost of goods sold	-11 569	-11 751	-4 978	-5 147	1 061	1 031	-15 486	-15 867
Gross profit	31 801	32 218	4 504	4 725	37	67	36 342	37 010
Selling, general and administration	-11 679	-12 306	-2 062	-2 062	-512	-518	-14 253	-14 886
Research and development	-9 172	-8 641	-824	-899			-9 996	-9 540
Other income	531	1 149	103	233	171	470	805	1 852
Other expense	-2 695	-1 732	-273	-397	-733	-618	-3 701	-2 747
Operating income	8 786	10 688	1 448	1 600	-1 037	-599	9 197	11 689
as % of net sales	21.3%	25.5%	15.7%	16.6%			18.2%	22.6%
(Loss)/income from associated companies	-2	5	2	2	-9	15 332	-9	15 339
Interest expense							-837	-811
Other financial income and expense							20	-80
Income before taxes							8 371	26 137
Income taxes							-1 416	-2 119
Net income							6 955	24 018

¹ Eliminations mainly relate to the elimination of sales to other segments and the corresponding cost of goods sold.

Segmentation – Additional consolidated balance sheets and income statements disclosure

		Innovative Medicines		Sandoz		orate iminations)¹	Group	
(USD millions)	Dec 31, 2022	Dec 31, 2021	Dec 31, 2022	Dec 31, 2021	Dec 31, 2022	Dec 31, 2021	Dec 31, 2022	Dec 31, 2021
Total assets	75 510	79 220	16 078	16 192	25 865	36 383	117 453	131 795
Total liabilities	-16 966	-15 929	-3 710	-3 632	-37 354	-44 412	-58 030	-63 973
Total equity							59 423	67 822
Net debt ²					7 245	868	7 245	868
Net operating assets	58 544	63 291	12 368	12 560	-4 244	-7 161	66 668	68 690
Included in net operating assets are:								
Property, plant and equipment	8 488	9 168	1 861	1 901	415	476	10 764	11 545
Goodwill	21 531	21 562	7 770	8 026		7	29 301	29 595
Intangible assets other than goodwill	29 826	32 357	1 460	1 577	358	248	31 644	34 182

¹ Eliminations mainly relate to the elimination of intercompany receivables and payables to other segments and inventories

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:

Fourth quarter

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions)	Q4 2022	Q4 2021	Q4 2022	Q4 2021	Q4 2022	Q4 2021	Q4 2022	Q4 2021
Property, plant and equipment impairment charges	-92	-131	-2	-8	1	-1	-93	-140
Property, plant and equipment impairment reversals	2	1		1			2	2
Right-of-use assets impaiment charges	-3		1				-2	
Intangible assets impairment charges	-441	-5	-14	-9	-2	-7	-457	-21
Additions to restructuring provisions	-438	-80	-5	-10	-74	-10	-517	-100

Full year

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions)	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021
Property, plant and equipment impairment charges	-411	-315	-3	-68		-1	-414	-384
Property, plant and equipment impairment reversal	4	44	3	59			7	103
Right-of-use assets impaiment charges	-3						-3	
Intangible assets impairment charges ¹	-1 299	-367	-25	-28	-2	-8	-1 326	-403
Additions to restructuring provisions	-1 069	-240	-40	-62	-259	-26	-1 368	-328

^{1 2021} includes an impairment of USD 201 million in Innovative Medicines related to the write-down of IPR&D related to cessation of clinical development program GTX312.

In the fourth quarter and full year period of 2022, there were no reversals of prior-year impairment charges on intangible assets (Q4 and FY 2021: nil) and right-of-use assets (Q4 and FY 2021: nil).

Restructuring provisions movements

(USD millions)	Q4 2022	Q4 2021	FY 2022	FY 2021
Balance at beginning of period	903	361	345	459
Additions	517	100	1 368	328
Cash payments	-237	-71	-468	-344
Releases	-7	-23	-42	-54
Transfers	-52	-22	-53	-27
Currency translation effects	7	0	-19	-17
Balance at closing of period	1 131	345	1 131	345

² See page 60 for additional disclosures related to net debt.

In 2022, additions to provisions of USD 1.4 billion (Q4: USD 517 million) were mainly related to the following reorganizations:

- Initiative announced in April 2022 to implement a new streamlined organizational model designed to support innovation, growth and productivity.
- The continuation of the Innovative Medicines Division and the Operations unit (formerly the Novartis Technical Operations and the Customer & Technology Solutions) 2021 restructuring initiatives.

In 2021, additions to provisions of USD 328 million (Q4: USD 100 million) were mainly related to the following reorganizations:

- The Innovative Medicines Division commenced a plan to restructure its field force and supporting functions in response to changes in its go-to-market structure with increased utilization of digital technology.
- Group-wide initiatives to streamline manufacturing platforms and manufacturing functions and implement new technologies continued. In addition, the Operations unit (formerly Customer & Technology Solutions) continued the phased implementation of the new operating model to transition activities to service centers.

Segmentation – Net sales to third parties

Net sales by region¹

Fourth quarter

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change	Q4 2022 % of total	Q4 2021 % of total
Innovative Medicines						
Europe	3 405	3 795	-10	-1	33	35
US	4 207	3 945	7	7	41	37
Asia/Africa/Australasia	2 022	2 246	-10	3	20	21
Canada and Latin America	726	718	1	10	6	7
Total	10 360	10 704	-3	3	100	100
Of which in Established Markets	7 789	8 082	-4	2	75	76
Of which in Emerging Growth Markets	2 571	2 622	-2	7	25	24
Sandoz						
Europe	1 289	1 382	-7	3	55	55
US	429	475	-10	-10	18	19
Asia/Africa/Australasia	387	452	-14	-4	17	18
Canada and Latin America	225	216	4	10	10	8
Total	2 330	2 525	-8	0	100	100
Of which in Established Markets	1 625	1 774	-8	0	70	70
Of which in Emerging Growth Markets	705	751	-6	1	30	30
Group						
Europe	4 694	5 177	-9	0	37	39
US	4 636	4 420	5	5	37	33
Asia/Africa/Australasia	2 409	2 698	-11	2	19	20
Canada and Latin America	951	934	2	10	7	8
Total	12 690	13 229	-4	3	100	100
Of which in Established Markets	9 414	9 856	-4	2	74	75
Of which in Emerging Growth Markets	3 276	3 373	-3	5	26	25

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 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 50.

Net sales to third parties by region¹

Of which in Established Markets 30 548 31 459 -3 3 74 Of which in Emerging Growth Markets 10 748 10 536 2 9 26 Sandoz Europe 4 913 5 278 -7 4 53 US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 <		FY 2022 USD m	FY 2021 USD m	% change USD	% change cc²	FY 2022 % of total	FY 2021 % of total
US 15 899 14 999 6 6 39 Asia/Africa/Australasia 8 929 9 304 -4 4 22 Canada and Latin America 2 914 2 773 5 10 6 Total 41 296 41 995 -2 4 100 1 Of which in Established Markets 30 548 31 459 -3 3 74 Of which in Emerging Growth Markets 10 748 10 536 2 9 26 Sandoz Europe 4 913 5 278 -7 4 53 US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which i	Innovative Medicines						
Asia/Africa/Australasia 8 929 9 304 -4 4 22 Canada and Latin America 2 914 2 773 5 10 6 Total 41 296 41 995 -2 4 100 1 Of which in Established Markets 30 548 31 459 -3 3 74 Of which in Emerging Growth Markets 10 748 10 536 2 9 26 Sandoz Europe 4 913 5 278 -7 4 53 US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group	Europe	13 554	14 919	-9	1	33	36
Canada and Latin America 2 914 2 773 5 10 6 Total 41 296 41 995 -2 4 100 1 Of which in Established Markets 30 548 31 459 -3 3 74 Of which in Emerging Growth Markets 10 748 10 536 2 9 26 Sandoz Europe 4 913 5 278 -7 4 53 US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37	US	15 899	14 999	6	6	39	36
Total 41 296 41 995 -2 4 100 1 Of which in Established Markets 30 548 31 459 -3 3 74 Of which in Emerging Growth Markets 10 748 10 536 2 9 26 Sandoz Europe 4 913 5 278 -7 4 53 US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 <td< td=""><td>Asia/Africa/Australasia</td><td>8 929</td><td>9 304</td><td>-4</td><td>4</td><td>22</td><td>22</td></td<>	Asia/Africa/Australasia	8 929	9 304	-4	4	22	22
Of which in Established Markets 30 548 31 459 -3 3 74 Of which in Emerging Growth Markets 10 748 10 536 2 9 26 Sandoz Europe 4 913 5 278 -7 4 53 US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and	Canada and Latin America	2 914	2 773	5	10	6	6
Of which in Emerging Growth Markets 10 748 10 536 2 9 26 Sandoz Europe 4 913 5 278 -7 4 53 US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 <	Total	41 296	41 995	-2	4	100	100
Sandoz Europe 4 913 5 278 -7 4 53 US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 3 7 008 38 314 -3 3 <t< td=""><td>Of which in Established Markets</td><td>30 548</td><td>31 459</td><td>-3</td><td>3</td><td>74</td><td>75</td></t<>	Of which in Established Markets	30 548	31 459	-3	3	74	75
Europe 4 913 5 278 -7 4 53 US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Of which in Emerging Growth Markets	10 748	10 536	2	9	26	25
US 1 754 1 819 -4 -4 19 Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Sandoz						
Asia/Africa/Australasia 1 613 1 662 -3 6 17 Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Europe	4 913	5 278	-7	4	53	55
Canada and Latin America 969 872 11 15 11 Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	US	1 754	1 819	-4	-4	19	19
Total 9 249 9 631 -4 4 100 1 Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Asia/Africa/Australasia	1 613	1 662	-3	6	17	17
Of which in Established Markets 6 460 6 855 -6 2 70 Of which in Emerging Growth Markets 2 789 2 776 0 9 30 Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Canada and Latin America	969	872	11	15	11	9
Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Total	9 249	9 631	-4	4	100	100
Group Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Of which in Established Markets	6 460	6 855	-6	2	70	71
Europe 18 467 20 197 -9 2 37 US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Of which in Emerging Growth Markets	2 789	2 776	0	9	30	29
US 17 653 16 818 5 5 35 Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Group						
Asia/Africa/Australasia 10 542 10 966 -4 5 21 Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Europe	18 467	20 197	-9	2	37	39
Canada and Latin America 3 883 3 645 7 11 7 Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	US	17 653	16 818	5	5	35	33
Total 50 545 51 626 -2 4 100 1 Of which in Established Markets 37 008 38 314 -3 3 73	Asia/Africa/Australasia	10 542	10 966	-4	5	21	21
Of which in Established Markets 37 008 38 314 -3 3 73	Canada and Latin America	3 883	3 645	7	11	7	7
	Total	50 545	51 626	-2	4	100	100
Of which in Emerging Growth Markets 13 537 13 312 2 9 27	Of which in Established Markets	37 008	38 314	-3	3	73	74
	Of which in Emerging Growth Markets	13 537	13 312	2	9	27	26

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

Australia and New Zealand.

2 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 50.

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

Fourth quarter

	Q4 2022 USD m	Q4 2021 USD m ¹	% change USD	% change
Cardiovascular	505 III	000 111	000	
Entresto	1 291	949	36	44
Legvio	42	4	nm	nm
Total Cardiovascular	1 333	953	40	47
Immunology				
Cosentyx	1 080	1 243	-13	-9
Xolair ³	323	373	-13	-3
llaris	301	284	6	14
Total Immunology	1 704	1 900	-10	-5
Neuroscience				
Gilenya	346	656	-47	-44
Zolgensma	309	342	-10	-5
Kesimpta	369	147	151	157
Mayzent	99	81	22	28
Aimovig	59	59	0	9
Other		1	nm	nm
Total Neuroscience	1 182	1 286	-8	-4
Solid Tumors				
Tafinlar + Mekinist	465	458	2	8
Kisqali	357	285	25	33
Votrient	103	139	-26	-21
Lutathera	128	115	11	15
Piqray	112	87	29	30
Pluvicto	179		nm	nm
Tabrecta	36	27	33	35
Total Solid Tumors	1 380	1 111	24	30
Hematology				
Promacta/Revolade	540	518	4	11
Tasigna	475	508	-6	0
Jakavi	388	408	-5	8
Kymriah	139	143	-3	5
Adakveo	51	43	19	19
Scemblix	52	7	nm	nm
Total Hematology	1 645	1 627	1	9
Other Promoted Brands	000	500		4.0
Lucentis	398	508	-22	-12
Xiidra	145	134	8	8
Ultibro Group	113	148	-24	-13
Beovu	49	51	-4	7
Other respiratory	26	16	63	69
Total Other Promoted Brands	731	857	-15	-6
Total Promoted Brands	7 975	7 734	3	10
Established Brands	7 97 9	7 704		10
Sandostatin	305	345	-12	-8
Galvus Group	209	278	-12	-16
Gleevec/Glivec	175	233	-25	-18
Exforge Group	159	197	-19	-12
Diovan Group	142	189	-19	-12
Afinitor/Votubia	106	174	-39	-32
Voltaren/Cataflam	81	97	-16	-4
Zortress/Certican	80	110	-27	-18
Exjade/Jadenu	61	129	-53	-48
Neoral/Sandimmun(e)	74	89	-17	-40
Contract manufacturing	82	108	-24	-23
Other	911	1 021	-11	-6
Total Established Brands	2 385	2 970	-20	-13
Total division net sales to third parties	10 360	10 704	-3	3

¹ Reclassified to reflect the new Innovative Medicines divisional structures announced on April 4, 2022

² Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 50.

³ Net sales to third parties reflect *Xolair* sales for all indications. nm = not meaningful

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

Full year

	FY 2022 USD m	FY 2021 USD m ¹	% change USD	% change
Cardiovascular				
Entresto	4 644	3 548	31	37
Leqvio	112	12	nm	nm
Total Cardiovascular	4 756	3 560	34	40
Immunology				
Cosentyx	4 788	4 718	1	5
Xolair ³	1 365	1 428	-4	6
llaris	1 133	1 059	7	15
Other	1		nm	nm
Total Immunology	7 287	7 205	1	7
Neuroscience				
Gilenya	2 013	2 787	-28	-24
Zolgensma	1 370	1 351	1	5
Kesimpta	1 092	372	194	200
Mayzent	357	281	27	32
Aimovig	218	215	11	11
Other	1	1	0	nm
Total Neuroscience	5 051	5 007	1	5
Solid Tumors			_	
Tafinlar + Mekinist	1 770	1 693	5	11
Kisqali	1 231	937	31	38
Votrient	474	577	-18	-13
Lutathera	471	475	-1	3
Piqray	373	329	13	14
Pluvicto	271	00	nm	nm
Tabrecta Tabrecta	133 4 723	90 4 101	48	48
Total Solid Tumors	4 723	4 101	15	21
Hematology	0.000	0.040		
Promacta/Revolade	2 088	2 016	4	9
Tasigna	1 923	2 060	-7	-1
Jakavi Komprink	1 561	1 595	-2 -9	9 -2
Kymriah Adakveo	536 194	587 164		19
Scemblix	149	7	nm	nm
Other	149		0	nm
Total Hematology	6 452	6 430	0	7
Other Promoted Brands	0 432	0 430		
Lucentis	1 874	2 160	-13	-4
Xiidra	487	468	4	4
Ultibro Group	479	584	-18	-9
Веочи	203	186	9	18
Other respiratory	84	53	<u></u>	79
Total Other Promoted Brands	3 127	3 451	-9	-1
Total Offici Frontotca Brando	0.2.	0 .0 .		<u>.</u>
Total Promoted Brands	31 396	29 754	6	12
Established Brands				
Sandostatin	1 238	1 413	-12	-10
Galvus Group	859	1 092	-21	-12
Gleevec/Glivec	745	1 024	-27	-22
Exforge Group	743	901	-18	-12
Diovan Group	652	773	-16	-9
Afinitor/Votubia	512	938	-45	-41
Voltaren/Cataflam	334	373	-10	0
Zortress/Certican	329	431	-24	-14
Exjade/Jadenu	323	563	-43	-38
Neoral/Sandimmun(e)	310	368	-16	-8
Contract manufacturing	214	108	98	110
Other	3 641	4 257	-14	-9
Total Established Brands	9 900	12 241	-19	-13
Total division net sales to third parties	41 296	41 995	-2	4
·				

 $^{^{\}scriptscriptstyle 1}$ Reclassified to reflect the new Innovative Medicines divisional structures announced on April 4, 2022

² Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 50. ³ Net sales to third parties reflect *Xolair* sales for all indications.

Net sales to third parties of the top 20 Innovative Medicines Division brands in 2022

Fourth quarter

		_	US	 3	Res	at of world			Total	
Brands	Brand classification by therapeutic area, other promoted brands or established brands	Key indications	USD m	% change USD/cc ²	USD m	% change USD	% change cc²	USD m	% change USD	% change cc²
Cosentyx	Immunology	Psoriasis (PsO), ankylosing spondylitis (AS), psoriatic arthritis (PsA), non-radiographic axial spondyloarthritis (nr-axSPA)	633	-18	447	-5	5	1 080	-13	-9
Entresto	Cardiovascular	Chronic heart failure, hypertension	694	33	597	39	56	1 291	36	44
Promacta/Revolade	Hematology	Immune thrombocytopenia (ITP), severe aplastic anemia (SAA)	282	15	258	-5	7	540	4	11
Gilenya	Neuroscience	Relapsing multiple sclerosis (RMS)	189	-45	157	-50	-43	346	-47	-44
Tasigna	Hematology	Chronic myeloid leukemia (CML)	223	-3	252	-9	1	475	-6	0
Lucentis	Other Promoted Brands	Age-related macular degeneration (AMD), diabetic macular edema (DME) retinal vein occlusion (RVO)	,		398	-22	-12	398	-22	-12
Tafinlar + Mekinist	Solid Tumors	BRAF V600+ metastatic adjuvant melanoma, advanced non-small cell lung cancer (NSCLC), tumor agnostic with BRAF mutation indication	175	9	290	-2	7	465	2	8
Jakavi	Hematology	Myelofibrosis (MF), polycytomia vera (PV), graft-versus-host disease (GvHD)			388	-5	8	388	-5	8
Zolgensma	Neuroscience	Spinal muscular atrophy (SMA)	99	-15	210	-6	0	309	-10	-5
Xolair ¹	Immunology	Severe allergic asthma (SAA), chronic spontaneous urticaria (CSU), nasal polyps			323	-13	-3	323	-13	-3
Sandostatin	Established Brands	Carcinoid tumors, acromegaly	203	-2	102	-26	-16	305	-12	-8
Kisqali	Solid Tumors	HR+/HER2- metastatic breast cancer	149	52	208	11	23	357	25	33
llaris	Immunology	Auto-inflammatory (CAPS, TRAPS, HIDS/MKD, FMF, SJIA, AOSD, gout)	165	14	136	-2	14	301	6	14
Kesimpta	Neuroscience	Relapsing-remitting multiple sclerosis (RRMS)	306	132	63	nm	nm	369	151	157
Galvus Group	Established Brands	Type 2 diabetes			209	-25	-16	209	-25	-16
Gleevec/Glivec	Established Brands	Chronic myeloid leukemia (CML), gastrointestinal stromal tumors (GIST)	49	-20	126	-27	-17	175	-25	-18
Exforge Group	Established Brands	Hypertension	2	-50	157	-19	-11	159	-19	-12
Diovan Group	Established Brands	Hypertension	17	55	125	-30	-21	142	-25	-16
Kymriah	Hematology	r/r pediatric and young adults acute lymphoblastic leukemia (ALL), diffuse large B-cell lymphoma (DLBCL), follicular lymphoma (FL)	54	-7	85	0	14	139	-3	5
Afinitor/Votubia	Established Brands	Breast cancer/ tuberous sclerosis complex (TSC)	24	-68	82	-18	-7	106	-39	-32
Top 20 brands total			3 264	3	4 613	-9	2	7 877	-4	2
Rest of portfolio			943	23	1 540	-9	-1	2 483	1	6
Total division net sales to third parties	;		4 207	7	6 153	-9	1	10 360	-3	3

Net sales to third parties reflect Xolair sales for all indications.
 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 50.

$Net \, sales \, to \, third \, parties \, of \, the \, top \, 20 \, Innovative \, Medicines \, Division \, brands \, in \, 2022 \,$ Full year

	_		U	US		Rest of world			Total		
	Brand classification by therapeutic area, other promoted brands or		1105	% change	1100	% change		1105	% change	% change	
Cosentyx	established brands Immunology	Rey indications Psoriasis (PsO), ankylosing spondylitis (As), psoriatic arthritis (PsA), non-radiographic axial spondyloarthritis (nr-axSPA)	2 770	USD/cc²	2 018	10	20	4 788	USD 1	5	
Entresto	Cardiovascular	Chronic heart failure, hypertension	2 354	38	2 290	25	37	4 644	31	37	
Promacta/Revolade	Hematology	Immune thrombocytopenia (ITP), severe aplastic anemia (SAA)	1 083	14	1 005	-6	5	2 088	4	9	
Gilenya	Neuroscience	Relapsing multiple sclerosis (RMS)	1 153	-19	860	-37	-29	2 013	-28	-24	
Tasigna	Hematology	Chronic myeloid leukemia (CML)	877	-1	1 046	-11	-2	1 923	-7	-1	
Lucentis	Other Promoted Brands	Age-related macular degeneration (AMD), diabetic macular edema (DME retinal vein occlusion (RVO)	Ξ),		1 874	-13	-4	1 874	-13	-4	
Tafinlar + Mekinist	Solid Tumors	BRAF V600+ metastatic adjuvant melanoma, advanced non-small cell lung cancer (NSCLC), tumor agnostic with BRAF mutation indication	678	12	1 092	0	10	1 770	5	11	
Jakavi	Hematology	Myelofibrosis (MF), polycytomia vera (PV), graft-versus-host disease (GvHD)			1 561	-2	9	1 561	-2	9	
Zolgensma	Neuroscience	Spinal muscular atrophy (SMA)	434	-7	936	6	12	1 370	1	5	
Xolair¹	Immunology	Severe allergic asthma (SAA), chronic spontaneous urticaria (CSU), nasal polyps			1 365	-4	6	1 365	-4	6	
Sandostatin	Established Brands	Carcinoid tumors, acromegaly	800	-5	438	-23	-16	1 238	-12	-10	
Kisqali	Solid Tumors	HR+/HER2- metastatic breast cancer	472	39	759	27	38	1 231	31	38	
llaris	Immunology	Auto-inflammatory (CAPS, TRAPS, HIDS/MKD, FMF, SJIA, AOSD, gout)	570	14	563	1	16	1 133	7	15	
Kesimpta	Neuroscience	Relapsing-remitting multiple sclerosis (RRMS)	921	165	171	nm	nm	1 092	194	200	
Galvus Group	Established Brands	Type 2 diabetes			859	-21	-12	859	-21	-12	
Gleevec/Glivec	Established Brands	Chronic myeloid leukemia (CML), gastrointestinal stromal tumors (GIST)	205	-22	540	-29	-23	745	-27	-22	
Exforge Group	Established Brands	Hypertension	14	0	729	-18	-12	743	-18	-12	
Diovan Group	Established Brands	Hypertension	55	8	597	-17	-10	652	-16	-9	
Kymriah	Hematology	r/r pediatric and young adults acute lymphoblastic leukemia (ALL), diffuse large B-cell lymphoma (DLBCL), follicular lymphoma (FL)	196	-15	340	-5	7	536	-9	-2	
Afinitor/Votubia	Established Brands	Breast cancer/ tuberous sclerosis complex (TSC)	171	-67	341	-18	-8	512	-45	-41	
Top 20 brands total			12 753	6	19 384	-5	5	32 137	-1	5	
Rest of portfolio			3 146	6	6 013	-9	0	9 159	-4	2	
Total division net sales to third parties			15 899	6	25 397	-6	3	41 296	-2	4	

Net sales to third parties reflect Xolair sales for all indications.
 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 50.

Sandoz Division net sales to third parties by business franchise

Fourth quarter

	Q4 2022 USD m	Q4 2021 USD m	% change USD	% change cc²
Retail Generics ¹	1 692	1 853	-9	-1
Biopharmaceuticals	517	555	-7	3
Anti-Infectives 1	121	117	3	8
Total division net sales to third parties	2 330	2 525	-8	0

¹ Sandoz total anti-infectives net sales to third parties amounted to USD 329 million (Q4 2021: USD 337 million), of which USD 208 million (Q4 2021: USD 220 million) were sold through the Retail Generics business franchise and USD 121 million (Q4 2021: USD 117 million) were sold to other third-party companies through the Anti-Infectives business franchise

Full year

	FY 2022 USD m	FY 2021 USD m	% change USD	% change cc²
Retail Generics 1	6 776	7 092	-4	4
Biopharmaceuticals	2 093	2 116	-1	9
Anti-Infectives ¹	380	423	-10	-5
Total division net sales to third parties	9 249	9 631	-4	4

¹ Sandoz total anti-infectives net sales to third parties amounted to USD 1.2 billion (2021: USD 1.1 billion), of which USD 777 million (2021: USD 707 million) were sold through the Retail Generics business franchise and USD 380 million (2021: USD 423 million) were sold to other third-party companies through the Anti-Infectives business franchise.

The product portfolio of Sandoz is widely spread in 2022 and 2021.

Segmentation - Other revenue

Fourth quarter

	Innovative	Innovative Medicines		Sandoz		Corporate		oup
(USD millions)	Q4 2022	Q4 2021	Q4 2022	Q4 2021	Q4 2022	Q4 2021	Q4 2022	Q4 2021
Profit sharing income	247	236					247	236
Royalty income	13	14	5	6		2	18	22
Milestone income	98	9		24			98	33
Other ¹	32	22	2	-20			34	2
Total other revenues	390	281	7	10		2	397	293

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

	Innovative	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions)	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021	
Profit sharing income	921	873					921	873	
Royalty income	28	74	18	24	6	11	52	109	
Milestone income	145	127	3	28			148	155	
Other ¹	155	105	7	9			162	114	
Total other revenues	1 249	1 179	28	61	6	11	1 283	1 251	

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

² Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 50.

² Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 50.

12. Events subsequent to the December 31, 2022, consolidated balance sheet

South Korea investigation - Concluded matter

In January 2023, the Supreme Court dismissed the appeal by the Seoul Western District Prosecutor on the criminal investigation on, among other things, allegations that Novartis Korea utilized medical journals to provide inappropriate economic benefits to healthcare professionals (HCPs). This matter is now concluded. For additional information see Note 10.

Dividend proposal for 2022 and approval of the Group's 2022 consolidated financial statements

On January 31, 2023, the Novartis AG Board of Directors proposed the acceptance of the 2022 consolidated financial statements of the Novartis Group for approval by the Annual General Meeting on March 7, 2023. Furthermore, also on January 31, 2023, the Board proposed a dividend of CHF 3.20 per share to be approved at the Annual General Meeting on March 7, 2023. If approved, total dividend payments would amount to approximately USD 7.3 billion (2021: USD 7.5 billion), using the CHF/USD December 31, 2022, exchange rate.

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

Novartis defines free cash flow as net cash flows from operating activities and cash flows from investing activities associated with purchases and sales of property, plant and equipment, of intangible assets, of financial assets and of other non-current assets. Excluded from free cash flow are cash flows from investing activities

associated with acquisitions and divestments of businesses and of interests in associated companies, purchases and sales of marketable securities, commodities, time deposits and net cash flows from financing activities

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 60 for additional disclosures related to net debt.

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

Fourth quarter

	Innovative	Medicines	Sandoz		Corporate		Gro	oup
(USD millions unless indicated otherwise)		Q4 2021		Q4 2021	•	Q4 2021		Q4 2021
IFRS operating income	1 945	2 468	273	386	-269	-292	1 949	2 562
Amortization of intangible assets	910	877	54	61			964	938
Impairments								
Intangible assets	436		14	8	2		452	8
Property, plant and equipment related to the Group-wide rationalization of manufacturing sites	-23	125		7			-23	132
Other property, plant and equipment	84	-2					84	-2
Total impairment charges	497	123	14	15	2		513	138
Acquisition or divestment of businesses and related items								
- Income	1				-2	-11	-1	-11
- Expense	1					89	1	89
Total acquisition or divestment of businesses and related items, net	2				-2	78		78
Other items								
Divestment gains	-27	-57				-9	-27	-66
Financial assets - fair value adjustments	-26	39			-2	-27	-28	12
Restructuring and related items								
- Income	-7	-11	1	-12	2	-1	-4	-24
- Expense	601	154	41	70	140	12	782	236
Legal-related items								
- Income								
- Expense	244		11	6			255	6
Additional income	-400	-115	-1	2	-1	-84	-402	-197
Additional expense	29	118	-2		1	18	28	136
Total other items	414	128	50	66	140	-91	604	103
Total adjustments	1 823	1 128	118	142	140	-13	2 081	1 257
Core operating income	3 768	3 596	391	528	-129	-305	4 030	3 819
as % of net sales	36.4%	33.6%	16.8%	20.9%			31.8%	28.9%
(Loss)/income from associated companies	-1	4			-2	14 617	-3	14 621
Core adjustments to income from associated companies, net o	f tax					-14 528		-14 528
Interest expense							-219	-206
Other financial income and expense							14	-26
Core adjustments to other financial income and expense							40	2
Income taxes, adjusted for above items (core income taxes)							-611	-547
Core net income							3 251	3 135
Core net income attributable to shareholders of Novartis AG	ì						3 251	3 137
Core basic EPS (USD) 1							1.52	1.40

¹ 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-Group

	Innovative	Medicines	Sandoz		Corporate		Group	
(USD millions unless indicated otherwise)	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021
IFRS operating income	8 786	10 688	1 448	1 600	-1 037	-599	9 197	11 689
Amortization of intangible assets	3 585	3 528	221	236			3 806	3 764
Impairments								
Intangible assets	1 291	360	25	27	2		1 318	387
Property, plant and equipment related to the Group-wide rationalization of manufacturing sites	286	219	-2	7			284	226
Other property, plant and equipment	85	40					85	40
Total impairment charges	1 662	619	23	34	2		1 687	653
Acquisition or divestment of businesses and related items								
- Income		-2			-4	-64	-4	-66
- Expense	8	1				106	8	107
Total acquisition or divestment of businesses and related items, net	8	-1			-4	42	4	41
Other items								
Divestment gains	-161	-649		-4	-5	-75	-166	-728
Financial assets - fair value adjustments	134	-43			126	5	260	-38
Restructuring and related items								
- Income	-33	-32	-14	-36	-1	-6	-48	-74
- Expense	1 572	833	167	193	449	32	2 188	1 058
Legal-related items								
- Income	-51			-11			-51	-11
- Expense	364	170	56	53			420	223
Additional income	-692	-139	-6	-1	-6	-138	-704	-278
Additional expense	63	241	8		1	48	72	289
Total other items	1 196	381	211	194	564	-134	1 971	441
Total adjustments	6 451	4 527	455	464	562	-92	7 468	4 899
Core operating income	15 237	15 215	1 903	2 064	-475	-691	16 665	16 588
as % of net sales	36.9%	36.2%	20.6%	21.4%			33.0%	32.1%
(Loss)/income from associated companies	-2	5	2	2	-9	15 332	-9	15 339
Core adjustments to income from associated companies, net of	of tax					-14 346		-14 346
Interest expense							-837	-811
Other financial income and expense							20	-80
Core adjustments to other financial income and expense							121	39
Income taxes, adjusted for above items (core income taxes)							-2 608	-2 635
Core net income							13 352	14 094
Core net income attributable to shareholders of Novartis AG	à						13 352	14 097
Core basic EPS (USD) 1							6.12	6.29

¹ 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 - Group

Fourth quarter

(USD millions unless indicated otherwise)	Q4 2022 IFRS results	Amortization of intangible assets ¹	Acquisition or divestment of businesses and Impairments ² related items ³	Other items ⁴	Q4 2022 Core results	Q4 2021 Core results
Gross profit	9 014	922	326	-176	10 086	10 430
Operating income	1 949	964	513	604	4 030	3 819
Income before taxes	1 741	964	513	644	3 862	3 682
Income taxes ⁵	-275				-611	-547
Net income	1 466				3 251	3 135
Basic EPS (USD) 6	0.69				1.52	1.40
Other revenues Cost of goods sold The following are adjustments to arrive at	397 -4 073	922 come	326	-86 -90	-2 915	-3 092
Selling, general and administration	-3 747			48	-3 699	-3 984
Research and development	-2 442	42	109	-27	-2 318	-2 369
Other income	172		-1	-71	100	118
Other expense	-1 048		78 1	830	-139	-376
The following are adjustments to arrive at	core income befor	e taxes				
Other financial income and expense	14			40	54	-24

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 expense include impairment charges related to intangible assets; other expense also includes 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 stamp duties related to an acquisition

⁴ Other items: other revenues includes a net income from an outlicensing agreement; 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, selling, general and administration and research and development include adjustments to provisions and related items; cost of goods sold and research and development also include contingent consideration adjustments; other income and other expense include fair value adjustments and divestment gains and losses on financial assets; other income also includes gains from the divestment of property, a curtailment gain and an adjustment to an environmental provision; other expense includes legal-related items and other costs and items; other financial income and expense includes the monetary loss on the restatement of non-monetary items for subsidiaries in hyperinflationary economies and a revaluation impact of a financial liability incurred through the Alcon distribution

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 2.1 billion to arrive at the core results before tax amounts to USD 336 million. The average tax rate on the adjustments is 15.8% since the quarterly core tax charge of 15.8% 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 - Group

(USD millions unless indicated otherwise)	FY 2022 IFRS results	Amortization of intangible assets ¹		Acquisition or divestment of businesses and related items ³	Other items ⁴	FY 2022 Core results	FY 2021 Core results
Gross profit	36 342	3 648	338		64	40 392	41 097
Operating income	9 197	3 806	1 687	4	1 971	16 665	16 588
Income before taxes	8 371	3 806	1 687	4	2 092	15 960	16 729
Income taxes ⁵	-1 416					-2 608	-2 635
Net income	6 955					13 352	14 094
Basic EPS (USD) ⁶	3.19					6.12	6.29
The following are adjustments to arrive a	t core gross profit						
Other revenues	1 283				-86	1 197	1 251
Cost of goods sold	-15 486	3 648	338		150	-11 350	-11 780
The following are adjustments to arrive a	t core operating inc	ome					
Selling, general and administration	-14 253				63	-14 190	-14 815
Research and development	-9 996	158	954		-204	-9 088	-9 041
Other income	805		-3	-4	-414	384	421
Other expense	-3 701		398	8	2 462	-833	-1 074
The following are adjustments to arrive a	t core income befor	e taxes					
Other financial income and expense	20				121	141	-41

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 expense include impairment charges related to intangible assets; other income and other expense include net impairment charges related to property, plant and equipment

³ Acquisition or divestment of businesses and related items, including restructuring and integration charges: other income and other expense include transitional service fee income and charges related to divestments; other income also includes adjustments to provisions; other expense includes stamp duties related to an acquisition

⁴ Other items: other revenues includes a net income from an outlicensing agreement; 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, selling, general and administration, research and development and other expense include adjustments to provisions and related items; cost of goods sold and research and development also include 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 gains from the divestment of products and property, curtailment gains and an adjustment to an environmental provision; other expense includes a reversal of an accrual and other costs and items; other financial income and expense includes the monetary loss on the restatement of non-monetary items for subsidiaries in hyperinflationary economies and a revaluation impact of a financial liability incurred through the Alcon distribution

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 7.6 billion to arrive at the core results before tax amounts to USD 1.2 billion. The average tax rate on the adjustments is 15.7% since the 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

Fourth quarter

(USD millions)	Q4 2022 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items ³	Other items ⁴	Q4 2022 Core results	Q4 2021 Core results
Gross profit	7 917	868	312		-197	8 900	9 084
Operating income	1 945	910	497	2	414	3 768	3 596
The following are adjustments to arrive a	t core gross profit						
Other revenues	390				-86	304	281
Cost of goods sold	-3 026	868	312		-111	-1 957	-2 085
The following are adjustments to arrive a	t core operating inc	come					
Selling, general and administration	-3 036				43	-2 993	-3 275
Research and development	-2 216	42	109		-29	-2 094	-2 136
Other income	106			1	-64	43	119
Other expense	-826		76	1	661	-88	-196

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

(USD millions)	FY 2022 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items ³	Other items ⁴	FY 2022 Core results	FY 2021 Core results
Gross profit	31 801	3 427	314		-29	35 513	35 981
Operating income	8 786	3 585	1 662	8	1 196	15 237	15 215
The following are adjustments to arrive a	nt core gross profit						
Other revenues	1 249				-86	1 163	1 179
Cost of goods sold	-11 569	3 427	314		57	-7 771	-7 988
The following are adjustments to arrive a	nt core operating inc	ome					
Selling, general and administration	-11 679				50	-11 629	-12 235
Research and development	-9 172	158	953		-206	-8 267	-8 150
Other income	531		-1		-311	219	265
Other expense	-2 695		396	8	1 692	-599	-646

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 expense include impairment charges related to intangible assets; other expense also includes 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 transitional service fee income related to divestments; other expense includes stamp duties related to an acquisition

⁴ Other items: other revenues includes a net income from an outlicensing agreement; 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 Group-wide rationalization of manufacturing sites and other net restructuring charges and related items; cost of goods sold and research and development also include contingent consideration adjustments and adjustments to provisions and related items; other income and other expense include fair value adjustments and divestment gains and losses on financial assets; other income also includes gains from the divestment of property, a curtailment gain and an adjustment to an environmental provision; other expense includes legal-related items and other costs and items

² Impairments: cost of goods sold, research and development and other expense include impairment charges related to intangible assets; other income and other expense include net 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 stamp duties related to an acquisition and transitional service fee charges related to divestments

⁴ Other items: other revenues includes a net income from an outlicensing agreement; 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 Group-wide rationalization of manufacturing sites and other net restructuring charges and related items; cost of goods sold and research and development also include contingent consideration adjustments and adjustments to provisions and related items; 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 gains from the divestment of products and property, curtailment gains and an adjustment to an environmental provision; other expense includes a reversal of an accrual and other costs and items

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

Fourth quarter

(USD millions)	Q4 2022 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items	Other items ³	Q4 2022 Core results	Q4 2021 Core results
Gross profit	1 098	54	14		21	1 187	1 332
Operating income	273	54	14		50	391	528
The following are adjustments to arrive a	nt core gross profit						
Cost of goods sold	-1 300	54	14		21	-1 211	-1 245
The following are adjustments to arrive a	nt core operating inc	ome					
Selling, general and administration	-565				5	-560	-566
Research and development	-226				2	-224	-233
Other income	17				1	18	41
Other expense	-51				21	-30	-46

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

(USD millions)	FY 2022 IFRS results	Amortization of intangible assets ¹	Acquisition or divestment of businesses and Impairments ² related items	Other items ³	FY 2022 Core results	FY 2021 Core results
Gross profit	4 504	221	24	93	4 842	5 049
Operating income	1 448	221	23	211	1 903	2 064
The following are adjustments to arrive a	nt core gross profit					
Cost of goods sold	-4 978	221	24	93	-4 640	-4 823
The following are adjustments to arrive a	nt core operating inc	come				
Selling, general and administration	-2 062			9	-2 053	-2 062
Research and development	-824		1	2	-821	-891
Other income	103		-2	-14	87	127
Other expense	-273			121	-152	-159

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 intangible assets

³ Other items: cost of goods sold, selling, general and administration, research and development, 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; selling, general and administration also includes a provision release; other expense includes legal-related items

² Impairments: cost of goods sold and research and development include impairment charges related to intangible assets; other income includes a reversal of an impairment charge related to property, plant and equipment

Other items: cost of goods sold, selling, general and administration, research and development, 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; other expense also includes legal-related items; cost of goods sold and selling, general and administration include adjustments to provisions and related items

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

Fourth quarter

(USD millions)	Q4 2022 IFRS results	Amortization of intangible assets	Impairments ¹	Acquisition or divestment of businesses and related items ²	Other items ³	Q4 2022 Core results	Q4 2021 Core results
Gross profit	-1					-1	14
Operating loss	-269		2	-2	140	-129	-305
The following are adjustments t	to arrive at core operating los	s					
Other income	49			-2	-8	39	-42
Other expense	-171		2		148	-21	-134

¹ Impairments: Other expense includes impairment charges related to intangible assets

Full year

(USD millions)	FY 2022 IFRS results	Amortization of intangible assets	Impairments ¹	Acquisition or divestment of businesses and related items ²	Other items ³	FY 2022 Core results	FY 2021 Core results
Gross profit	37					37	67
Operating loss	-1 037		2	-4	564	-475	-691
The following are adjustments to arrive a	nt core operating los	s					
Selling, general and administration	-512				4	-508	-518
Other income	171			-4	-89	78	29
Other expense	-733		2		649	-82	-269

¹ Impairments: other expense includes impairment charges related to intangible assets

Reconciliation of 2021 IFRS results and non-IFRS measures core results and free cash flow to exclude the impacts of the 2021 divestment of our Roche investment

To enhance investor understanding of the Group's performance in comparison with the prior year, we presented the 2021 IFRS results and non-IFRS measures core results and free cash flow excluding the impacts related to our Roche investment, due to its divestment in the fourth quarter of 2021.

The following tables provide a reconciliation of our 2021 published IFRS results and non-IFRS measures core results and free cash flow with the 2021 results, excluding the impacts related to our Roche investment, due to its divestment.

² Acquisition or divestment of businesses and related items, including restructuring and integration charges: other income includes adjustments to provisions

³ Other items: 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 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

² Acquisition or divestment of businesses and related items, including restructuring and integration charges: other income includes adjustments to provisions and transitional service fee income related to divestments

³ Other items: selling, general and administration, 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 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 curtailment gain

		Q4 20)21			FY 20	21	
(USD millions unless indicated otherwise)	Results as published	Our Roche investment impacts excluding the divestment gain	Gain on divestment of our investment in Roche	Results excluding impacts from the divestment of our Roche investment	Results as published	Our Roche investment impacts excluding the divestment gain	Gain on divestment of our investment in Roche	Results excluding impacts from the divestment of our Roche investment
Operating income	2 562			2 562	11 689			11 689
Income from associated companies	14 621	-63	-14 556	2	15 339	-785	-14 556	-2
Interest expense and other financial income and expense	-232		-16	-248	-891		-16	-907
Income before tax	16 951	-63	-14 572	2 316	26 137	-785	-14 572	10 780
Income taxes	-645			-645	-2 119			-2 119
Net income	16 306	-63	-14 572	1 671	24 018	-785	-14 572	8 661
Earnings per share (USD)	7.29	-0.03	-6.51	0.75	10.71	-0.35	-6.50	3.86
Effective tax rate 1	3.8%			27.8%	8.1%			19.7%
Core operating income	3 819			3 819	16 588			16 588
Core income from associated compa	anies 93	-91		2	993	-995		-2
Core interest expense and core othe financial income and expense	er -230			-230	-852			-852
Core income before tax	3 682	-91		3 591	16 729	-995		15 734
Core income taxes	-547			-547	-2 635			-2 635
Core net income	3 135	-91		3 044	14 094	-995		13 099
Core earnings per share (USD)	1.40	-0.04		1.36	6.29	-0.45		5.84
Core effective tax rate ²	14.9%			15.2%	15.8%			16.7%
Free cash flow ³	3 027			3 027	13 282	-522		12 760

 $^{^{\}mbox{\tiny 1}}$ Effective tax rate is calculated as Income taxes divided by Income before tax.

Core effective tax rate is calculated as Core income taxes divided by Core income before tax.
 The free cash flow impact represents the dividend received in Q12021 from Roche in relation to the distribution of its 2020 net income.

		FY 2021	
(USD millions)	Free cash flow as published		Free cash flow excluding dividends received from Roche
Operating income	11 689		11 689
Adjustments for non-cash items	7 030		7 030
Operating income adjusted for non-cash items	18 719		18 719
Dividends received from associated companies and others	525	-522	3
Interest and other financial payments, net	-953		-953
Income taxes paid	-2 342		-2 342
Other operating cash flow items, net	-878		-878
Net cash flows from operating activities	15 071	-522	14 549
Net purchases of property, plant and equipment, intangible assets, financial assets and other non-current assets	-1 789		-1 789
Free cash flow	13 282	-522	12 760

 $^{^{\}scriptscriptstyle 1}$ In 2021, the dividend received from Roche in relation to the distribution of its 2020 net income was received in Q1 2021.

The following table provides a summary of the percentage point impact from excluding the effect of the divestment of our investment in Roche (in Q4 2021) on the USD and constant currencies % change on key Group figures.

Fourth quarter

	% change as published Q4 2022	In USD % change excluding impacts from the divestment of our Roche investment Q4 2022	Percentage point impact Q4 2022	% change as published Q4 2022	constant currencie % change excluding impacts from the divestment of our Roche investment Q4 2022	Percentage point impact Q4 2022
Net income	-91	-12	-79	-90	2	-92
Basic earnings per share (USD)	-91	-8	-83	-89	7	-96
Free cash flow	17	17	0			
Core net income	4	7	-3	14	17	-3
Core basic earnings per share (USD)	9	12	-3	19	23	-4

Full year

		In USD		In constant currencies		
	% change as published FY 2022	% change excluding impacts from the divestment of our Roche investment FY 2022	Percentage point impact FY 2022	% change as published FY 2022	% change excluding impacts from the divestment of our Roche investment FY 2022	Percentage point impact FY 2022
Net income	-71	-20	-51	-67	-9	-58
Basic earnings per share (USD)	-70	-17	-53	-66	-7	-59
Free cash flow	-10	-6	-4			
Core net income	-5	2	-7	3	11	-8
Core basic earnings per share (USD)	-3	5	-8	6	14	-8

Net debt

Condensed consolidated changes in net debt Fourth quarter

(USD millions)	Q4 2022	Q4 2021
Net change in cash and cash equivalents	-1 209	5 196
Change in marketable securities, commodities, time deposits, financial debts and derivatives		
financial instruments	1 648	18 212
Change in net debt	439	23 408
Net debt at October 1	-7 684	-24 276
Net debt at December 31	-7 245	-868

Condensed consolidated changes in net debt Full year

(USD millions)	FY 2022	FY 2021
Net change in cash and cash equivalents	-4 890	2 749
Change in marketable securities, commodities, time deposits, financial debts and derivatives		
financial instruments	-1 487	20 864
Change in net debt	-6 377	23 613
Net debt at January 1	-868	-24 481
Net debt at December 31	-7 245	-868

Components of net debt

(USD millions)	Dec 31, 2022	Dec 31, 2021
Non-current financial debts	-20 244	-22 902
Current financial debts and derivative financial instruments	-5 931	-6 295
Total financial debts	-26 175	-29 197
Less liquidity		
Cash and cash equivalents	7 517	12 407
Marketable securities, commodities, time deposits and derivative financial instruments	11 413	15 922
Total liquidity	18 930	28 329
Net debt at end of period	-7 245	-868

Share information

	Dec 31, 2022	Dec 31, 2021
Number of shares outstanding	2 119 609 057	2 234 939 948
Registered share price (CHF)	83.59	80.28
ADR price (USD)	90.72	87.47
Market capitalization (USD billions) 1	191.5	196.1
Market capitalization (CHF billions) ¹	177.2	179.4

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 year end CHF/USD exchange rate.

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:

Fourth quarter

(USD millions)	Q4 2022			Q4 2021		
	IFRS cash flow	Adjustments	Free cash flow	IFRS cash flow	Adjustments	Free cash flow
Net cash flows from operating activities	4 111		4 111	3 884		3 884
Net cash flows (used in)/from investing activities ¹	-1 467	908	-559	4 563	-5 420	-857
Net cash flows used in financing activities ²	-3 994	3 994	0	-3 251	3 251	0
Free cash flow			3 552			3 027

¹ Excluded from the free cash flow are cash flows from investing activities associated with acquisitions and divestments of businesses and of interest in associated companies, purchases and sales of marketable securities commodities and time denosits.

(USD millions)	FY 2022			FY 2021		
	IFRS cash flow	Adjustments	Free cash flow	IFRS cash flow	Adjustments	Free cash flow
Net cash flows from operating activities	14 236		14 236	15 071		15 071
Net cash flows from/(used in) investing activities ¹	1 468	-3 759	-2 291	4 208	-5 997	-1 789
Net cash flows used in financing activities ²	-20 562	20 562	0	-16 264	16 264	0
Free cash flow			11 945			13 282

¹ Excluded from the free cash flow are cash flows from investing activities associated with acquisitions and divestments of businesses and of interest in associated companies, purchases and sales of marketable securities, commodities and time deposits.

purchases and sales of marketable securities, commodities and time deposits.
² Net cash flows used in financing activities are excluded from the free cash flow.

² 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:

Fourth quarter

(USD millions)	Q4 2022	Q4 2021
Operating income	1 949	2 562
Adjustments for non-cash items		
Depreciation, amortization and impairments	1 920	1 531
Change in provisions and other non-current liabilities	508	100
Other	49	172
Operating income adjusted for non-cash items	4 426	4 365
Dividends received from associated companies and others		2
Interest and other financial receipts	115	5
Interest and other financial payments	-228	-192
Income taxes paid	-416	-883
Payments out of provisions and other net cash movements in non-current liabilities	-371	-589
Change in inventories and trade receivables less trade payables	636	893
Change in other net current assets and other operating cash flow items	-51	283
Net cash flows from operating activities	4 111	3 884
Purchases of property, plant and equipment	-397	-460
Proceeds from sale of property, plant and equipment	103	74
Purchases of intangible assets	-250	-517
Proceeds from sale of intangible assets	5	84
Purchases of financial assets	-31	-67
Proceeds from sale of financial assets	11	34
Purchases of other non-current assets		-5
Proceeds from sale of other non-current assets		0
Free cash flow	3 552	3 027

Full year

(USD millions)	FY 2022	FY 2021
Operating income	9 197	11 689
Adjustments for non-cash items		
Depreciation, amortization and impairments	7 441	6 075
Change in provisions and other non-current liabilities	1 403	896
Other	460	59
Operating income adjusted for non-cash items	18 501	18 719
Dividends received from associated companies and others	1	525
Interest and other financial receipts	325	13
Interest and other financial payments	-728	-966
Income taxes paid	-1 975	-2 342
Payments out of provisions and other net cash movements in non-current liabilities	-885	-1 119
Change in inventories and trade receivables less trade payables	-1 467	-329
Change in other net current assets and other operating cash flow items	464	570
Net cash flows from operating activities	14 236	15 071
Purchases of property, plant and equipment	-1 198	-1 378
Proceeds from sale of property, plant and equipment	167	240
Purchases of intangible assets	-1 473	-1 593
Proceeds from sale of intangible assets	202	748
Purchases of financial assets	-121	-191
Proceeds from sale of financial assets	133	442
Purchases of other non-current assets	-1	-61
Proceeds from sale of other non-current assets		4
Free cash flow	11 945	13 282

Effects of currency fluctuations

Principal currency translation rates

(USD per unit)	Average rates Q4 2022	Average rates Q4 2021	Average rates FY 2022	Average rates FY 2021	Period-end rates Dec 31, 2022	Period-end rates Dec 31, 2021
1 CHF	1.038	1.085	1.048	1.094	1.081	1.093
1 CNY	0.141	0.156	0.149	0.155	0.144	0.157
1 EUR	1.020	1.144	1.054	1.183	1.065	1.131
1 GBP	1.173	1.349	1.237	1.376	1.207	1.351
100 JPY	0.708	0.880	0.766	0.912	0.757	0.868
100 RUB	1.589	1.377	1.481	1.357	1.380	1.336

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.

Fourth quarter

	Change in USD % Q4 2022	Change in constant currencies % Q4 2022	Percentage point currency impact Q4 2022	Change in USD % Q4 2021	Change in constant currencies % Q4 2021	Percentage point currency impact Q4 2021
Total Group						
Net sales to third parties	-4	3	-7	4	6	-2
Operating income	-24	-14	-10	-3	-1	-2
Net income	-91	-90	-1	nm	nm	nm
Basic earnings per share (USD)	-91	-89	-2	nm	nm	nm
Core operating income	6	15	-9	9	12	-3
Core net income	4	14	-10	3	6	-3
Core basic earnings per share (USD)	9	19	-10	4	7	-3
Innovative Medicines						
Net sales to third parties	-3	3	-6	5	7	-2
Operating income	-21	-12	-9	3	6	-3
Core operating income	5	14	-9	12	15	-3
Sandoz						
Net sales to third parties	-8	0	-8	0	2	-2
Operating income	-29	-20	-9	4	4	0
Core operating income	-26	-18	-8	0	0	0
Corporate						
Operating loss	8	2	6	-156	-154	-2
Core operating loss	58	57	1	-28	-28	0

Currency impact on key figures Full year

	Change in USD % FY 2022	Change in constant currencies % FY 2022	point currency impact	Change in USD % FY 2021	Change in constant currencies % FY 2021	Percentage point currency impact FY 2021
Total Group						
Net sales to third parties	- 2	4	-6	6	4	2
Operating income	-21	-13	-8	15	13	2
Net income	-71	-67	-4	198	195	3
Basic earnings per share (USD)	-70	-66	-4	202	200	2
Core operating income	0	8	-8	8	6	2
Core net income	-5	3	-8	7	5	2
Core basic earnings per share (USD)	-3	6	-9	9	7	2
Innovative Medicines						
Net sales to third parties	- 2	4	-6	8	6	2
Operating income	-18	-9	-9	17	15	2
Core operating income	0	8	-8	12	10	2
Sandoz						
Net sales to third parties	-4	4	-8	0	-2	2
Operating income	-10	-2	-8	53	48	5
Core operating income	-8	-1	-7	-12	-14	2
Corporate						
Operating loss	-73	-84	11	nm	nm	nm
Core operating loss	31	28	3	-23	-20	-3

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 "continued," "growth," "ongoing," "to grow," "on track," "to become, "to leverage," "growing," "building," "launch," "looking ahead," "expect," "continue," "to deliver," "transformation," "focus," "address," "growing," "accelerate," "continuing," "remains," "scaling," "on track," "expected," "guidance," "to be presented," "outlook," "driven," "long-term," "driven," "innovation," "transformative," "priority," "potential," "can," "submissions," "will," "proposes," "proposal," "to reduce," "advance," 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; regarding potential future sales or earnings of the Group or any of its divisions; or by discussions of strategy, plans, expectations or intentions; or regarding the Group's liquidity or cash flow positions and its ability to meet its ongoing financial obligations and operational needs; or regarding the conclusion of the strategic review of Sandoz, our planned 100% spin-off of Sandoz, through which we plan to become a fully focused Innovative Medicines business. 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 100% 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.

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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 106,000 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.

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

March 7, 2023 Annual General Meeting
April 25, 2023 First quarter 2023 results
July 18, 2023 Second quarter & Half yea

July 18, 2023 Second quarter & Half year 2023 results
October 24, 2023 Third quarter & Nine months 2023 results