

Novartis Second Quarter and Half Year 2021

**Condensed interim financial report –
supplementary data**

Novartis Second Quarter and Half Year 2021 Condensed Interim Financial Report – Supplementary Data

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Group

Key Figures

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc ¹
Net sales to third parties	12 956	11 347	14	9	25 367	23 630	7	3
Divisional operating income	3 639	2 354	55	48	6 193	5 064	22	18
Corporate income and expense, net	-160	-2	nm	nm	-299	32	nm	nm
Operating income	3 479	2 352	48	41	5 894	5 096	16	12
<i>As % of net sales</i>	<i>26.9</i>	<i>20.7</i>			<i>23.2</i>	<i>21.6</i>		
Income from associated companies	239	183	31	30	495	306	62	62
Interest expense	-201	-220	9	8	-403	-459	12	12
Other financial income and expense	-11	-27	59	99	-30	-34	12	77
Taxes	-611	-421	-45	-39	-1 002	-869	-15	-12
Net income	2 895	1 867	55	49	4 954	4 040	23	19
Basic earnings per share (USD)	1.29	0.82	57	52	2.20	1.77	24	21
Cash flows from operating activities	4 132	3 961	4		6 262	6 489	-3	
Free cash flow¹	4 235	3 631	17		5 832	5 652	3	
Core¹								
Core operating income	4 345	3 669	18	13	8 302	7 846	6	2
<i>As % of net sales</i>	<i>33.5</i>	<i>32.3</i>			<i>32.7</i>	<i>33.2</i>		
Core net income	3 716	3 108	20	14	7 129	6 657	7	3
Core basic earnings per share (USD)	1.66	1.36	22	16	3.17	2.92	9	5

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

nm = not meaningful

COVID-19 update

The COVID-19 situation continues to evolve and is taking differing courses across the multitude of geographies in which Novartis operates. While demand is starting to return to pre-COVID-19 levels in most geographies and therapeutic areas, we still see a slight impact on parts of our business for example in oncology, generics and certain geographies. We are assuming further easing of COVID-19 restrictions in the second half of the year with a positive impact on business dynamics.

The Group has not experienced liquidity or cash flow disruptions during Q2 2021 due to the COVID-19 pandemic. We are confident that Novartis is well positioned to meet its ongoing financial obligations and has sufficient liquidity to support its normal business activities.

Financials

Second quarter

Net sales

Net sales were USD 13.0 billion (+14%, +9% cc) in the second quarter. Volume contributed 13 percentage points to sales growth, driven by *Entresto*, *Cosentyx*, *Zolgensma* and *Lucentis*. Volume growth was partly offset by price erosion of 2 percentage points and negative impact from generic competition of 2 percentage points. Excluding prior year COVID-19 related forward purchasing de-stocking, we estimate second quarter net sales grew +5% (cc, +10% USD).¹

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 160 million compared to an expense of USD 2 million in the second quarter of 2020, mainly driven by lower contributions from the Novartis Venture Fund.

Operating income

Operating income was USD 3.5 billion (+48%, +41% cc) mainly driven by higher sales as well as divestment gains, partly offset by higher spend. Lower impairments were offset by lower financial assets gains, higher restructuring and higher amortization.

Core operating income was USD 4.3 billion (+18%, +13% cc) mainly driven by higher sales and favorable gross margin, partly offset by higher spend. Core operating income margin was 33.5% of net sales, increasing by 1.2 percentage points (+1.2 percentage points cc). Excluding prior year COVID-19 related forward purchasing de-stocking, we estimate core operating income increased +4% (cc, +10% USD).¹

Income from associated companies

Income from associated companies increased to USD 239 million in the second quarter of 2021 from USD 183 million in the prior year, mainly due to the increase in the estimated share of income from Roche Holding AG.

Core income from associated companies increased to USD 278 million from USD 272 million in the prior year mainly due to a higher estimated core income contribution from Roche Holding AG for the current period.

Interest expense and other financial income/expense

Interest expense amounted to USD 201 million compared to the prior year interest expense of USD 220 million mainly due to lower interest expense on financial debts. Other financial income and expense amounted to a net expense of USD 11 million compared to a net expense of USD 27 million in prior year mainly due to lower currency losses.

Taxes

The tax rate in the second quarter was 17.4% compared to 18.4% in the prior year quarter. The current year second quarter tax rate was impacted by the effect of an increase in an uncertain tax position. The prior year second quarter tax rate was negatively impacted by the effect of adjusting to the updated estimated full year tax rate.

¹Growth excluding prior year COVID-19 related forward purchasing de-stocking is a non-IFRS measure, an explanation for this measure can be found on page 61

Excluding these impacts, the second quarter tax rate would have been 16.0% compared to 16.8% in the prior year quarter. The decrease from prior year quarter was mainly the result of a change in profit mix.

The core tax rate was 16.0% in the second quarter and 16.0% in the prior year quarter.

Net income, EPS and free cash flow

Net income was USD 2.9 billion (+55%, +49% cc) benefiting mainly from lower financial expenses and higher Roche income. EPS was USD 1.29 (+57%, +52% cc), growing faster than net income benefiting from lower weighted average number of shares outstanding.

Core net income was USD 3.7 billion (+20%, +14% cc) mainly driven by growth in core operating income. Core EPS was USD 1.66 (+22%, +16% cc), growing faster than core net income benefiting from lower weighted average number of shares outstanding.

Cash flows from operating activities amounted to USD 4.1 billion.

Free cash flow amounted to USD 4.2 billion (+17%), compared to USD 3.6 billion in the prior year quarter. This increase was mainly driven by operating income growth, including higher divestments, partly offset by unfavorable changes in working capital.

First half

Net sales

Net sales were USD 25.4 billion (+7%, +3% cc) in the first half. Volume contributed 7 percentage points to sales growth, driven by *Entresto*, *Cosentyx* and *Zolgensma*. Volume growth was partly offset by price erosion of 2 percentage points and negative impact from generic competition of 2 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 299 million, compared to an income of USD 32 million in the first half of 2020, mainly driven by royalty settlement gains related to intellectual property rights in the prior year period and lower contributions from the Novartis Venture Fund.

Operating income

Operating income was USD 5.9 billion (+16%, +12% cc) mainly driven by higher sales, lower legal expenses and higher divestments, partly offset by higher spend and restructuring.

Core operating income was USD 8.3 billion (+6%, +2% cc) mainly driven by higher sales, partly offset by higher spend. Core operating income margin was 32.7% of net sales, decreasing by 0.5 percentage points (-0.4 percentage points cc).

Income from associated companies

Income from associated companies increased to USD 495 million in the first half of 2021, from USD 306 million in the prior year, mainly due to the increase in the share of income from Roche Holding AG. The estimated first half income for Roche Holding AG, net of amortization, was USD 457 million compared to USD 372 million in prior year. A positive prior year true up of USD 40 million has been recognized in the first quarter of 2021, compared to a negative true up of USD 64 million in the first quarter of 2020.

Core income from associated companies increased to USD 591 million from USD 580 million in prior year due to a higher estimated core income contribution from Roche Holding AG for the current period. The favorable prior year core income true up from Roche of USD 40 million was broadly in line with the true up recognized in the first quarter of 2020 of USD 38 million.

Interest expense and other financial income/expense

Interest expense decreased to USD 403 million from USD 459 million in prior year, mainly due to lower interest expense on financial debts.

Other financial income and expense amounted to a net expense of USD 30 million compared to a net expense of USD 34 million in prior year mainly due to lower currency losses partially offset by lower interest income and higher financial expense.

Taxes

The tax rate in the first half was 16.8% compared to 17.7% in the prior year period. The current year first half tax rate was impacted by the effect of an increase in an uncertain tax position. The prior year first half tax rate was negatively impacted by the effect of non-deductible legal settlement expenses.

Excluding these impacts, the first half tax rate would have been 16.0% compared to 16.8% in the prior year period. The decrease from prior year first half rate was mainly the result of a change in profit mix.

The core tax rate was 16.0% in the first half and 16.0% in the prior year period.

Net income, EPS and free cash flow

Net income was USD 5.0 billion (+23%, +19% cc) benefiting mainly from lower financial expenses and higher Roche income. EPS was USD 2.20 (+24%, +21% cc), growing faster than net income benefiting from lower weighted average number of shares outstanding.

Core net income was USD 7.1 billion (+7%, +3% cc) mainly driven by growth in core operating income. Core EPS was USD 3.17 (+9%, +5% cc), growing faster than core net income benefiting from lower weighted average number of shares outstanding.

Cash flows from operating activities amounted to USD 6.3 billion.

Free cash flow amounted to USD 5.8 billion (+3%), compared to USD 5.7 billion in the prior year period. This increase was mainly driven by higher divestment proceeds, which were mostly offset by the USD 650 million upfront payment to in-license tislelizumab from BeiGene.

Innovative Medicines

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc
Net sales	10 559	9 188	15	10	20 663	18 943	9	5
Operating income	3 177	2 033	56	50	5 419	4 788	13	10
<i>As % of net sales</i>	<i>30.1</i>	<i>22.1</i>			<i>26.2</i>	<i>25.3</i>		
Core operating income	3 936	3 301	19	14	7 602	6 908	10	6
<i>As % of net sales</i>	<i>37.3</i>	<i>35.9</i>			<i>36.8</i>	<i>36.5</i>		

COVID-19 impacts

Growth versus prior year was positively impacted by the significant negative effects of the pandemic on prior year results: Q2 2020 saw a strong disruption to practices and the de-stocking of Q1 2020 COVID-19 related forward purchasing. While demand is starting to return to pre-COVID-19 levels in most geographies and therapeutic areas, we still see a slight impact on parts of our business for example in oncology and certain geographies.

Second quarter

Net sales

Net sales were USD 10.6 billion (+15%, +10% cc). Volume contributed 13 percentage points to sales growth. Generic competition had a negative impact of 3 percentage points, mainly due to *Ciprodex*, *Diovan*, *Exjade*, *Afinitor* and *Glivec*. Net pricing had a negligible impact on sales growth. Excluding prior year COVID-19 related forward purchasing de-stocking, we estimate second quarter net sales increased by +7% (cc).¹

In the US (USD 3.7 billion) sales grew 6% driven by *Cosentyx*, *Entresto* and the launch of *Kesimpta*. In Europe (USD 3.8 billion, +27%, +17% cc) sales growth was driven by *Zolgensma*, *Lucentis*, *Entresto*, *Jakavi* and *Cosentyx*. Japan sales were USD 0.6 billion (0%, +2% cc). Emerging Growth Markets grew +17% (+12% cc), including double-digit (cc) growth in China, with the launches of *Entresto* and *Cosentyx*.

Pharmaceuticals BU sales were USD 6.6 billion (+18%, +12% cc) with continued strong growth from *Entresto* (USD 886 million, +53%, +46% cc), *Cosentyx* (USD 1.2 billion, +24%, +21% cc), *Zolgensma* (USD 315 million, +54%, +48% cc) and *Kesimpta* (USD 66 million). *Lucentis* (USD 551 million, +37%, +27% cc) benefited from a low prior year comparison due to COVID-19 related disruptions.

Oncology BU sales were USD 3.9 billion (+11%, +7% cc), driven by strong performance from *Promacta/Revolade* (USD 513 million, +22%, +18% cc), *Jakavi* (USD 398 million, +28%, +19% cc), *Kisqali* (USD 225 million, +42%, +36% cc), *Tafinlar + Mekinist* (USD 425 million, +15%, +10% cc), *Tasigna* (USD 523 million, +9%, +6% cc) and *Kymriah* (USD 147 million, +25%, +19% cc).

Operating income

Operating income was USD 3.2 billion (+56%, +50% cc), mainly driven by strong sales growth, higher divestment income and lower impairments, partly offset by higher amortization, higher restructuring cost and higher spend. Operating income margin was 30.1% of net sales, increasing 8.0 percentage points (+7.9 percentage points in cc).

Core adjustments were USD 0.8 billion, mainly due to amortization, compared to USD 1.3 billion in prior year. Core adjustments decreased compared to prior year mainly due to higher divestment income and lower impairments, partly offset by higher amortization and restructuring cost.

Core operating income was USD 3.9 billion (+19%, +14% cc) mainly driven by higher sales and favorable gross margin partly offset by higher spend. Core operating income margin was 37.3% of net sales, increasing 1.4 percentage points (+1.3 percentage points cc). Core gross margin as a percentage of sales increased by 1.6 percentage points (cc) mainly driven by productivity. Core R&D expenses as a percentage of net sales did not have a material impact on margin. Core SG&A expenses as a percentage of net sales decreased by 0.4 percentage points (cc). Core Other Income and Expense decreased the margin by 0.7 percentage points (cc) mainly due to prior year pre-launch inventory provision release.

¹Growth excluding prior year COVID-19 related forward purchasing de-stocking is a non-IFRS measure, an explanation for this measure can be found on page 61

First half

Net sales

Net sales were USD 20.7 billion (+9%, +5% cc). Volume contributed 8 percentage points to growth. Generic competition had a negative impact of 3 percentage points. Pricing had a negligible impact on sales growth.

The US (USD 7.3 billion, +3%) delivered strong performance of *Entresto*, *Cosentyx* and *Kesimpta*. Europe sales (USD 7.4 billion, +16%, +8% cc) grew driven by *Zolgensma*, *Entresto* and *Lucentis*. Japan sales were USD 1.1 billion (-5%, -5% cc) as growth was negatively impacted by the *Galvus* co-promotion agreement. Emerging Growth Markets sales grew +11% (+9% cc), led by double-digit growth in China, including the launches of *Cosentyx* and *Entresto*.

Pharmaceuticals BU grew 10% (+6% cc) driven by *Entresto* (USD 1.7 billion, +46%, +40% cc), *Cosentyx* (USD 2.2 billion, +19%, +16% cc), *Zolgensma* (USD 0.6 billion, +69%, +63% cc), *Lucentis* (USD 1.1 billion, +23%, +15% cc) and *Kesimpta* (0.1 billion).

Oncology BU grew +7% (+4% cc) driven by *Promacta/Revolade* (USD 1.0 billion, +18%, +16% cc), *Kisqali* (USD 0.4 billion, +31%, +28% cc), *Jakavi* (USD 0.8 billion, +21%, +14% cc), *Kymriah* (USD 0.3 billion, +41%, +35% cc), *Tafinlar + Mekinist* (USD 0.8 billion, +11%, +7% cc) and *Adakveo* (USD 0.1 billion, +119%, +118% cc), partly offset by generic competition for *Afinitor*, *Exjade* and *Glivec*.

Operating income

Operating income was USD 5.4 billion (+13%, +10% cc). Growth was mainly driven by sales growth partly offset by higher spend. Higher divestment income, higher financial assets gains and lower impairments were offset by higher restructuring costs and higher amortization.

Operating income margin was 26.2% of net sales, increasing 0.9 percentage points (+1.1 percentage points cc).

Core adjustments were USD 2.2 billion, mainly due to amortization. Core adjustments were in line with prior year as higher divestment income, higher financial assets gains and lower impairments were offset by higher restructuring costs and higher amortization.

Core operating income was USD 7.6 billion (+10%, +6% cc) mainly driven by sales growth partly offset by higher spend. Core operating income margin was 36.8% of net sales, increasing 0.3 percentage points (+0.4 percentage points cc). Core gross margin increased by 0.3 percentage points (cc). Core R&D expenses as a percentage of net sales did not have a material impact on margin. Core SG&A expenses declined by -0.4 percentage points (cc). Core Other Income and Expense net decreased the margin by 0.3 percentage points (cc).

ONCOLOGY BUSINESS UNIT

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc
Hematology								
<i>Tasigna</i>	523	480	9	6	1 038	967	7	4
<i>Promacta/Revolade</i>	513	422	22	18	976	825	18	16
<i>Jakavi</i>	398	310	28	19	761	628	21	14
<i>Gleevec/Glivec</i>	263	288	-9	-13	535	617	-13	-17
<i>Exjade/Jadenu</i>	147	163	-10	-14	300	335	-10	-15
<i>Kymriah</i>	147	118	25	19	298	211	41	35
<i>Adakveo</i>	42	21	100	96	79	36	119	118
Other	76	73	4	0	179	149	20	16
Total Hematology	2 109	1 875	12	8	4 166	3 768	11	6
Solid Tumor								
<i>Tafinlar + Mekinist¹</i>	425	371	15	10	818	737	11	7
<i>Sandostatin</i>	359	341	5	2	717	715	0	-2
<i>Afinitor/Votubia</i>	264	266	-1	-2	518	562	-8	-9
<i>Kisqali</i>	225	159	42	36	420	320	31	28
<i>Votrient</i>	153	162	-6	-9	296	328	-10	-13
<i>Lutathera</i>	118	105	12	10	240	217	11	8
<i>Piqray</i>	82	79	4	4	160	153	5	4
<i>Tabrecta</i>	22	6	nm	nm	39	6	nm	nm
Other	172	184	-7	-10	337	390	-14	-17
Total Solid Tumor	1 820	1 673	9	5	3 545	3 428	3	1
Total Novartis Oncology business unit	3 929	3 548	11	7	7 711	7 196	7	4

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

HEMATOLOGY

Tasigna (USD 523 million, +9%, +6% cc) sales growth was mainly driven by Emerging Growth Markets.

Promacta/Revolade (USD 513 million, +22%, +18% cc) showed double-digit growth across all regions, driven by increased use in chronic immune thrombocytopenia (ITP) and as first-line treatment for severe aplastic anemia (SAA).

Jakavi (USD 398 million, +28%, +19% cc) growth in all regions was driven by strong demand in the myelofibrosis and polycythemia vera indications. Regulatory filings based on the REACH2 and REACH3 trials in steroid-resistant/dependent graft-versus-host disease (GvHD) are under review and approvals are expected in 2022.

Gleevec/Glivec (USD 263 million, -9%, -13% cc) declined due to increased generic competition.

Exjade/Jadenu (USD 147 million, -10%, -14% cc) declined in most regions due to pressure from generic competition.

Kymriah (USD 147 million, +25%, +19% cc) continued to see double-digit growth, predominantly driven by Japan, Europe and Emerging Growth Markets. Coverage continued to expand, with more than 325 qualified treatment centers in 30 countries having coverage for at least one indication. *Kymriah* showed robust data from the primary analysis of the pivotal Phase II ELARA trial in patients with relapsed or refractory (r/r) follicular lymphoma (FL) presented at ASCO.

Adakveo (USD 42 million, +100%, +96% cc) US launch continued to progress with a growing number of accounts purchasing *Adakveo*, which is now approved in 44 countries. Reimbursement discussions continue with individual countries.

SOLID TUMORS

Tafinlar + Mekinist (USD 425 million, +15%, +10% cc) the global BRAF/MEK-inhibitor leader, saw continued demand increases in BRAF+ adjuvant melanoma and NSCLC, while maintaining demand in the highly competitive metastatic melanoma market. *Tafinlar + Mekinist* is the first and only targeted therapy to achieve five-year relapse-free sur-

vival (RFS) and overall survival (OS) data in the adjuvant and metastatic melanoma settings, respectively. More than 185,000 patients have been treated with *Tafinlar + Mekinist* worldwide to date since launch.

Sandostatin (USD 359 million, +5%, +2% cc) grew in Emerging Growth Markets and the US, while growth was partially offset by declining sales in Europe and Japan due to ongoing competitive pressure including generics impact.

Afinitor/Votubia (USD 264 million, -1%, -2% cc) declined due to generic competition in the US and Europe.

Kisqali (USD 225 million, +42%, +36% cc) continued to see growth in Europe, Emerging Growth Markets and the US, benefiting from the positive impact of updated MONALEESA-3 data, where *Kisqali* has shown the longest median overall survival in postmenopausal HR+/HER2- metastatic breast cancer patients. *Kisqali* stands apart as the only CDK4/6 inhibitor that significantly improves OS in two large Ph3 trials, regardless of metastatic sites, endocrine treatment (ET) resistance, ET partner, treatment line or menopausal status, while maintaining quality of life. US sales were impacted by COVID-19 as new patient starts, physician visits and cancer screenings continued to be affected. *Kisqali* is approved for use in more than 75 countries around the world. Novartis is in US ANDA litigation with generic manufacturers.

Votrient (USD 153 million, -6%, -9% cc) declined due to increased competition in the US, Europe and Japan.

Lutathera (USD 118 million, +12%, +10% cc) grew in the second quarter, with over 400 total centers now actively treating patients globally. Sales from all AAA brands (including *Lutathera* and radiopharmaceutical diagnostic products) were USD 180 million.

Piqray (USD 82 million, +4%, +4% cc) benefited from launches in Europe and Emerging Growth Markets, while US sales declined as new patient starts, physician visits and cancer screenings were still impacted by COVID-19. *Piqray* is the first and only therapy specifically developed for the approximately 40% of HR+/HER2- advanced breast cancer patients who have a PIK3CA mutation, which is associated with poor prognoses. *Piqray* is approved in more than 50 countries, including the US and EU member states, with over 40 regulatory submissions in various stages of review.

Tabrecta (USD 22 million) continued to gain traction in the US with prescribing across all major lung cancer centers nationwide. The first published mature overall survival (OS) data for *Tabrecta* further supports its evidence in metastatic NSCLC with a mutation that leads to MET exon 14 skipping (METex14), as detected by an FDA-approved test. *Tabrecta* is now approved in six countries.

PHARMACEUTICAL BUSINESS UNIT

IMMUNOLOGY, HEPATOLOGY AND DERMATOLOGY

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc
Immunology, Hepatology and Dermatology								
<i>Cosentyx</i>	1 175	944	24	21	2 228	1 874	19	16
<i>Ilaris</i>	247	200	24	21	503	413	22	20
Total Immunology, Hepatology and Dermatology	1 422	1 144	24	21	2 731	2 287	19	17

Xolair sales for all indications are reported in the Respiratory and Allergy franchise

Cosentyx (USD 1.2 billion, +24%, +21% cc) saw strong growth driven by sustained underlying demand across indications in the US and Europe, and strong volume growth in China following National Reimbursement Drug List (NRDL) listing in Q1 2021. In May, Novartis announced that the CHMP had granted a positive opinion for *Cosentyx* 75 mg/0.5 mL pre-filled syringe (PFS). Also in May, *Cosentyx* received approval from the FDA for moderate to severe plaque psoriasis in pediatric patients six years and older. At EULAR 2021, Novartis presented positive Phase III results from the JUNIPERA study supporting *Cosentyx* as a potential treatment in two subtypes of juvenile idiopathic arthritis (JIA). These data have supported regulatory submissions to both US and European regulators made in June.

Ilaris (USD 247 million, +24%, +21% cc) strong sales were driven by continued double-digit volume growth across all regions. The launch of the adult-onset Still's disease (AOSD) indication in June 2020 in the US remains a significant driver of growth, alongside strong performance for all other adult rheumatology indications. In Europe, the reimbursement for the Periodic Fever Syndromes (PFS) indication in the UK as well as the inclusion of the PFS indication for pediatric patients in the Federal Orphan Fund in Russia, have made notable contributions to the *Ilaris* performance in Q2.

NEUROSCIENCE

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc
Neuroscience								
<i>Gilenya</i>	721	738	-2	-6	1 428	1 510	-5	-9
<i>Zolgensma</i>	315	205	54	48	634	375	69	63
<i>Mayzent</i>	69	34	103	96	124	64	94	89
<i>Kesimpta</i>	66		nm	nm	116		nm	nm
<i>Aimovig</i>	53	33	61	45	100	69	45	33
Other	11	15	-27	-19	23	27	-15	-13
Total Neuroscience	1 235	1 025	20	16	2 425	2 045	19	15

nm = not meaningful

Gilenya (USD 721 million, -2%, -6% cc) sales declined due to increased competition. *Gilenya* remains the top prescribed high efficacy therapy in 32 countries and the only one approved to treat pediatric RMS both in the EU and the US. Novartis is in US patent litigation with manufacturers of generic and other tablet forms of *Gilenya*. In August 2020, the US District Court in Delaware issued a favorable decision finding the dosage regimen patent valid and infringed, which has been appealed.

Zolgensma (USD 315 million, +54%, +48% cc) had a strong second quarter driven by expanding access in Europe and ongoing geographic expansion. US sales were broadly in line with prior year. In Europe, uptake was driven by several formal reimbursement agreements in place including Germany, the UK, Italy and several other markets. Reimbursement agreements are also in place in Emerging Growth Markets, including Egypt and Argentina. *Zolgensma* is now approved in 41 countries.

Mayzent (USD 69 million, +103%, +96% cc) continued to grow, driven by fulfilling an important unmet need in patients showing signs of progression despite being on other treatments. *Mayzent* is the first and only oral disease modifying therapy (DMT) studied and proven to delay disease progression in a broad SPMS patient population. *Mayzent* is now approved in 58 countries.

Kesimpta (USD 66 million) sales were driven by launch uptake, strong access and increased demand, despite some COVID-19 vaccination associated delays. To initiate access, *Kesimpta* is being provided free of charge for US patients who are eligible for reimbursement until they are covered by their insurance. Novartis expects the share of free goods to decrease over time as reimbursement progresses. *Kesimpta* is now launched in several markets, including Japan, Canada and Switzerland, with further launches expected in H2 2021. *Kesimpta* was also approved in several other markets, including Brazil. Currently Novartis is in discussion with payers across Europe and beyond to achieve further market access.

Aimovig (USD 53 million, ex-US, ex-Japan +61%, +45% cc) is the most prescribed anti-CGRP worldwide, with more than half a million patients prescribed worldwide in the post-trial setting. Novartis and Amgen agreed that effective June 2, 2021 previously shared US business operations for *Aimovig* will be transferred from Novartis to Amgen, who assumes responsibility for all related US business operations going forward. This decision, which will help enhance operational efficiencies in the increasingly competitive migraine space, will not have an impact on the distribution of, or access to *Aimovig* in the US. Novartis remains committed to supporting the migraine community and will continue to maintain the financial aspects of the current US collaborative agreement, including sharing the commercialization costs and receiving royalties on sales. Novartis retains the exclusive rights to commercialize *Aimovig* in the rest of the world with the exception of Japan. During the ongoing litigation between the companies the collaboration continues and will remain in force until a final court decision.

OPHTHALMOLOGY

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc
Ophthalmology								
<i>Lucentis</i>	551	401	37	27	1 096	888	23	15
<i>Xiidra</i>	118	79	49	48	226	169	34	33
<i>Beovu</i>	47	34	38	32	86	102	-16	-18
Other	398	423	-6	-11	797	974	-18	-21
Total Ophthalmology	1 114	937	19	12	2 205	2 133	3	-2

Lucentis (USD 551 million, +37%, +27% cc) showed double-digit growth, benefiting from a low prior year comparison due to COVID-19 related disruption and strong growth in China following NRDL listing in Q4 2019.

Xiidra (USD 118 million, +49%, +48% cc) showed double-digit growth, benefiting from increased brand awareness among diagnosed patients suffering from symptoms of dry eye disease and a lower prior year base. Novartis is in US ANDA litigation with generic manufacturers.

Beovu (USD 47 million, +38%, +32% cc) sales grew versus prior year following continued geographic expansion. Launch roll-out continued, with approval now in 68 countries and reimbursement achieved in 19 countries, including the US, Germany, Japan, the UK and Italy.

Other ophthalmology products declined mainly due to generic impacts in the US, primarily for *Ciprodex* and *Azopt*.

CARDIOVASCULAR, RENAL AND METABOLISM

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc
Cardiovascular, Renal and Metabolism								
<i>Entresto</i>	886	580	53	46	1 675	1 149	46	40
Other	2		nm	nm	3	1	200	nm
Total Cardiovascular, Renal and Metabolism	888	580	53	47	1 678	1 150	46	40

nm = not meaningful

Entresto (USD 886 million, +53%, +46% cc) sustained strong growth with increased patient share across markets, driven by demand as the essential first choice therapy for HF patients (reduced ejection fraction). Sales in the US also benefited from the FDA approval in February of an expanded indication in patients with left ventricular ejection fraction (LVEF) below normal, making *Entresto* the first therapy indicated for HFREF and the majority of HFpEF patients. The draft European Society of Cardiology HF guidelines as well as American College of Cardiology Expert Consensus Decision Pathway recommend *Entresto* as first line HF therapy. In China, the National Medical Products Administration (NMPA) granted a new indication for the treatment of essential hypertension on June 1, 2021, in addition to the HFREF indication. *Entresto* is approved in more than 100 countries. Novartis is in US ANDA litigation with generic manufacturers.

Leqvio is now approved, reimbursed in Germany and awaiting reimbursement in most of the EU, the UK and several other countries. *Leqvio* is indicated for the treatment of adults with primary hypercholesterolemia (heterozygous familial and non-familial) or mixed dyslipidemia, as an adjunct to diet. In the US, our response to the Complete Response Letter related to unresolved third party facility inspection-related conditions was re-submitted in early July for a Novartis owned manufacturing site. There were no concerns related to the efficacy or safety of *Leqvio*. Novartis has obtained global rights to develop, manufacture and commercialize *Leqvio* under a license and collaboration agreement with Alnylam Pharmaceuticals.

RESPIRATORY AND ALLERGY

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc
Respiratory and Allergy								
<i>Xolair</i>	355	289	23	14	690	596	16	9
<i>Ultibro Group</i>	150	149	1	-8	299	309	-3	-10
Other	12	6	100	133	21	10	110	99
Total Respiratory and Allergy	517	444	16	8	1 010	915	10	3

Xolair sales for all indications are reported in the Respiratory and Allergy franchise

Xolair (USD 355 million, +23%, +14% cc) continued growth, mainly driven by the chronic spontaneous urticaria (CSU) and severe allergic asthma (SAA) indications. The indication of nasal polyps has been approved and launched to date in the US, Germany and several other countries. In April 2021 the FDA approved *Xolair* for self-injection, which was also launched in the US in Q2 2021. Novartis co-promotes *Xolair* with Genentech in the US and shares a portion of operating income, but we do not record any US sales.

Ultibro Group (USD 150 million, +1%, -8% cc) sales declined in constant currencies due to competition. *Ultibro Group* consists of *Ultibro Breezhaler*, *Seebri Breezhaler* and *Onbrez Breezhaler*.

ESTABLISHED MEDICINES

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc
Established Medicines								
<i>Galvus Group</i>	280	279	0	-2	542	617	-12	-14
<i>Exforge Group</i>	247	238	4	-3	501	496	1	-5
<i>Diovan Group</i>	190	268	-29	-33	404	542	-25	-28
<i>Zortress/Certican</i>	109	106	3	-2	216	233	-7	-11
<i>Neoral/Sandimmun(e)</i>	93	96	-3	-9	187	197	-5	-10
<i>Voltaren/Cataflam</i>	96	82	17	13	182	174	5	3
Other	439	441	0	-6	871	958	-9	-13
Total Established Medicines	1 454	1 510	-4	-8	2 903	3 217	-10	-13

Galvus Group (USD 280 million, 0%, -2% cc) declined in constant currencies primarily due to generic competition in Emerging Growth Markets and the impact of VBP (volume based procurement) in China.

Exforge Group (USD 247 million, +4%, -3% cc) declined in constant currencies mainly due to generic competition in Europe and the impact of VBP in China.

Diovan Group (USD 190 million, -29%, -33% cc) declined mainly due to generic competition and the impact of VBP in China.

Zortress/Certican (USD 109 million, +3%, -2% cc) declined in constant currencies mainly due to generic competition in the US and the overall decline of the transplant market resulting from the impact of the COVID-19 pandemic.

Neoral/Sandimmun(e) (USD 93 million, -3%, -9% cc) declined in most markets mainly due to generic competition and the overall decline of the transplant market resulting from the impact of the COVID-19 pandemic.

Voltaren/Cataflam (USD 96 million, +17%, +13% cc) grew driven by recovery from the impact of the COVID-19 pandemic.

Sandoz

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc
Net sales	2 397	2 159	11	5	4 704	4 687	0	-5
Operating income	462	321	44	37	774	276	180	175
<i>As % of net sales</i>	<i>19.3</i>	<i>14.9</i>			<i>16.5</i>	<i>5.9</i>		
Core operating income	520	475	9	3	965	1 148	-16	-19
<i>As % of net sales</i>	<i>21.7</i>	<i>22.0</i>			<i>20.5</i>	<i>24.5</i>		

COVID-19 impacts

Second quarter sales grew versus last year, driven by the de-stocking of Q1 2020 COVID-19-related forward purchasing. Sandoz continued to see an impact from COVID-19, which contributed to lower market demand. Our Retail Generics and Anti-Infectives businesses were also impacted by the tail-end of a historically weak cough and cold season, which we believe is likely attributable to measures taken to manage the pandemic.

Second quarter

Net sales

Sandoz net sales were USD 2.4 billion (+11%, +5% cc) as the business is starting to stabilize. Volume increased by 13 percentage points, pricing had a negative impact of 8 percentage points. Excluding prior year COVID-19 related forward purchasing de-stocking, we estimate second quarter net sales declined by -1% (cc).¹

Sales in Europe were USD 1.3 billion (+15%, +6% cc). Sales in the US were USD 457 million (-10%), with the decline due to the Retail Generics business, especially oral solids including partnership terminations, as well as Biopharmaceuticals impacted by higher off-contract sales in prior year. Sales in Asia / Africa / Australasia were USD 417 million (+22%, +16% cc). Sales in Canada and Latin America were USD 224 million (+24%, +16% cc).

Global sales of Biopharmaceuticals (biosimilars, biopharmaceutical contract manufacturing and *Glato*) grew to USD 524 million (+12%, +5% cc), despite increased competition particularly in Europe.

Retail Generics sales were USD 1.8 billion (+13%, +6% cc). Total Anti-Infectives sales were USD 257 million (+2%, -3% cc). Both Retail Generics and Anti-Infectives were impacted by COVID-19.

Operating income

Operating income was USD 462 million (+44%, 37% cc), an increase of USD 141 million versus prior year, mainly driven by higher sales and lower impairments compared to prior year. Operating income margin increased by 4.6 percentage points in constant currencies. Currency had a negative impact of 0.2 percentage points, resulting in a net increase of 4.4 percentage points to 19.3% of net sales.

Core adjustments were USD 58 million, mostly due to amortization. Prior year core adjustments were USD 154 million. The change in core adjustments compared to prior year was driven by lower impairments.

Core operating income was USD 520 million (+9%, +3% cc). The increase was mainly due to higher sales, higher divestments and lower litigation costs. Excluding the prior year COVID-19 forward purchasing de-stocking, we estimate core operating income declined -8% (cc). Core operating income margin was 21.7% of net sales, decreasing 0.3 percentage points (-0.4 percentage points cc) compared to prior year. Core gross margin as a percentage of sales decreased by 1.9 percentage points (cc), due to unfavorable price effects, product and geographic mix, partly offset by ongoing productivity improvements. Core R&D expenses as a percentage of net sales decreased by 0.1 percentage points (cc). Core SG&A expenses decreased by 0.6 percentage points (cc). Core Other Income and Expenses increased the margin by 0.8 percentage points (cc) driven by higher divestments and lower litigation costs.

¹Growth excluding prior year COVID-19 related forward purchasing de-stocking is a non-IFRS measure, an explanation for this measure can be found on page 61

First half

Net sales

Sandoz net sales were USD 4.7 billion (0%, -5% cc) with a negative price effect of 9 percentage points. Volume increased by 4 percentage points from growth in Biopharmaceuticals partly offset by the impact of softer retail demand, with a historically weak cough and cold season.

Sales in Europe were USD 2.6 billion (0%, -7% cc) with a decline due to the impact of COVID-19 on the Retail Generics business. Sales in the US were USD 904 million (-16%), mainly due to the Retail Generics business, especially oral solids including partnership terminations, as well as Biopharmaceuticals impacted by higher off-contract sales in prior year. Sales in Asia / Africa / Australasia were USD 810 million (+20%, +14% cc). Sales in Canada and Latin America were USD 433 million (+15%, +12% cc).

Global sales of Biopharmaceuticals (biosimilars, biopharmaceutical contract manufacturing and *Glatopa*) grew to USD 1.0 billion (+13%, +6% cc), despite increased competition particularly in Europe.

Retail Generics sales were USD 3.5 billion (-3%, -7% cc), total Anti-Infectives sales were USD 520 million (-11%, -15% cc), both impacted by softer retail demand as a result of COVID-19 and a historically weak cough and cold season

Operating income

Operating income was USD 774 million, an increase of USD 498 million versus prior year, mainly driven by lower legal settlements, lower amortization and lower impairments. Operating income margin increased by 11.0 percentage points in constant currencies. Currency had a negative impact of 0.4 percentage points, resulting in a net increase of 10.6 percentage points to 16.5% of net sales.

Core adjustments were USD 191 million, including USD 120 million of amortization. Prior year core adjustments were USD 872 million. The change in core adjustments compared to prior year was mainly driven by lower legal settlements, lower amortization and lower impairments.

Core operating income was USD 965 million (-16%, -19% cc), declining due to lower sales and unfavorable gross margin. Core operating income margin was 20.5% of net sales, decreasing 4.0 percentage points (-3.7 percentage points cc) versus prior year. Core gross margin as a percentage of sales decreased by 3.2 percentage points (cc), due to unfavorable price effects, product and geographic mix, partly offset by ongoing productivity improvements. Core R&D expenses as a percentage of net sales increased by 0.7 percentage points (cc) driven by biopharmaceutical pipeline investments. Core SG&A expenses increased by 0.3 percentage points (cc) mainly due to lower sales. Core Other Income and Expenses increased the margin by 0.5 percentage points (cc) driven by higher divestments.

Group Cash Flow and Balance Sheet

Cash Flow

Second quarter

Net cash flows from operating activities amounted to USD 4.1 billion, compared to USD 4.0 billion in the prior year quarter. This increase was mainly driven by higher net income adjusted for non-cash items and other adjustments, including divestment gains, and lower payments out of provisions, mainly due to legal matter payments in the prior year quarter. This was partly offset by unfavorable changes in working capital.

Net cash inflows from investing activities from continuing operations amounted to USD 0.1 billion, compared to net cash outflows of USD 0.3 billion in the prior year quarter.

The current year quarter cash inflows were driven by USD 0.8 billion proceeds from the sale of intangible assets and financial assets. These cash inflows were partly offset by cash outflows of USD 0.7 billion for purchases of property, plant and equipment, intangible assets, financial assets and other non-current assets.

In the prior year quarter, net cash flows used in investing activities from continuing operations were mainly driven by USD 0.5 billion for purchases of property, plant and equipment, intangible assets, financial assets and other non-current assets. These cash outflows were partly offset by cash inflows of USD 0.2 billion mainly from the sale of financial and intangible assets.

Net cash flows used in investing activities from discontinued operations, which included cash outflows for transaction-related expenditures, amounted to USD 1 million compared to USD 0.1 billion in the prior year quarter.

Net cash flows used in financing activities from continuing operations amounted to USD 2.9 billion, compared to USD 2.2 billion in the prior year quarter.

The current year quarter cash outflows were mainly driven by USD 2.3 billion net decrease in current financial debts and USD 0.7 billion for net treasury share transactions.

In the prior year quarter, net cash flows used in financing activities from continuing operations were mainly driven by USD 1.2 billion net decrease in current financial debts and the repayment of a US dollar bond of USD 1.0 billion at maturity.

Free cash flow amounted to USD 4.2 billion (+17%), compared to USD 3.6 billion in the prior year quarter. This increase was mainly driven by operating income growth, including higher divestments, partly offset by unfavorable changes in working capital.

First half

Net cash flows from operating activities amounted to USD 6.3 billion, compared to USD 6.5 billion in the prior year period. This decrease was mainly driven by unfavorable hedging results, partly offset by lower payments out of provisions, mainly due to legal matter payments in the prior year period.

Net cash inflows from investing activities from continuing operations amounted to USD 0.9 billion, compared to net cash outflows of USD 10.5 billion in the prior year period.

The current year period cash inflows were driven by USD 1.5 billion net proceeds from the sale of marketable securities, commodities and time deposits; and USD 1.1 billion from the sale of intangible assets, financial assets and property, plant and equipment. These cash inflows were partly offset by USD 0.9 billion for purchases of intangible assets (including the in-licensing of tislelizumab from BeiGene); USD 0.6 billion for purchases of property, plant and equipment and USD 0.2 billion for acquisitions and divestments of businesses, net.

In the prior year period, net cash outflows from investing activities from continuing operations were driven by the USD 9.9 billion for the acquisitions and divestments of businesses, net (including the acquisition of The Medicines Company for USD 9.5 billion, net of cash acquired USD 0.1 billion, and the acquisition of Japanese business of Aspen Global Incorporated for USD 0.3 billion). Other investing activities cash outflows were USD 1.1 billion for purchases of property, plant and equipment, intangible assets, financial assets and other non-current assets. These cash outflows were partly offset by cash inflows of USD 0.5 billion from the sale of financial assets (including the USD 0.2 billion proceeds from the sale of Alcon Inc. shares), of intangible assets and from the net proceeds from the sale of marketable securities, commodities and time deposits.

Net cash flows used in investing activities from discontinued operations, which included cash outflows for transaction-related expenditures, amounted to USD 6 million compared to USD 0.1 billion in the prior year period.

Net cash flows used in financing activities from continuing operations amounted to USD 11.5 billion, compared to USD 1.1 billion in the prior year period.

The current year period cash outflows were driven by USD 7.4 billion for the dividend payment; USD 2.6 billion for net treasury share transactions; and USD 1.5 billion for the repayment of a bond denominated in euro (notional amount of EUR 1.25 billion) at maturity.

In the prior year period, net cash outflows from financing activities from continuing operations were driven by USD 7.0 billion for the dividend payment; USD 0.3 billion net payments for lease liabilities and other financing cash outflows, net. These cash outflows were partly offset by cash inflows of USD 0.7 billion from net treasury share transactions; and USD 5.4 billion from current and non-current financial debts, mainly consisting of USD 4.9 billion from issuance of bonds denominated in US dollars (notional amount of USD 5.0 billion), USD 2.5 billion from the net increase in current financial debts and the repayment of two US dollar bonds totaling USD 2.0 billion at maturity.

Free cash flow amounted to USD 5.8 billion (+3%), compared to USD 5.7 billion in the prior year period. This increase was mainly driven by higher divestment proceeds, which were mostly offset by the USD 650 million upfront payment to in-license tislelizumab from BeiGene.

Balance sheet

Assets

Total non-current assets of USD 100.2 billion at June 30, 2021, decreased by USD 2.2 billion compared to December 31, 2020.

Intangible assets other than goodwill decreased by USD 2.0 billion as net additions (including the in-licensing of tislelizumab from BeiGene) were more than offset by amortization, impairments and unfavorable currency translation adjustments.

Investments in associated companies decreased by USD 0.5 billion, as income from associated companies was more than offset by dividends received and unfavorable currency translation adjustments.

Property, plant and equipment decreased by USD 0.5 billion, as net additions were more than offset by depreciation, impairments and unfavorable currency translation adjustments.

These decreases were partly offset by an increase in other non-current assets of USD 1.3 billion, driven by an increase in the prepaid benefit costs of USD 1.2 billion, resulting from actuarial gains primarily from the changes in discount rates used to calculate the actuarial defined benefit obligations and valuation impact on plan assets.

Goodwill, right-of-use assets, deferred tax assets and financial assets were broadly in line with December 31, 2020.

Total current assets of USD 23.8 billion at June 30, 2021 decreased by USD 5.9 billion compared to December 31, 2020.

Cash and cash equivalents decreased by USD 4.5 billion and marketable securities, commodities, time deposits and derivative financial instruments decreased by USD 1.7 billion, mainly due to the dividend payment, the acquisitions of treasury shares, the repayment of the current portion of a non-current financial debt partly offset by the cash generated through operating activities.

Inventories, trade receivables, income tax receivables and other current assets were broadly in line with December 31, 2020.

Liabilities

Total non-current liabilities of USD 40.3 billion decreased by USD 2.1 billion compared to December 31, 2020.

Non-current financial debts decreased by USD 1.4 billion mainly due to the reclassification of USD 1.1 billion from non-current to current financial debts primarily related to the USD 1.0 billion (notional amount of USD 1.0 billion) bond due in 2022. Provisions and other non-current liabilities decreased by USD 0.6 billion, mainly due to a USD 0.7

billion decrease in defined benefit plans resulting primarily from actuarial gains from the changes in discount rates used to calculate the actuarial defined benefit obligations and valuation impact on plan assets.

Non-current lease liabilities and deferred tax liabilities were broadly in line with December 31, 2020.

Total current liabilities of USD 29.6 billion decreased by USD 3.4 billion compared to December 31, 2020.

Provisions and other current liabilities decreased by USD 2.0 billion mainly due to the decrease of the treasury share repurchase obligation amounting to USD 1.8 billion.

Current financial debts and derivative financial instruments decreased by USD 0.7 billion mainly due to the repayment of a USD 1.5 billion bond denominated in euro (notional amount of EUR 1.25 billion) at maturity, offset by the reclassification of USD 1.1 billion from non-current to current financial debts.

Trade payables decreased by USD 0.6 billion and current lease liabilities and income tax payables were broadly in line with December 31, 2020.

Equity

The Group's equity decreased by USD 2.5 billion to USD 54.1 billion at June 30, 2021 compared to December 31, 2020.

This decrease was mainly due to the cash-dividend payment of USD 7.4 billion, purchase of treasury shares of USD 2.7 billion and unfavorable currency translation differences of USD 1.6 billion.

This was partially offset by the net income of USD 5.0 billion, net actuarial gains of USD 1.7 billion, the decrease of the treasury share repurchase obligation of USD 1.8 billion and equity-based compensation of USD 0.3 billion and the net favorable fair value adjustments on financial instruments of USD 0.2 billion.

Net debt and debt/equity ratio

The Group's liquidity amounted to USD 5.4 billion at June 30, 2021, compared to USD 11.6 billion at December 31, 2020. Total non-current and current financial debts, including derivatives, amounted to USD 33.9 billion at June 30, 2021, compared to USD 36.0 billion at December 31, 2020.

The debt/equity ratio decreased to 0.63:1 at June 30, 2021, compared to 0.64:1 at December 31, 2020. The net debt increased to USD 28.5 billion at June 30, 2021, compared to USD 24.5 billion at December 31, 2020.

Innovation Review

Benefiting from our continued focus on innovation, Novartis has one of the industry's most innovative and inventive pipelines with more than 160 projects in clinical development.

Selected Innovative Medicines projects awaiting regulatory decisions

Product	Indication	Completed submissions			News update
		US	EU	Japan	
Cosentyx	Cosentyx 300mg auto-injector and pre-filled syringe	Q4 2020	Approved		
Cosentyx	Juvenile idiopathic arthritis	Q2 2021	Q2 2021		
Leqvio	Hyperlipidemia	Q2 2021	Approved		- US resubmission completed in early July with an action date of January 1, 2022
Jakavi	Acute graft-versus-host disease (GvHD)		Q1 2021	Q1 2021	- US filing by Incyte
	Chronic GvHD		Q1 2021	Q1 2021	- US filing by Incyte
asciminib (ABL001)	Chronic myeloid leukemia, 3rd line	Q2 2021	Q2 2021		

Selected Innovative Medicines pipeline projects

Compound/ product	Potential indication/ Disease area	First planned submissions	Current Phase	News update
ABL001 (asciminib)	Chronic myeloid leukemia, 1 st line	≥2025	3	- Ph3 to be initiated in H2 2021
ACZ885 (canakinumab)	Adjuvant NSCLC	2023	3	- Enrollment ongoing
	NSCLC, 1 st line	H2 2021	3	- Depending on timing of final read-out, submission may move to early 2022
Aimovig	Migraine, pediatrics	≥2025	3	
AVXS-101 (OAV101)	Spinal muscular atrophy (IT formulation)	≥2025	1/2	- Pivotal confirmatory study to be initiated after partial clinical hold is lifted
AVXS-201 (OAV201)	Rett syndrome	≥2025	1	
Beovu	Diabetic macular edema	H2 2021	3	- Submission moved post KINGFISHER readout
	Retinal vein occlusion	2024	3	- RAPTOR and RAVEN studies termination - Timing under evaluation
	Diabetic retinopathy	≥2025	3	
BYL719 (alpelisib)	PIK3CA-related overgrowth spectrum	H2 2021	2	- Planned US filing based on RWE data - EU Orphan Drug designation
	Triple negative breast cancer	2023	3	
	Human epidermal growth factor receptor 2-positive (HER2+) advanced breast cancer	≥2025	3	
	Ovarian cancer	2023	3	- Ph3 initiated
	Head and neck squamous cell carcinoma, 2 nd and 3 rd line		3	- Project will be discontinued to prioritize other key programs in portfolio

Compound/ product	Potential indication/ Disease area	First planned submissions	Current Phase	News update
CEE321	Atopic dermatitis	≥2025	1	
CFZ533 (iscalimab)	Renal transplantation	≥2025	2	
	Liver transplantation	≥2025	2	
	Sjögren's syndrome	≥2025	2	
<i>Coartem</i>	Malaria, uncomplicated (<5 kg patients)	2024	3	- Submission planned in Switzerland
<i>Cosentyx</i>	Ankylosing spondylitis head-to-head study versus Sandoz biosimilar <i>Hyrimoz</i> (adalimumab)	2022	3	
	Hidradenitis suppurativa	2022	3	
	Giant cell arteritis	2024	2	
	Lichen planus	≥2025	2	
	Lupus nephritis	≥2025	3	
	Psoriatic arthritis (IV formulation)	2022	3	
	Ankylosing spondylitis (IV formulation)	2023	3	
CPK850	Retinitis pigmentosa	≥2025	2	
CSJ117	Asthma	≥2025	2	
ECF843	Dry eye		2	- Program discontinued in broad population of Moderate to Severe DED
<i>Entresto</i>	Post-acute myocardial infarction		3	- No submission planned
KAE609 (cipargamin)	Malaria, uncomplicated	≥2025	2	
	Malaria, severe	≥2025	2	
KAF156 (ganaplacide)	Malaria, uncomplicated	≥2025	2	
<i>Kisqali</i> + endocrine therapy	Hormone receptor-positive (HR+)/human epidermal growth factor receptor 2-negative (HER2-) early breast cancer (adjuvant)	2023	3	- Global NATALEE study enrollment completed
<i>Kymriah</i>	Relapsed/refractory follicular lymphoma	H2 2021	2	- ELARA Pivotal trial demonstrates strong response rates and a remarkable safety profile in relapsed or refractory follicular lymphoma
	Relapsed/refractory aggressive non-Hodgkin's lymphoma	H2 2021	3	
<i>Leqvio</i>	Secondary prevention of cardiovascular events in patients with elevated levels of LDL-C	≥2025	3	
LJN452 (tropifexor + licogliflozin)	Nonalcoholic steatohepatitis	≥2025	2	
LMI070 (branaplam)	Spinal muscular atrophy		2	- Branaplam development in SMA is terminated given available treatments
	Huntington's disease	≥2025	1	- FDA Orphan Drug designation - Ph1 study is in healthy volunteers
LNA043	Osteoarthritis	≥2025	2	- Ph2b initiated
LNP023 (iptacopan)	Paroxysmal nocturnal hemoglobinuria	2023	3	- FDA, EU Orphan Drug designation - FDA Breakthrough Therapy designation - Ph2 study showed substantially improved hematological response as add-on to standard-of-care
	IgA nephropathy	2023	3	- EU Orphan Drug designation
	C3 glomerulopathy	2023	3	- FDA, EU Orphan Drug designation - EU PRIME designation - FDA Rare Pediatric designation - Ph2 IA data shows investigational iptacopan improved estimated glomerular filtration rate (eGFR) slope and stabilized kidney function - Ph3 enrolling
	Membranous nephropathy	≥2025	2	
	Atypical haemolytic uraemic syndrome	≥2025	2	
LOU064 (remibrutinib)	Chronic spontaneous urticaria	≥2025	2	- Readout expected in H2 2021
	Sjögren's syndrome	≥2025	2	
<i>Lutathera</i>	Gastroenteropancreatic neuroendocrine tumors, 1 st line in G2/3 tumors	2023	3	

Compound/ product	Potential indication/ Disease area	First planned submissions	Current Phase	News update
¹⁷⁷ Lu-PSMA-617	Metastatic castration-resistant prostate cancer	H2 2021	3	- FDA Breakthrough Therapy designation granted - Ph3 VISION study: significantly improvement of overall survival and radiographic progression-free survival
	Metastatic castration-resistant prostate cancer pre-taxane	2023	3	- Ph3 initiated
	Metastatic hormone sensitive prostate cancer	2024	3	- Ph3 initiated
¹⁷⁷ Lu-PSMA-R2	Prostate cancer	≥2025	1	
¹⁷⁷ Lu-NeoB	Multiple solid tumors	≥2025	1	
LXE408	Visceral leishmaniasis	≥2025	2	
MBG453 (sabatolimab)	Myelodysplastic syndrome	2022/2023	3	- DMC recommended continuation of STIMULUS MDS-1 trial based on CR readout - FDA Fast Track designation granted
	Unfit acute myeloid leukemia	2024	2	
MIJ821	Depression	≥2025	2	
PDR001 (spartalizumab)	Malignant melanoma (combo)	≥2025	2	
QBW251 (icenticaftor)	Chronic obstructive pulmonary disease	≥2025	2	- Ph2b recruitment completed - Trial kits shortage related delay
QGE031 (ligelizumab)	Chronic spontaneous urticaria	2022	3	- FDA Breakthrough Therapy designation
	Chronic inducible urticaria	≥2025	3	- Ph3 to be initiated in H2 2021 - Updated submission timeline due to Health Authority advice on primary endpoint
	Food allergy	≥2025	3	- Ph3 to be initiated in H2 2021
SAF312	Chronic ocular surface pain	2024	2	
Tabrecta	Colorectal Cancer		2	- Project will be discontinued to prioritize other key programs in portfolio
TQJ230 (pelacarsen)	Secondary prevention of cardiovascular events in patients with elevated levels of lipoprotein(a)	≥2025	3	- Enrollment ongoing - FDA Fast Track designation - China Breakthrough Therapy designation
UNR844	Presbyopia	2024	2	
VAY736 (ianalumab)	Auto-immune hepatitis	≥2025	2	
	Sjögren's syndrome	≥2025	2	- FDA Fast Track designation
VDT482 (tislelizumab)	NSCLC	H2 2021	3	
	2L Esophageal cancer	H2 2021	3	-Met primary endpoint of overall survival in pivotal Ph3 trial
	1L Nasopharyngeal carcinoma	2022	3	
	1L Gastric cancer	2023	3	
	1L ESCC	2023	3	
	Localized ESCC	2023	3	
	1L Hepatocellular carcinoma	2023	3	
	1L Small cell lung cancer	2024	3	
	1L Bladder urothelial cell carcinoma	2024	3	
VPM087 (gevokizumab)	Colorectal cancer, 1 st line	≥2025	1	
Xolair	Food allergy	2023	3	-Delay largely due to COVID-19

Selected Sandoz approvals and pipeline projects

Project/ Compound	Potential indication/ Disease area	News update
GP2411 (denosumab)	Osteoporosis, skeletal-related in bone met. pts (same as originator)	- In Ph3
SOK583 (afilibercept)	Ophthalmology indication (as originator)	- Ph3 initiated
Insulin glargine, lispro, aspart	Diabetes	- Collaboration with Gan & Lee
Natalizumab	Multiple sclerosis and Crohn's disease	- Collaboration Polpharma Biologics
Trastuzumab	HER2-positive cancer tumors	- Collaboration EirGenix

Condensed Interim Consolidated Financial Statements

Consolidated income statements

Second quarter (unaudited)

(USD millions unless indicated otherwise)

	Note	Q2 2021	Q2 2020
Net sales to third parties	9	12 956	11 347
Other revenues	9	338	275
Cost of goods sold		-3 914	-3 429
Gross profit		9 380	8 193
Selling, general and administration		-3 754	-3 368
Research and development		-2 400	-2 441
Other income		769	432
Other expense		-516	-464
Operating income		3 479	2 352
Income from associated companies		239	183
Interest expense		-201	-220
Other financial income and expense		-11	-27
Income before taxes		3 506	2 288
Taxes		-611	-421
Net income		2 895	1 867
<i>Attributable to:</i>			
Shareholders of Novartis AG		2 896	1 867
Non-controlling interests		-1	0
Weighted average number of shares outstanding – Basic (million)		2 243	2 289
Basic earnings per share (USD) ¹		1.29	0.82
Weighted average number of shares outstanding – Diluted (million)		2 258	2 304
Diluted earnings per share (USD) ¹		1.28	0.81

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

Consolidated income statements

First half (unaudited)

(USD millions unless indicated otherwise)	Note	H1 2021	H1 2020
Net sales to third parties	9	25 367	23 630
Other revenues	9	621	700
Cost of goods sold		-7 953	-7 151
Gross profit		18 035	17 179
Selling, general and administration		-7 283	-6 854
Research and development		-4 751	-4 501
Other income		1 108	693
Other expense		-1 215	-1 421
Operating income		5 894	5 096
Income from associated companies		495	306
Interest expense		-403	-459
Other financial income and expense		-30	-34
Income before taxes		5 956	4 909
Taxes		-1 002	-869
Net income		4 954	4 040
<i>Attributable to:</i>			
Shareholders of Novartis AG		4 955	4 043
Non-controlling interests		-1	-3
Weighted average number of shares outstanding – Basic (million)		2 248	2 281
Basic earnings per share (USD) ¹		2.20	1.77
Weighted average number of shares outstanding – Diluted (million)		2 263	2 299
Diluted earnings per share (USD) ¹		2.19	1.76

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

Consolidated statements of comprehensive income

Second quarter (unaudited)

(USD millions)	Q2 2021	Q2 2020
Net income	2 895	1 867
Other comprehensive income to be eventually recycled into the consolidated income statement:		
Fair value adjustments on debt securities, net of taxes		1
Total fair value adjustments on financial instruments, net of taxes		1
Net investment hedge	-33	-38
Currency translation effects	606	380
Total of items to eventually recycle	573	343
Other comprehensive income never to be recycled into the consolidated income statement:		
Actuarial gains from defined benefit plans, net of taxes	576	319
Fair value adjustments on equity securities, net of taxes	77	173
Total of items never to be recycled	653	492
Total comprehensive income	4 121	2 702
<i>Attributable to:</i>		
Shareholders of Novartis AG	4 123	2 703
Non-controlling interests	-2	-1

First half (unaudited)

(USD millions)	H1 2021	H1 2020
Net income	4 954	4 040
Other comprehensive income to be eventually recycled into the consolidated income statement:		
Novartis share of other comprehensive income recognized by associated companies, net of taxes	-71	-12
Net investment hedge	72	-1
Currency translation effects	-1 550	382
Total of items to eventually recycle	-1 549	369
Other comprehensive income never to be recycled into the consolidated income statement:		
Actuarial gains/(losses) from defined benefit plans, net of taxes	1 674	-293
Fair value adjustments on equity securities, net of taxes	226	99
Total of items never to be recycled	1 900	-194
Total comprehensive income	5 305	4 215
<i>Attributable to:</i>		
Shareholders of Novartis AG	5 309	4 219
Non-controlling interests	-4	-4

Consolidated balance sheets

(USD millions)	Note	Jun 30, 2021 (unaudited)	Dec 31, 2020 (audited)
Assets			
Non-current assets			
Property, plant and equipment	9	11 738	12 263
Right-of-use assets		1 606	1 676
Goodwill	9	29 766	29 999
Intangible assets other than goodwill	9	34 818	36 809
Investments in associated companies		9 127	9 632
Deferred tax assets		8 053	8 214
Financial assets		2 887	2 901
Other non-current assets		2 212	892
Total non-current assets		100 207	102 386
Current assets			
Inventories		7 111	7 131
Trade receivables		8 400	8 217
Income tax receivables		254	239
Marketable securities, commodities, time deposits and derivative financial instruments		239	1 905
Cash and cash equivalents		5 117	9 658
Other current assets		2 687	2 523
Total current assets		23 808	29 673
Total assets		124 015	132 059
Equity and liabilities			
Equity			
Share capital		913	913
Treasury shares		-65	-53
Reserves		53 194	55 738
Equity attributable to Novartis AG shareholders		54 042	56 598
Non-controlling interests		86	68
Total equity		54 128	56 666
Liabilities			
Non-current liabilities			
Financial debts		24 828	26 259
Lease liabilities		1 663	1 719
Deferred tax liabilities		7 472	7 422
Provisions and other non-current liabilities		6 291	6 934
Total non-current liabilities		40 254	42 334
Current liabilities			
Trade payables		4 811	5 403
Financial debts and derivative financial instruments		9 075	9 785
Lease liabilities		279	286
Current income tax liabilities		2 371	2 458
Provisions and other current liabilities		13 097	15 127
Total current liabilities		29 633	33 059
Total liabilities		69 887	75 393
Total equity and liabilities		124 015	132 059

Consolidated statements of changes in equity

Second quarter (unaudited)

(USD millions)	Note	Share capital	Treasury shares	Reserves		Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
				Retained earnings	Total value adjustments			
Total equity at April 1, 2021		913	-60	52 048	-2 378	50 523	66	50 589
Net income				2 896		2 896	-1	2 895
Other comprehensive income					1 227	1 227	-1	1 226
Total comprehensive income				2 896	1 227	4 123	-2	4 121
Purchase of treasury shares			-5	-788		-793		-793
Exercise of options and employee transactions			0	-3		-3		-3
Equity-based compensation			0	179		179		179
Taxes on treasury share transactions				-1		-1		-1
Fair value adjustments on financial assets sold				55	-55			
Impact of change in ownership of consolidated entities							22	22
Other movements	4.2			14		14		14
Total of other equity movements			-5	-544	-55	-604	22	-582
Total equity at June 30, 2021		913	-65	54 400	-1 206	54 042	86	54 128

(USD millions)	Note	Share capital	Treasury shares	Reserves		Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
				Retained earnings	Total value adjustments			
Total equity at April 1, 2020		936	-68	55 356	-5 321	50 903	74	50 977
Net income				1 867		1 867	0	1 867
Other comprehensive income					836	836	-1	835
Total comprehensive income				1 867	836	2 703	-1	2 702
Purchase of treasury shares			0	-9		-9		-9
Reduction of share capital		-23	31	-8				
Equity-based compensation			0	203		203		203
Shares delivered to Alcon employees as a result of the Alcon spin-off			0	8		8		8
Fair value adjustments on financial assets sold				74	-74			
Other movements	4.2			4		4		4
Total of other equity movements		-23	31	272	-74	206		206
Total equity at June 30, 2020		913	-37	57 495	-4 559	53 812	73	53 885

Consolidated statements of changes in equity

First half (unaudited)

(USD millions)	Note	Share capital	Treasury shares	Reserves		Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
				Retained earnings	Total value adjustments			
Total equity at January 1, 2021		913	-53	57 157	-1 419	56 598	68	56 666
Net income				4 955		4 955	-1	4 954
Other comprehensive income				-71	425	354	-3	351
Total comprehensive income				4 884	425	5 309	-4	5 305
Dividends				-7 368		-7 368		-7 368
Purchase of treasury shares			-17	-2 669		-2 686		-2 686
Exercise of options and employee transactions			0	39		39		39
Equity-based compensation			5	332		337		337
Shares delivered to Alcon employees as a result of the Alcon spin-off			0	17		17		17
Decrease of treasury share repurchase obligation under a share buyback trading plan	4.1			1 769		1 769		1 769
Fair value adjustments on financial assets sold				209	-209			
Fair value adjustments related to divestments				3	-3			
Impact of change in ownership of consolidated entities							22	22
Other movements	4.2			27		27		27
Total of other equity movements			-12	-7 641	-212	-7 865	22	-7 843
Total equity at June 30, 2021		913	-65	54 400	-1 206	54 042	86	54 128

(USD millions)	Note	Share capital	Treasury shares	Reserves		Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
				Retained earnings	Total value adjustments			
Total equity at January 1, 2020		936	-80	59 275	-4 657	55 474	77	55 551
Net income				4 043		4 043	-3	4 040
Other comprehensive income				-12	188	176	-1	175
Total comprehensive income				4 031	188	4 219	-4	4 215
Dividends				-6 987		-6 987		-6 987
Purchase of treasury shares			-1	-149		-150		-150
Reduction of share capital		-23	31	-8				
Exercise of options and employee transactions			8	815		823		823
Equity-based compensation			5	360		365		365
Shares delivered to Alcon employees as a result of the Alcon spin-off			0	29		29		29
Taxes on treasury share transactions				30		30		30
Fair value adjustments on financial assets sold				90	-90			
Other movements	4.2			9		9		9
Total of other equity movements		-23	43	-5 811	-90	-5 881		-5 881
Total equity at June 30, 2020		913	-37	57 495	-4 559	53 812	73	53 885

Consolidated statements of cash flows

Second quarter (unaudited)

(USD millions)	Note	Q2 2021	Q2 2020
Net income		2 895	1 867
<i>Adjustments to reconcile net income to net cash flows from operating activities</i>			
Reversal of non-cash items and other adjustments	6.1	1 900	2 345
Dividends received from associated companies and others		1	2
Interest received		2	5
Interest paid		-189	-227
Other financial receipts			52
Other financial payments		-39	-10
Taxes paid	6.2	-409	-303
Net cash flows from operating activities before working capital and provision changes		4 161	3 731
Payments out of provisions and other net cash movements in non-current liabilities		-159	-420
Change in net current assets and other operating cash flow items		130	650
Net cash flows from operating activities		4 132	3 961
Purchases of property, plant and equipment		-321	-238
Proceeds from sale of property, plant and equipment		19	1
Purchases of intangible assets		-276	-214
Proceeds from sale of intangible assets		546	49
Purchases of financial assets		-42	-38
Proceeds from sale of financial assets		204	117
Purchases of other non-current assets		-30	-7
Proceeds from sale of other non-current assets		3	
Acquisitions and divestments of interests in associated companies, net		-2	-2
Acquisitions and divestments of businesses, net	6.3	0	0
Purchases of marketable securities, commodities and time deposits		-45	-74
Proceeds from sale of marketable securities, commodities and time deposits		42	72
Net cash flows from/used in investing activities from continuing operations		98	-334
Net cash flows used in investing activities from discontinued operations	6.4	-1	-91
Net cash flows from/used in investing activities		97	-425
Acquisitions of treasury shares		-703	-9
Proceeds from exercised options and other treasury share transactions, net		23	30
Repayments of non-current financial debts		0	-1 002
Change in current financial debts		-2 293	-1 169
Payments of lease liabilities, net		-78	-74
Other financing cash flows, net		115	52
Net cash flows used in financing activities from continuing operations		-2 936	-2 172
Net cash flows used in financing activities from discontinued operations	6.4	-3	-13
Net cash flows used in financing activities		-2 939	-2 185
Net change in cash and cash equivalents before effect of exchange rate changes		1 290	1 351
Effect of exchange rate changes on cash and cash equivalents		26	38
Net change in cash and cash equivalents		1 316	1 389
Cash and cash equivalents at April 1		3 801	4 528
Cash and cash equivalents at June 30		5 117	5 917

Consolidated statements of cash flows

First half (unaudited)

(USD millions)	Note	H1 2021	H1 2020
Net income		4 954	4 040
<i>Adjustments to reconcile net income to net cash flows from operating activities</i>			
Reversal of non-cash items and other adjustments	6.1	4 266	5 202
Dividends received from associated companies and others		523	489
Interest received		6	37
Interest paid		-301	-321
Other financial receipts			261
Other financial payments		-322	-19
Taxes paid	6.2	-1 144	-899
Net cash flows from operating activities before working capital and provision changes		7 982	8 790
Payments out of provisions and other net cash movements in non-current liabilities		-376	-824
Change in net current assets and other operating cash flow items		-1 344	-1 477
Net cash flows from operating activities		6 262	6 489
Purchases of property, plant and equipment		-567	-475
Proceeds from sale of property, plant and equipment		85	4
Purchases of intangible assets		-888	-460
Proceeds from sale of intangible assets		629	105
Purchases of financial assets		-78	-90
Proceeds from sale of financial assets		428	359
Purchases of other non-current assets		-42	-48
Proceeds from sale of other non-current assets		3	0
Acquisitions and divestments of interests in associated companies, net		-4	-4
Acquisitions and divestments of businesses, net	6.3	-209	-9 901
Purchases of marketable securities, commodities and time deposits		-95	-345
Proceeds from sale of marketable securities, commodities and time deposits		1 621	394
Net cash flows from/used in investing activities from continuing operations		883	-10 461
Net cash flows used in investing activities from discontinued operations	6.4	-6	-105
Net cash flows from/used in investing activities		877	-10 566
Dividends paid to shareholders of Novartis AG		-7 368	-6 987
Acquisitions of treasury shares		-2 625	-150
Proceeds from exercised options and other treasury share transactions, net		53	846
Increase in non-current financial debts			4 945
Repayments of non-current financial debts		-1 466	-2 002
Change in current financial debts		8	2 486
Payments of lease liabilities, net		-158	-142
Other financing cash flows, net		91	-142
Net cash flows used in financing activities from continuing operations		-11 465	-1 146
Net cash flows used in financing activities from discontinued operations	6.4	-14	-26
Net cash flows used in financing activities		-11 479	-1 172
Net change in cash and cash equivalents before effect of exchange rate changes		-4 340	-5 249
Effect of exchange rate changes on cash and cash equivalents		-201	54
Net change in cash and cash equivalents		-4 541	-5 195
Cash and cash equivalents at January 1		9 658	11 112
Cash and cash equivalents at June 30		5 117	5 917

Notes to the Condensed Interim Consolidated Financial Statements for the three-month and six-month period ended June 30, 2021 (unaudited)

1. Basis of preparation

These Condensed Interim Consolidated Financial Statements for the three-month and six-month interim period ended June 30, 2021, were prepared in accordance with

International Accounting Standard 34 *Interim Financial Reporting* and accounting policies set out in the 2020 Annual Report published on January 26, 2021.

2. Selected critical accounting policies

The Group's principal accounting policies are set out in Note 1 to the Consolidated Financial Statements in the 2020 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 continually 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 2020 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.

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 2021

There were no significant business acquisition transactions that closed in the first half of 2021. For disclosure on significant research and development agreements, see Note 10.

Significant pending transactions

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 will acquire the global rights to three established brands (Zinnat®, Zinacef® and Fortum®) in more than 100 markets. It excludes 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 purchase price will consist of a USD 350 million upfront payment payable 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 transaction is expected to be completed in the second half of 2021, subject to customary closing conditions, including regulatory approvals.

Significant transactions in 2020

Innovative Medicines – acquisition of The Medicines Company

On November 23, 2019, Novartis entered into an agreement and plan of merger (the Merger Agreement) with The Medicines Company, a US-based pharmaceutical company headquartered in Parsippany, New Jersey USA. Pursuant to the Merger Agreement, on December 5, 2019, Novartis, through a subsidiary, commenced a tender offer to acquire all outstanding shares of The Medicines Company for USD 85 per share, or a total consideration of approximately USD 9.6 billion in cash on a fully diluted basis, including the equivalent share value related to The Medicines Company's convertible notes, in accordance with their terms. The tender offer expired on January 3, 2020, and on January 6, 2020, the acquiring subsidiary merged with and into The Medicines Company, resulting in The Medicines Company becoming an indirect wholly owned subsidiary of Novartis. Novartis financed the transaction through available cash, and short- and long-term borrowings.

The Medicines Company is focused on the development of inclisiran, a potentially first-in-class, twice yearly therapy that allows administration during patients' routine visits to their healthcare professionals and will potentially contribute to improved patient adherence and sustained lower LDL-C levels.

The fair value of the total purchase consideration was USD 9.6 billion. The purchase price allocation resulted in net identifiable assets of approximately USD 7.1 billion, consisting of USD 8.5 billion intangible assets, USD 1.4 billion net deferred tax liabilities and goodwill of approximately USD 2.5 billion.

The 2020 results of operations since the date of acquisition were not material.

Sandoz – acquisition of the Japanese business of Aspen Global Incorporated

On November 11, 2019, Sandoz entered into an agreement for the acquisition of the Japanese business of Aspen Global Incorporated (AGI), a wholly owned subsidiary of Aspen Pharmacare Holdings Limited. Under the agreement, Sandoz acquired the shares in Aspen Japan K.K. and associated assets held by AGI. The transaction closed on January 31, 2020.

Aspen's portfolio in Japan consists of off-patent medicines with a focus on anesthetics and specialty

brands. The acquisition will enable Sandoz to expand its presence in the third-largest worldwide generics marketplace.

The purchase price consist of EUR 274 million (USD 303 million) upfront payment, less customary purchase price adjustment of EUR 27 million (USD 30 million), plus potential milestone payments of up to EUR 70 million (USD 77 million), which AGI is eligible to receive upon the achievement of specified milestones.

The fair value of the total purchase consideration was EUR 294 million (USD 324 million). The amount consisted of a cash payment of EUR 247 million (USD 273 million) and the fair value of contingent consideration of EUR 47 million (USD 51 million), which AGI is eligible to receive upon the achievement of specified milestones. The purchase price allocation resulted in net identifiable assets of USD 238 million, consisting of USD 196 million intangible assets, USD 26 million other net assets, USD 16 million net deferred tax assets. Goodwill amounted to USD 86 million.

The 2020 results of operations since the date of acquisition were not material.

Sandoz – retention of US dermatology business and generic US oral solids portfolio, previously planned to be divested

On September 6, 2018, Novartis announced that it entered into a stock and asset purchase agreement (SAPA) with Aurobindo Pharma USA Inc. (Aurobindo) for the sale of selected portions of its Sandoz US portfolio, specifically the Sandoz US dermatology business and generic US oral solids portfolio, for USD 0.8 billion in cash and potential earnouts. The closing was conditional on obtaining regulatory approval.

In March 2020, Novartis took the decision to retain the Sandoz US generic oral solids and dermatology businesses and on April 2, 2020 entered into a mutual agreement with Aurobindo to terminate the transaction. The decision was taken as approval from the US Federal Trade Commission for the transaction was not obtained within the agreed timelines.

The cumulative amount of the depreciation on property, plant and equipment (USD 38 million) and amortization on intangible assets (USD 102 million), not recorded in the consolidated income statement since the date of classification as held for sale was recognized in the consolidated income statement in the first quarter of 2020. In addition, an impairment of currently marketed products of USD 42 million was recognized in the first quarter of 2020 consolidated income statement.

As at March 31, 2020, the assets and liabilities of the Sandoz US generic oral solids and dermatology businesses were reclassified out of assets and liabilities of disposal group held for sale. The prior year balance sheet is not required to be restated.

In 2020, there were no cumulative income or expenses included in other comprehensive income relating to the disposal group.

4. Summary of equity attributable to Novartis AG shareholders

	Note	Number of outstanding shares (in millions)		Issued share capital and reserves attributable to Novartis AG shareholders (in USD millions)	
		2021	2020	H1 2021	H1 2020
Balance at beginning of year		2 256.8	2 265.0	56 598	55 474
Shares acquired to be canceled		-28.2		-2 558	
Other share purchases		-1.3	-1.6	-128	-150
Exercise of options and employee transactions		0.6	14.7	39	823
Equity-based compensation		8.7	10.6	337	365
Shares delivered to Alcon employees as a result of the Alcon spin-off		0.1	0.3	17	29
Taxes on treasury share transactions					30
Decrease of treasury share repurchase obligation under a share buyback trading plan	4.1			1 769	
Dividends				-7 368	-6 987
Net income of the period attributable to shareholders of Novartis AG				4 955	4 043
Other comprehensive income attributable to shareholders of Novartis AG				354	176
Other movements	4.2			27	9
Balance at June 30		2 236.7	2 289.0	54 042	53 812

4.1. In June 2021, Novartis entered into an irrevocable, non-discretionary arrangement with a bank to repurchase Novartis shares to mitigate dilution related to participation plans of associates. Novartis was able to cancel this arrangement at any time but would have been subject to a 90-day waiting period.

This trading plan commitment was fully executed and expired in June 2021, and as a consequence, there is no contingent liability related to this plan recognized as of June 30, 2021.

In November 2020, 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 2.5 billion share buyback. Novartis was able to cancel this arrangement at any time but

would have been subject to a 90-day waiting period. The commitment under this arrangement therefore reflected the obligated purchases by the bank under such trading plan over a rolling 90-day period, or if shorter, until the maturity date of such trading plan.

This trading plan commitment was fully executed and expired in March 2021, and as a consequence, there is no contingent liability related to this plan recognized as of June 30, 2021.

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

5. Financial instruments

Fair value by hierarchy

The following table illustrates the three hierarchical levels for valuing financial instruments at fair value as of June 30, 2021, and December 31, 2020. For additional information on the hierarchies and other matters, please refer to the Consolidated Financial Statements in the 2020 Annual Report, published on January 26, 2021.

(USD millions)	Level 1		Level 2		Level 3		Total	
	Jun 30, 2021	Dec 31, 2020	Jun 30, 2021	Dec 31, 2020	Jun 30, 2021	Dec 31, 2020	Jun 30, 2021	Dec 31, 2020
Marketable securities								
Debt securities			24	26			24	26
Total marketable securities			24	26			24	26
Derivative financial instruments			42	159			42	159
Total marketable securities and derivative financial instruments			66	185			66	185
Long-term financial investments								
Debt and equity securities	1 048	1 153			535	460	1 583	1 613
Fund investments	28	30			370	336	398	366
Contingent consideration receivables					638	625	638	625
Total long-term financial investments	1 076	1 183			1 543	1 421	2 619	2 604
Associated companies at fair value through profit or loss					223	211	223	211
Contingent consideration payables					-1 073	-1 046	-1 073	-1 046
Other financial liabilities					-17	-23	-17	-23
Derivative financial instruments			-76	-194			-76	-194
Total financial liabilities at fair value			-76	-194	-1 090	-1 069	-1 166	-1 263

During the first half of 2021, there was a transfer of equity security from level 1 to level 3 of USD 29 million due to de-listing (Q2 2021: nil).

The fair value of straight bonds amounted to USD 28.5 billion at June 30, 2021 (USD 31.4 billion at December 31, 2020) compared to the balance sheet value of USD 26.4 billion at June 30, 2021 (USD 28.3 billion at December 31, 2020). 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 2.6 billion at June 30, 2021 (USD 2.6 billion at December 31, 2020) is included in line "Financial and other non-current assets" of the consolidated balance sheets.

In the first half of 2021, in accordance with the consolidated foundations Alcon Inc. share divestment plans, Alcon Inc. shares with a fair value of USD 9 million (2020: USD 331 million) were sold, or otherwise disposed of, and the USD 1 million gain on disposal (2020: USD 13

million gain on disposal) was transferred from other comprehensive income to retained earnings (Q2 2021: nil).

In the first quarter of 2021, Novartis repaid a USD 1.5 billion (nominal amount of EUR 1.25 billion) bond, at maturity in accordance with its terms.

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.

Interest Rate Benchmark Reform – Phase 2, Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 was effective as of January 1, 2021. These amendments address issues that might affect financial reporting when an existing interest rate benchmark (i.e. Interbank offered rate – IBOR) is replaced with an alternative benchmark interest rate. The effects of interest rate benchmark reform on the Group's financial instruments and risk management strategies are not expected to have a material impact on the Group's consolidated financial statements.

6. Details to the consolidated statements of cash flows

6.1. Reversal of non-cash items and other adjustments

(USD millions)	Q2 2021	Q2 2020
Depreciation, amortization and impairments on:		
Property, plant and equipment	299	319
Right-of-use assets	80	78
Intangible assets	1 065	1 306
Financial assets ¹	59	-166
Change in provisions and other non-current liabilities	139	118
(Gains)/losses on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	-511	6
Equity-settled compensation expense	185	199
Income from associated companies	-239	-183
Taxes	611	421
Net financial expense	212	247
Total	1 900	2 345

¹ Includes fair value adjustments

(USD millions)	H1 2021	H1 2020
Depreciation, amortization and impairments on:		
Property, plant and equipment	733	700
Right-of-use assets	160	154
Intangible assets	2 248	2 259
Financial assets ¹	-42	-127
Change in provisions and other non-current liabilities	416	838
Gains on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	-557	-55
Equity-settled compensation expense	368	377
Income from associated companies	-495	-306
Taxes	1 002	869
Net financial expense	433	493
Total	4 266	5 202

¹ Includes fair value adjustments

6.2. Total amount of taxes paid

During the first half of 2021, the total amount of taxes paid was USD 1 144 million (Q2 2021: USD 409 million), which was included within "Net cash flows from operating activities."

During the first half of 2020, the total amount of taxes paid was USD 987 million (Q2 2020: USD 391 million), of which USD 899 million (Q2 2020: USD 303 million) was included within "Net cash flows from operating activities," and USD 88 million (Q2 2020: USD 88 million) was included within "Net cash flows used in investing activities from discontinued operations."

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

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

(USD millions)	Q2 2021	Q2 2020	H1 2021	H1 2020
Net assets recognized as a result of acquisitions of businesses	0	-32	-229	-10 030
Fair value of previously held equity interests			20	
Contingent consideration payable, net		17	0	77
Payments, deferred consideration and other adjustments, net		13	-2	65
Cash flows used for acquisitions of businesses	0	-2	-211	-9 888
Cash flows from/used for divestments of businesses, net ¹	0	2	2	-13
Cash flows used for acquisitions and divestments of businesses, net	0	0	-209	-9 901

¹ The USD 2 million in the first half of 2021, (Q2 2021: USD nil) and the USD 2 million in the first half of 2020 (Q2 2020: USD 2 million), represented the net cash inflows from divestments in previous years.

During the first half of 2020, USD 13 million included USD 15 million net cash outflows from divestments in previous years and a prepaid sales price of USD 2 million for a business divestment.

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

6.4. Cash flows from discontinued operations, net

Net cash flows used in investing activities from discontinued operations

Net cash flows used in investing activities from discontinued operations included cash outflows for transaction-related expenditures attributable to both, the series of portfolio transformation transactions completed in 2015 and to the distribution (spin-off) of the Alcon business to Novartis AG shareholders completed in 2019.

Net cash flows used in financing activities from discontinued operations

Net cash outflows used in financing activities from discontinued operations was for transaction cost payments directly attributable to the distribution (spin-off) of the Alcon business to Novartis AG shareholders, which was completed in 2019.

7. Acquisition of businesses

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

(USD millions)	H1 2021	H1 2020
Property, plant and equipment		26
Right-of-use assets		32
Currently marketed products		269
Acquired research and development	161	8 602
Deferred tax assets	12	470
Non-current financial and other assets		49
Inventories		84
Trade receivables and financial and other current assets		109
Cash and cash equivalents	6	76
Deferred tax liabilities	-31	-1 928
Current and non-current financial debts		-32
Current and non-current lease liabilities		-44
Trade payables and other liabilities	-3	-144
Net identifiable assets acquired	145	7 569
Acquired cash and cash equivalents	-6	-76
Non-controlling interests	-22	
Goodwill	112	2 537
Net assets recognized as a result of acquisitions of businesses	229	10 030

There were no significant acquisitions of businesses in the first half of 2021.

Note 3 details first half of 2020 significant acquisitions of businesses, specifically, The Medicines Company and the Japanese business of AGI. The goodwill

arising out of these acquisitions is attributable to buyer specific synergies, the assembled workforce, and the accounting for deferred tax liabilities on the acquired assets. In the first half of 2021 no goodwill (2020: USD 59 million) was tax deductible.

8. Legal proceedings update

A number of Novartis companies are, and will likely continue to be, subject to various legal proceedings, including litigations, arbitrations and governmental investigations, that arise from time to time. Legal proceedings are inherently unpredictable. As a result, the Group may become subject to substantial liabilities that may not be covered by insurance and may in the future incur judgments or enter into settlements of claims that could have a material adverse effect on its results of operations or cash flow. Note 20 to the Consolidated Financial Statements in our 2020 Annual Report and 2020 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 July 20, 2021 of significant developments in those proceedings, as well as any new significant proceedings commenced since the date of the 2020 Annual Report and 2020 Form 20-F.

Investigations and related litigations

340B Drug Pricing Program investigation

In February 2021, Novartis Pharmaceuticals Corporation (NPC) received a civil investigative subpoena from the Office of the Attorney General of the State of Vermont. The subpoena requests 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. In May 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 U.S. District Court 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.

Japan investigation

In 2015, a trial started against a former Novartis Pharma K.K. (NPKK) employee, and also against NPKK under the dual liability concept in Japanese law, over allegations brought by the Tokyo District Public Prosecutor Office for alleged manipulation of data in sub-analysis publications of the Kyoto Heart Study regarding valsartan. The charges against NPKK were subject to a maximum total fine of JPY 4 million. In 2018, the Tokyo High Court upheld a not-guilty ruling of the Tokyo District Court in 2017 for both the former NPKK employee and NPKK, and that ruling was appealed to the Supreme Court of Japan. In June 2021, the Supreme Court issued its decision dismissing the prosecutors' appeal and upholding the Tokyo District Court's not-guilty ruling. This matter is now concluded.

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 2020 Annual Report and 2020 Form 20-F.

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

9. Segmentation of key figures

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

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

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

The reporting segments are as follows:

Innovative Medicines researches, develops, manufactures, distributes and sells patented prescription medicines. The Innovative Medicines Division is organized into two global business units: Novartis Oncology and Novartis Pharmaceuticals. Novartis Oncology consists of the global business franchises Hematology and Solid Tumor, and Novartis Pharmaceuticals consists of the global business franchises Immunology, Hepatology and Dermatology; Neuroscience; Ophthalmology; Cardiovascular, Renal and Metabolism; Respiratory and Allergy; and Established Medicines.

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 active ingredients and finished dosage forms of small molecule pharmaceuticals to third parties across a broad range of therapeutic areas, as well as 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 the Retail Generics business franchise 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, Novartis Technical Operations and Customer and Technology Solutions (formerly named Novartis Business Services).

Further details are provided in Note 3 to the Consolidated Financial Statements of the 2020 Annual Report.

Segmentation – Consolidated income statements

Second quarter

(USD millions)	Innovative Medicines		Sandoz		Corporate (including eliminations)		Group	
	Q2 2021	Q2 2020	Q2 2021	Q2 2020	Q2 2021	Q2 2020	Q2 2021	Q2 2020
Net sales to third parties	10 559	9 188	2 397	2 159			12 956	11 347
Sales to other segments	194	219	48	43	-242	-262		
Net sales	10 753	9 407	2 445	2 202	-242	-262	12 956	11 347
Other revenues	321	251	16	22	1	2	338	275
Cost of goods sold	-2 902	-2 554	-1 271	-1 158	259	283	-3 914	-3 429
Gross profit	8 172	7 104	1 190	1 066	18	23	9 380	8 193
Selling, general and administration	-3 120	-2 764	-512	-496	-122	-108	-3 754	-3 368
Research and development	-2 179	-2 240	-221	-201			-2 400	-2 441
Other income	622	154	102	17	45	261	769	432
Other expense	-318	-221	-97	-65	-101	-178	-516	-464
Operating income	3 177	2 033	462	321	-160	-2	3 479	2 352
as % of net sales	30.1%	22.1%	19.3%	14.9%			26.9%	20.7%
Income from associated companies	1	1	1	1	237	181	239	183
Interest expense							-201	-220
Other financial income and expense							-11	-27
Income before taxes							3 506	2 288
Taxes							-611	-421
Net income							2 895	1 867

First half

(USD millions)	Innovative Medicines		Sandoz		Corporate (including eliminations)		Group	
	H1 2021	H1 2020	H1 2021	H1 2020	H1 2021	H1 2020	H1 2021	H1 2020
Net sales to third parties	20 663	18 943	4 704	4 687			25 367	23 630
Sales to other segments	422	409	101	92	-523	-501		
Net sales	21 085	19 352	4 805	4 779	-523	-501	25 367	23 630
Other revenues	591	507	25	35	5	158	621	700
Cost of goods sold	-5 966	-5 080	-2 537	-2 614	550	543	-7 953	-7 151
Gross profit	15 710	14 779	2 293	2 200	32	200	18 035	17 179
Selling, general and administration	-6 026	-5 621	-1 014	-1 016	-243	-217	-7 283	-6 854
Research and development	-4 316	-4 106	-435	-395			-4 751	-4 501
Other income	828	326	145	49	135	318	1 108	693
Other expense	-777	-590	-215	-562	-223	-269	-1 215	-1 421
Operating income	5 419	4 788	774	276	-299	32	5 894	5 096
as % of net sales	26.2%	25.3%	16.5%	5.9%			23.2%	21.6%
Income from associated companies	1	1	1	1	493	304	495	306
Interest expense							-403	-459
Other financial income and expense							-30	-34
Income before taxes							5 956	4 909
Taxes							-1 002	-869
Net income							4 954	4 040

Segmentation – Additional consolidated balance sheets and income statements disclosure

(USD millions)	Innovative Medicines		Sandoz		Corporate (including eliminations)		Group	
	Jun 30, 2021	Dec 31, 2020	Jun 30, 2021	Dec 31, 2020	Jun 30, 2021	Dec 31, 2020	Jun 30, 2021	Dec 31, 2020
Total assets	80 964	83 112	16 659	16 825	26 392	32 122	124 015	132 059
Total liabilities	-14 892	-15 472	-3 715	-3 786	-51 280	-56 135	-69 887	-75 393
Total equity							54 128	56 666
Net debt ¹					28 547	24 481	28 547	24 481
Net operating assets	66 072	67 640	12 944	13 039	3 659	468	82 675	81 147

Included in net operating assets are:

Property, plant and equipment	9 336	9 863	1 916	1 849	486	551	11 738	12 263
Goodwill	21 624	21 718	8 135	8 274	7	7	29 766	29 999
Intangible assets other than goodwill	33 287	35 121	1 361	1 543	170	145	34 818	36 809

¹ See page 57 for additional disclosures related to net debt.

The following tables show the property, plant and equipment impairment charges and reversals, and the intangible asset impairment charges:

Second quarter

(USD millions)	Innovative Medicines		Sandoz		Group	
	Q2 2021	Q2 2020	Q2 2021	Q2 2020	Q2 2021	Q2 2020
Property, plant and equipment impairment charges	-64		-17		-81	
Property, plant and equipment impairment reversal	41		55		96	
Intangible assets impairment charges ¹	-87	-500			-87	-500

¹ Second quarter of 2020 includes an impairment of USD 485 million in Innovative Medicines related to the write-down of IPR&D related to cessation of clinical development program ZPL389 for atopic dermatitis.

First half

(USD millions)	Innovative Medicines		Sandoz		Group	
	H1 2021	H1 2020	H1 2021	H1 2020	H1 2021	H1 2020
Property, plant and equipment impairment charges	-178	-10	-36	-12	-214	-22
Property, plant and equipment impairment reversal	43		55		98	
Intangible assets impairment charges ¹	-288	-509	-1	-42	-289	-551

¹ First half of 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.

First half of 2020 includes an impairment of USD 485 million in Innovative Medicines related to the write-down of IPR&D related to cessation of clinical development program ZPL389 for atopic dermatitis.

In the second quarter and first half of 2021, there were no reversals of prior-year impairment charges on intangible assets (Q2 and H1 2020: nil).

Segmentation – Net sales by region¹

Second quarter

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc ²	Q2 2021 % of total	Q2 2020 % of total
Innovative Medicines						
Europe	3 751	2 964	27	17	36	32
US	3 709	3 515	6	6	35	38
Asia/Africa/Australasia	2 396	2 123	13	7	23	23
Canada and Latin America	703	586	20	15	6	7
Total	10 559	9 188	15	10	100	100
<i>Of which in Established Markets</i>	7 898	6 909	14	10	75	75
<i>Of which in Emerging Growth Markets</i>	2 661	2 279	17	12	25	25
Sandoz						
Europe	1 299	1 130	15	6	54	52
US	457	508	-10	-10	19	24
Asia/Africa/Australasia	417	341	22	16	17	16
Canada and Latin America	224	180	24	16	10	8
Total	2 397	2 159	11	5	100	100
<i>Of which in Established Markets</i>	1 730	1 621	7	0	72	75
<i>Of which in Emerging Growth Markets</i>	667	538	24	19	28	25
Group						
Europe	5 050	4 094	23	14	39	36
US	4 166	4 023	4	4	32	35
Asia/Africa/Australasia	2 813	2 464	14	8	22	22
Canada and Latin America	927	766	21	15	7	7
Total	12 956	11 347	14	9	100	100
<i>Of which in Established Markets</i>	9 628	8 530	13	8	74	75
<i>Of which in Emerging Growth Markets</i>	3 328	2 817	18	13	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 48.

Segmentation – Net sales by region¹

First half

	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc ²	H1 2021 % of total	H1 2020 % of total
Innovative Medicines						
Europe	7 400	6 366	16	8	36	34
US	7 252	7 057	3	3	35	37
Asia/Africa/Australasia	4 678	4 301	9	3	23	23
Canada and Latin America	1 333	1 219	9	10	6	6
Total	20 663	18 943	9	5	100	100
<i>Of which in Established Markets</i>	15 463	14 266	8	4	75	75
<i>Of which in Emerging Growth Markets</i>	5 200	4 677	11	9	25	25
Sandoz						
Europe	2 557	2 558	0	-7	54	55
US	904	1 078	-16	-16	19	23
Asia/Africa/Australasia	810	675	20	14	17	14
Canada and Latin America	433	376	15	12	10	8
Total	4 704	4 687	0	-5	100	100
<i>Of which in Established Markets</i>	3 385	3 466	-2	-8	72	74
<i>Of which in Emerging Growth Markets</i>	1 319	1 221	8	6	28	26
Group						
Europe	9 957	8 924	12	4	39	38
US	8 156	8 135	0	0	32	34
Asia/Africa/Australasia	5 488	4 976	10	5	22	21
Canada and Latin America	1 766	1 595	11	11	7	7
Total	25 367	23 630	7	3	100	100
<i>Of which in Established Markets</i>	18 848	17 732	6	2	74	75
<i>Of which in Emerging Growth Markets</i>	6 519	5 898	11	8	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 48.

Segmentation – Net sales by business franchise

Innovative Medicines Division net sales by business franchise

Second quarter

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc ¹
Hematology				
<i>Tasigna</i>	523	480	9	6
<i>Promacta/Revolade</i>	513	422	22	18
<i>Jakavi</i>	398	310	28	19
<i>Gleevec/Glivec</i>	263	288	-9	-13
<i>Exjade/Jadenu</i>	147	163	-10	-14
<i>Kymriah</i>	147	118	25	19
<i>Adakveo</i>	42	21	100	96
Other	76	73	4	0
Total Hematology	2 109	1 875	12	8
Solid Tumor				
<i>Tafinlar + Mekinist</i>	425	371	15	10
<i>Sandostatin</i>	359	341	5	2
<i>Afinitor/Votubia</i>	264	266	-1	-2
<i>Kisqali</i>	225	159	42	36
<i>Votrient</i>	153	162	-6	-9
<i>Lutathera</i>	118	105	12	10
<i>Piqray</i>	82	79	4	4
<i>Tabrecta</i>	22	6	nm	nm
Other	172	184	-7	-10
Total Solid Tumor	1 820	1 673	9	5
Total Novartis Oncology business unit	3 929	3 548	11	7
Immunology, Hepatology and Dermatology				
<i>Cosentyx</i>	1 175	944	24	21
<i>Ilaris</i>	247	200	24	21
Total Immunology, Hepatology and Dermatology	1 422	1 144	24	21
Neuroscience				
<i>Gilenya</i>	721	738	-2	-6
<i>Zolgensma</i>	315	205	54	48
<i>Mayzent</i>	69	34	103	96
<i>Kesimpta</i>	66		nm	nm
<i>Aimovig</i>	53	33	61	45
Other	11	15	-27	-19
Total Neuroscience	1 235	1 025	20	16
Ophthalmology				
<i>Lucentis</i>	551	401	37	27
<i>Xiidra</i>	118	79	49	48
<i>Beovu</i>	47	34	38	32
Other	398	423	-6	-11
Total Ophthalmology	1 114	937	19	12
Cardiovascular, Renal and Metabolism				
<i>Entresto</i>	886	580	53	46
Other	2		nm	nm
Total Cardiovascular, Renal and Metabolism	888	580	53	47
Respiratory and Allergy				
<i>Xolair</i>	355	289	23	14
<i>Ultibro Group</i>	150	149	1	-8
Other	12	6	100	133
Total Respiratory and Allergy	517	444	16	8
Established Medicines				
<i>Galvus Group</i>	280	279	0	-2
<i>Exforge Group</i>	247	238	4	-3
<i>Diovan Group</i>	190	268	-29	-33
<i>Zortress/Certican</i>	109	106	3	-2
<i>Neoral/Sandimmun(e)</i>	93	96	-3	-9
<i>Voltaren/Cataflam</i>	96	82	17	13
Other	439	441	0	-6
Total Established Medicines	1 454	1 510	-4	-8
Total Novartis Pharmaceuticals business unit	6 630	5 640	18	12
Total division net sales	10 559	9 188	15	10

¹ Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 48.

Innovative Medicines Division net sales by business franchise

First half

	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc ¹
Hematology				
<i>Tasigna</i>	1 038	967	7	4
<i>Promacta/Revolade</i>	976	825	18	16
<i>Jakavi</i>	761	628	21	14
<i>Gleevec/Glivec</i>	535	617	-13	-17
<i>Exjade/Jadenu</i>	300	335	-10	-15
<i>Kymriah</i>	298	211	41	35
<i>Adakveo</i>	79	36	119	118
Other	179	149	20	16
Total Hematology	4 166	3 768	11	6
Solid Tumor				
<i>Tafinlar + Mekinist</i>	818	737	11	7
<i>Sandostatin</i>	717	715	0	-2
<i>Afinitor/Votubia</i>	518	562	-8	-9
<i>Kisqali</i>	420	320	31	28
<i>Votrient</i>	296	328	-10	-13
<i>Lutathera</i>	240	217	11	8
<i>Piqray</i>	160	153	5	4
<i>Tabrecta</i>	39	6	nm	nm
Other	337	390	-14	-17
Total Solid Tumor	3 545	3 428	3	1
Total Novartis Oncology business unit	7 711	7 196	7	4
Immunology, Hepatology and Dermatology				
<i>Cosentyx</i>	2 228	1 874	19	16
<i>Ilaris</i>	503	413	22	20
Total Immunology, Hepatology and Dermatology	2 731	2 287	19	17
Neuroscience				
<i>Gilenya</i>	1 428	1 510	-5	-9
<i>Zolgensma</i>	634	375	69	63
<i>Mayzent</i>	124	64	94	89
<i>Kesimpta</i>	116		nm	nm
<i>Aimovig</i>	100	69	45	33
Other	23	27	-15	-13
Total Neuroscience	2 425	2 045	19	15
Ophthalmology				
<i>Lucentis</i>	1 096	888	23	15
<i>Xiidra</i>	226	169	34	33
<i>Beovu</i>	86	102	-16	-18
Other	797	974	-18	-21
Total Ophthalmology	2 205	2 133	3	-2
Cardiovascular, Renal and Metabolism				
<i>Entresto</i>	1 675	1 149	46	40
Other	3	1	200	nm
Total Cardiovascular, Renal and Metabolism	1 678	1 150	46	40
Respiratory and Allergy				
<i>Xolair</i>	690	596	16	9
<i>Ultibro Group</i>	299	309	-3	-10
Other	21	10	110	99
Total Respiratory and Allergy	1 010	915	10	3
Established Medicines				
<i>Galvus Group</i>	542	617	-12	-14
<i>Exforge Group</i>	501	496	1	-5
<i>Diovan Group</i>	404	542	-25	-28
<i>Zortress/Certican</i>	216	233	-7	-11
<i>Neoral/Sandimmun(e)</i>	187	197	-5	-10
<i>Voltaren/Cataflam</i>	182	174	5	3
Other	871	958	-9	-13
Total Established Medicines	2 903	3 217	-10	-13
Total Novartis Pharmaceuticals business unit	12 952	11 747	10	6
Total division net sales	20 663	18 943	9	5

¹ Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 48.

nm = not meaningful

Net sales of the top 20 Innovative Medicines Division products in 2021

Second quarter

Brands	Business franchise	Key indication	US		Rest of world			Total		
			USD m	% change USD/cc ²	USD m	% change USD	% change cc ²	USD m	% change USD	% change cc ²
Cosentyx	Immunology, Hepatology and Dermatology	Psoriasis, ankylosing spondylitis, psoriatic arthritis and non-radiographic axial spondyloarthritis	715	16	460	39	28	1 175	24	21
Entresto	Cardiovascular, Renal and Metabolism	Chronic heart failure	405	31	481	77	63	886	53	46
Gilenya	Neuroscience	Relapsing multiple sclerosis	369	-11	352	9	1	721	-2	-6
Lucentis	Ophthalmology	Age-related macular degeneration			551	37	27	551	37	27
Tasigna	Hematology	Chronic myeloid leukemia	219	-1	304	17	11	523	9	6
Promacta/Revolade	Hematology	Immune thrombocytopenia (ITP), severe aplastic anemia (SAA)	235	11	278	32	26	513	22	18
Tafinlar + Mekinist	Solid Tumor	BRAF V600+ metastatic and adjuvant melanoma; advanced non-small cell lung cancer (NSCLC)	151	3	274	22	14	425	15	10
Jakavi	Hematology	Myelofibrosis (MF), polycythemia vera (PV)			398	28	19	398	28	19
Sandostatin	Solid Tumor	Carcinoid tumors and acromegaly	207	3	152	8	1	359	5	2
Xolair ¹	Respiratory and Allergy	Severe allergic asthma (SAA), chronic spontaneous urticaria (CSU) and nasal polyps			355	23	14	355	23	14
Zolgensma	Neuroscience	Spinal muscular atrophy (SMA)	106	1	209	109	98	315	54	48
Galvus Group	Established Medicines	Type 2 diabetes			280	0	-2	280	0	-2
Gleevec/Glivec	Hematology	Chronic myeloid leukemia and GIST	65	-7	198	-9	-14	263	-9	-13
Afinitor/Votubia	Solid Tumor	Breast cancer/TSC	153	-6	111	8	3	264	-1	-2
Ilaris	Immunology, Hepatology and Dermatology	Auto-inflammatory (CAPS, TRAPS, HIDS/MKD, FMF, SJIA, AOSD and gout)	113	19	134	28	23	247	24	21
Exforge Group	Established Medicines	Hypertension	5	150	242	3	-4	247	4	-3
Kisqali	Solid Tumor	HR+/HER2- metastatic breast cancer	83	5	142	78	67	225	42	36
Diovan Group	Established Medicines	Hypertension	11	-68	179	-24	-28	190	-29	-33
Exjade/Jadenu	Hematology	Chronic iron overload	19	-44	128	-1	-7	147	-10	-14
Ultibro Group	Respiratory and Allergy	Chronic obstructive pulmonary disease (COPD)			150	1	-8	150	1	-8
Top 20 products total			2 856	6	5 378	22	15	8 234	16	11
Rest of portfolio			853	5	1 472	15	8	2 325	11	6
Total division sales			3 709	6	6 850	21	13	10 559	15	10

¹ Net sales reflect Xolair sales for all indications.

² Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 48.

Net sales of the top 20 Innovative Medicines Division products in 2021

First half

Brands	Business franchise	Key indication	US		Rest of world			Total		
			USD m	% change USD/cc ²	USD m	% change USD	% change cc ²	USD m	% change USD	% change cc ²
Cosentyx	Immunology, Hepatology and Dermatology	Psoriasis, ankylosing spondylitis, psoriatic arthritis and non-radiographic axial spondyloarthritis	1 360	14	868	27	18	2 228	19	16
Entresto	Cardiovascular, Renal and Metabolism	Chronic heart failure	787	31	888	62	50	1 675	46	40
Gilenya	Neuroscience	Relapsing multiple sclerosis	723	-10	705	0	-7	1 428	-5	-9
Lucentis	Ophthalmology	Age-related macular degeneration			1 096	23	15	1 096	23	15
Tasigna	Hematology	Chronic myeloid leukemia	430	1	608	12	7	1 038	7	4
Promacta/Revolade	Hematology	Immune thrombocytopenia (ITP), severe aplastic anemia (SAA)	455	14	521	22	17	976	18	16
Tafinlar + Mekinist	Solid Tumor	BRAF V600+ metastatic and adjuvant melanoma; advanced non-small cell lung cancer (NSCLC)	291	4	527	15	8	818	11	7
Jakavi	Hematology	Myelofibrosis (MF), polycythemia vera (PV)			761	21	14	761	21	14
Sandostatin	Solid Tumor	Carcinoid tumors and acromegaly	419	1	298	-1	-6	717	0	-2
Xolair ¹	Respiratory and Allergy	Severe allergic asthma (SAA), chronic spontaneous urticaria (CSU) and nasal polyps			690	16	9	690	16	9
Zolgensma	Neuroscience	Spinal muscular atrophy (SMA)	225	-3	409	184	169	634	69	63
Galvus Group	Established Medicines	Type 2 diabetes			542	-12	-14	542	-12	-14
Gleevec/Glivec	Hematology	Chronic myeloid leukemia and GIST	139	-20	396	-11	-15	535	-13	-17
Afinitor/Votubia	Solid Tumor	Breast cancer/TSC	304	-8	214	-7	-11	518	-8	-9
Ilaris	Immunology, Hepatology and Dermatology	Auto-inflammatory (CAPS, TRAPS, HIDS/MKD, FMF, SJIA, AOSD and gout)	220	20	283	23	21	503	22	20
Exforge Group	Established Medicines	Hypertension	8	33	493	1	-5	501	1	-5
Kisqali	Solid Tumor	HR+/HER2- metastatic breast cancer	154	1	266	59	53	420	31	28
Diovan Group	Established Medicines	Hypertension	31	-48	373	-23	-26	404	-25	-28
Exjade/Jadenu	Hematology	Chronic iron overload	47	-40	253	-2	-8	300	-10	-15
Ultibro Group	Respiratory and Allergy	Chronic obstructive pulmonary disease (COPD)			299	-3	-10	299	-3	-10
Top 20 products total			5 593	5	10 490	15	8	16 083	11	7
Rest of portfolio			1 659	-4	2 921	7	1	4 580	3	-1
Total division sales			7 252	3	13 411	13	6	20 663	9	5

¹ Net sales reflect Xolair sales for all indications.

² Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 48.

Sandoz Division net sales by business franchise

Second quarter

	Q2 2021 USD m	Q2 2020 USD m	% change USD	% change cc ²
Retail Generics ¹	1 777	1 576	13	6
Biopharmaceuticals	524	466	12	5
Anti-Infectives ¹	96	117	-18	-21
Total division net sales	2 397	2 159	11	5

¹ Sandoz total anti-infectives net sales amounted to USD 257 million (Q2 2020: USD 251 million), of which USD 161 million (Q2 2020: USD 134 million) is sold through the Retail Generics business franchise and USD 96 million (Q2 2020: USD 117 million) is sold to other third party companies through the Anti-Infectives business franchise

² Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 48.

First half

	H1 2021 USD m	H1 2020 USD m	% change USD	% change cc ²
Retail Generics ¹	3 456	3 545	-3	-7
Biopharmaceuticals	1 035	916	13	6
Anti-Infectives ¹	213	226	-6	-10
Total division net sales	4 704	4 687	0	-5

¹ Sandoz total anti-infectives net sales amounted to USD 520 million (H1 2020: USD 582 million), of which USD 307 million (H1 2020: USD 356 million) is sold through the Retail Generics business franchise and USD 213 million (H1 2020: USD 226 million) is sold to other third party companies through the Anti-Infectives business franchise

² Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 48.

The product portfolio of Sandoz is widely spread in 2021 and 2020.

Segmentation – Other revenue

Second quarter

(USD millions)	Innovative Medicines		Sandoz		Corporate		Group	
	Q2 2021	Q2 2020	Q2 2021	Q2 2020	Q2 2021	Q2 2020	Q2 2021	Q2 2020
Profit sharing income	214	209					214	209
Royalty income	19	24	6	5	1	2	26	31
Milestone income	73	5	2	11			75	16
Other ¹	15	13	8	6			23	19
Total other revenues	321	251	16	22	1	2	338	275

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

First half

(USD millions)	Innovative Medicines		Sandoz		Corporate		Group	
	H1 2021	H1 2020	H1 2021	H1 2020	H1 2021	H1 2020	H1 2021	H1 2020
Profit sharing income	405	407					405	407
Royalty income	42	54	12	13	5	158	59	225
Milestone income	112	25	3	11			115	36
Other ¹	32	21	10	11			42	32
Total other revenues	591	507	25	35	5	158	621	700

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

10. Commitments and contingencies

Research and development commitments

Significant transactions in 2021

In January 2021, Novartis entered into a long-term research and development agreement, which closed in February 2021, and Innovative Medicines recognized an IPR&D intangible asset amounting to USD 426 million. This agreement provides for potential milestones payments by Novartis that may be capitalized and royalties. Based on their estimated timing, the research and development commitments for this transaction are expected to amount to USD 260 million in 2022, USD 275 million in 2023, USD 310 million in 2024, USD 455 million in 2025

and USD 250 million later than 2025, for a total of USD 1.6 billion.

Significant pending transactions

In November 2020, Novartis entered into a long-term research and development agreement, which did not close as of July 20, 2021. This agreement provides for potential milestones payments by Novartis that may be capitalized and royalties. Based on their estimated timing, the payments for this transaction are expected to amount to USD 117 million in 2021, USD 63 million in 2022, USD 200 million in 2024, USD 115 million in 2025 and USD 819 million later than 2025, for a total of USD 1.3 billion.

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, free cash flow and net debt.

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, 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 and restructurings.

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 exchange 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, 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 to 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.

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 a non-IFRS measure, which means it should not be interpreted as a measure determined under IFRS. Net debt is presented as additional information because 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.

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

Second quarter

(USD millions unless indicated otherwise)	Innovative Medicines		Sandoz		Corporate		Group	
	Q2 2021	Q2 2020	Q2 2021	Q2 2020	Q2 2021	Q2 2020	Q2 2021	Q2 2020
IFRS operating income	3 177	2 033	462	321	-160	-2	3 479	2 352
Amortization of intangible assets	886	714	56	70			942	784
Impairments								
Intangible assets	87	500					87	500
Property, plant and equipment related to the Group-wide rationalization of manufacturing sites	-22		-38				-60	
Other property, plant and equipment	45						45	
Total impairment charges	110	500	-38				72	500
Acquisition or divestment of businesses and related items								
- Income		-2				-17		-19
- Expense		30		11	3	24	3	65
Total acquisition or divestment of businesses and related items, net		28		11	3	7	3	46
Other items								
Divestment gains	-550	-8			-18	24	-568	16
Financial assets – fair value adjustments	32	1			28	-167	60	-166
Restructuring and related items								
- Income	-2	-5	-16	-2	-2	-2	-20	-9
- Expense	261	107	50	42	18	21	329	170
Legal-related items								
- Income								
- Expense			5	7			5	7
Additional income	-4	-86	1			-4	-3	-90
Additional expense	26	17		26	20	16	46	59
Total other items	-237	26	40	73	46	-112	-151	-13
Total adjustments	759	1 268	58	154	49	-105	866	1 317
Core operating income	3 936	3 301	520	475	-111	-107	4 345	3 669
as % of net sales	37.3%	35.9%	21.7%	22.0%			33.5%	32.3%
Income from associated companies	1	1	1	1	237	181	239	183
Core adjustments to income from associated companies, net of tax					39	89	39	89
Interest expense							-201	-220
Other financial income and expense							-11	-27
Core adjustments to other financial income and expense							13	7
Taxes, adjusted for above items (core taxes)							-708	-593
Core net income							3 716	3 108
Core net income attributable to shareholders of Novartis AG							3 717	3 108
Core basic EPS (USD)¹							1.66	1.36

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

First half

(USD millions unless indicated otherwise)	Innovative Medicines		Sandoz		Corporate		Group	
	H1 2021	H1 2020	H1 2021	H1 2020	H1 2021	H1 2020	H1 2021	H1 2020
IFRS operating income	5 419	4 788	774	276	-299	32	5 894	5 096
Amortization of intangible assets	1 775	1 432	120	233			1 895	1 665
Impairments								
Intangible assets	288	509	1	42			289	551
Property, plant and equipment related to the Group-wide rationalization of manufacturing sites	90	10	-19	10			71	20
Other property, plant and equipment	45			2			45	2
Total impairment charges	423	519	-18	54			405	573
Acquisition or divestment of businesses and related items								
- Income	-1	-3			-5	-53	-6	-56
- Expense	1	74		22	12	61	13	157
Total acquisition or divestment of businesses and related items, net		71		22	7	8	7	101
Other items								
Divestment gains	-559	-148	-4		-50	22	-613	-126
Financial assets – fair value adjustments	-75	25			34	-152	-41	-127
Restructuring and related items								
- Income	-14	-11	-17	-12	-2	-2	-33	-25
- Expense	571	218	79	136	22	25	672	379
Legal-related items								
- Income			-11				-11	
- Expense	1	87	42	392		-26	43	453
Additional income	-22	-90		-1		-140	-22	-231
Additional expense	83	17		48	23	23	106	88
Total other items	-15	98	89	563	27	-250	101	411
Total adjustments	2 183	2 120	191	872	34	-242	2 408	2 750
Core operating income	7 602	6 908	965	1 148	-265	-210	8 302	7 846
as % of net sales	36.8%	36.5%	20.5%	24.5%			32.7%	33.2%
Income from associated companies	1	1	1	1	493	304	495	306
Core adjustments to income from associated companies, net of tax					96	274	96	274
Interest expense							-403	-459
Other financial income and expense							-30	-34
Core adjustments to other financial income and expense							27	-8
Taxes, adjusted for above items (core taxes)							-1 358	-1 268
Core net income							7 129	6 657
Core net income attributable to shareholders of Novartis AG							7 130	6 660
Core basic EPS (USD)¹							3.17	2.92

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

Second quarter

(USD millions unless indicated otherwise)	Q2 2021 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items ³	Other items ⁴	Q2 2021 Core results	Q2 2020 Core results
Gross profit	9 380	915			160	10 455	9 058
Operating income	3 479	942	72	3	-151	4 345	3 669
Income before taxes	3 506	981	72	3	-138	4 424	3 701
Taxes ⁵	-611					-708	-593
Net income	2 895					3 716	3 108
Basic EPS (USD)⁶	1.29					1.66	1.36

The following are adjustments to arrive at core gross profit

Cost of goods sold	-3 914	915			160	-2 839	-2 564
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The following are adjustments to arrive at core operating income

Selling, general and administration	-3 754				44	-3 710	-3 318
Research and development	-2 400	27	87		2	-2 284	-2 010
Other income	769		-96		-581	92	190
Other expense	-516		81	3	224	-208	-251

The following are adjustments to arrive at core income before taxes

Income from associated companies	239	39				278	272
Other financial income and expense	-11				13	2	-20

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; income from associated companies includes USD 39 million for the Novartis share of the estimated Roche core items

² Impairments: research and development includes impairment charges related to intangible assets; other income and other expense include reversals of impairment charges and 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 transitional service fee expenses related to the Alcon distribution

⁴ Other items: cost of goods sold, other income and other expense include net restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, research and development, other income and other expense include other restructuring income and charges and related items; selling, general and administration also includes adjustments to provisions; other income includes net gains from the divestment of products and financial assets; other income and other expense include fair value adjustments on financial assets; other expense also includes an adjustment to an environmental provision and legal-related items; other financial income and expense includes a charge related to the monetary loss due to hyperinflation in Argentina 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 918 million to arrive at the core results before tax amounts to USD 97 million. The average tax rate on the adjustments is 10.6% since the estimated quarterly core tax charge of 16.0% 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

First half

(USD millions unless indicated otherwise)	H1 2021 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items ³	Other items ⁴	H1 2021 Core results	H12020 Core results
Gross profit	18 035	1 841			366	20 242	18 942
Operating income	5 894	1 895	405	7	101	8 302	7 846
Income before taxes	5 956	1 991	405	7	128	8 487	7 925
Taxes ⁵	-1 002					-1 358	-1 268
Net income	4 954					7 129	6 657
Basic EPS (USD)⁶	2.20					3.17	2.92
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-7 953	1 841			366	-5 746	-5 252
The following are adjustments to arrive at core operating income							
Selling, general and administration	-7 283				53	-7 230	-6 773
Research and development	-4 751	54	289		-3	-4 411	-4 044
Other income	1 108		-98	-6	-826	178	231
Other expense	-1 215		214	13	511	-477	-510
The following are adjustments to arrive at core income before taxes							
Income from associated companies	495	96				591	580
Other financial income and expense	-30				27	-3	-42

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; income from associated companies includes USD 96 million for the Novartis share of the estimated Roche core items

² Impairments: research and development includes impairment charges related to intangible assets; other income and other expense include reversals of impairment charges and 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 expenses related to the Alcon distribution

⁴ Other items: cost of goods sold, other income and other expense include net restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, research and development, other income and other expense include other restructuring income and charges and related items; selling, general and administration also includes adjustments to provisions; research and development includes adjustments to contingent considerations; other income includes net gains from the divestment of products; other income and other expense include fair value adjustments and divestment gains and losses on financial assets and legal-related items; other expense also includes an adjustment to an environmental provision; other financial income and expense includes a charge related to the monetary loss due to hyperinflation in Argentina 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 2.5 billion to arrive at the core results before tax amounts to USD 356 million. The average tax rate on the adjustments is 14.1% since the estimated full year core tax charge of 16.0% 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

Second quarter

(USD millions)	Q2 2021 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items	Other items ³	Q2 2021 Core results	Q2 2020 Core results
Gross profit	8 172	859			150	9 181	7 865
Operating income	3 177	886	110		-237	3 936	3 301

The following are adjustments to arrive at core gross profit

Cost of goods sold	-2 902	859			150	-1 893	-1 793
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The following are adjustments to arrive at core operating income

Selling, general and administration	-3 120				43	-3 077	-2 737
Research and development	-2 179	27	87		2	-2 063	-1 809
Other income	622		-41		-546	35	133
Other expense	-318		64		114	-140	-151

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

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

³ Other items: cost of goods sold, other income and other expense include net restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, research and development, other income and other expense include other restructuring income and charges and related items; selling, general and administration also includes adjustments to provisions; other income includes net gains from the divestment of products and financial assets; other income and other expense include fair value adjustments on financial assets

First half

(USD millions)	H1 2021 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items ³	Other items ⁴	H1 2021 Core results	H1 2020 Core results
Gross profit	15 710	1 721			350	17 781	16 302
Operating income	5 419	1 775	423		-15	7 602	6 908

The following are adjustments to arrive at core gross profit

Cost of goods sold	-5 966	1 721			350	-3 895	-3 557
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The following are adjustments to arrive at core operating income

Selling, general and administration	-6 026				53	-5 973	-5 564
Research and development	-4 316	54	288		-3	-3 977	-3 649
Other income	828		-43	-1	-693	91	149
Other expense	-777		178	1	278	-320	-330

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

² Impairments: research and development includes impairment charges related to intangible assets; other income and other expense include reversals of impairment charges and 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 expenses related to the Alcon distribution

⁴ Other items: cost of goods sold, other income and other expense include net restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, research and development, other income and other expense include other restructuring income and charges and related items; selling, general and administration also includes adjustments to provisions; research and development includes adjustments to contingent considerations; other income includes net gains from the divestment of products and financial assets; other income and other expense include fair value adjustments on financial assets; other expense also includes legal-related items

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

Second quarter

(USD millions)	Q2 2021 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items	Other items ³	Q2 2021 Core results	Q2 2020 Core results
Gross profit	1 190	56			10	1 256	1 170
Operating income	462	56	-38		40	520	475

The following are adjustments to arrive at core gross profit

Cost of goods sold	-1 271	56			10	-1 205	-1 054
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The following are adjustments to arrive at core operating income

Selling, general and administration	-512				1	-511	-473
Other income	102		-55		-16	31	15
Other expense	-97		17		45	-35	-36

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

² Impairments: other income and other expense include a reversal of an impairment charge and impairment charges related to property, plant and equipment

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

First half

(USD millions)	H1 2021 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items	Other items ³	H1 2021 Core results	H12020 Core results
Gross profit	2 293	120			16	2 429	2 576
Operating income	774	120	-18		89	965	1 148

The following are adjustments to arrive at core gross profit

Cost of goods sold	-2 537	120			16	-2 401	-2 238
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The following are adjustments to arrive at core operating income

Research and development	-435		1			-434	-395
Other income	145		-55		-32	58	37
Other expense	-215		36		105	-74	-78

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

³ Other items: cost of goods sold, other income and other expense include net restructuring and other charges related to the Group-wide rationalization of manufacturing sites and other restructuring income and charges and related items; other income also includes net gains from the divestment of a product; other income and other expense include legal-related items

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

Second quarter

(USD millions)	Q2 2021 IFRS results	Amortization of intangible assets	Impairments	Acquisition or divestment of businesses and related items ¹	Other items ²	Q2 2021 Core results	Q2 2020 Core results
Gross profit	18					18	23
Operating loss	-160			3	46	-111	-107

The following are adjustments to arrive at core operating loss

Other income	45				-19	26	42
Other expense	-101			3	65	-33	-64

¹ Acquisition or divestment of businesses and related items, including restructuring and integration charges: other expense includes transitional service fee expenses related to the Alcon distribution

² Other items: other income and other expense include restructuring income and charges and related items; other income also includes divestment gains on financial assets; other expense includes fair value adjustments on financial assets and an adjustment to an environmental provision

First half

(USD millions)	H1 2021 IFRS results	Amortization of intangible assets	Impairments	Acquisition or divestment of businesses and related items ¹	Other items ²	H1 2021 Core results	H1 2020 Core results
Gross profit	32					32	64
Operating loss	-299			7	27	-265	-210

The following are adjustments to arrive at core operating loss

Other income	135			-5	-101	29	45
Other expense	-223			12	128	-83	-102

¹ Acquisition or divestment of businesses and related items, including restructuring and integration charges: other income and other expense include transitional service fee income and expenses related to the Alcon distribution

² Other items: other income and other expense include fair value adjustments and divestment gains and losses on financial assets, and restructuring income and charges and related items; other expense also includes an adjustment to an environmental provision

Income from associated companies

(USD millions)	Q2 2021	Q2 2020	H1 2021	H1 2020
Share of estimated Roche reported results	263	225	500	455
Prior-year adjustment			40	-64
Amortization of additional intangible assets recognized by Novartis on initial accounting for the equity interest	-22	-41	-43	-83
Net income effect from Roche Holding AG	241	184	497	308
Others	-2	-1	-2	-2
Income from associated companies	239	183	495	306

Core income from associated companies

(USD millions)	Q2 2021	Q2 2020	H1 2021	H1 2020
Income from associated companies	239	183	495	306
Share of estimated Roche core adjustments	39	89	96	172
Roche prior year adjustment				102
Core income from associated companies	278	272	591	580

Net debt

Condensed consolidated changes in net debt – Second quarter

(USD millions)	Q2 2021	Q2 2020
Change in cash and cash equivalents	1 316	1 389
Change in marketable securities, commodities, time deposits, financial debts and derivatives financial instruments	1 972	1 857
Change in net debt	3 288	3 246
Net debt at April 1	-31 835	-29 783
Net debt at June 30	-28 547	-26 537

Condensed consolidated changes in net debt – First half

(USD millions)	H1 2021	H1 2020
Change in cash and cash equivalents	-4 541	-5 195
Change in marketable securities, commodities, time deposits, financial debts and derivatives financial instruments	475	-5 404
Change in net debt	-4 066	-10 599
Net debt at January 1	-24 481	-15 938
Net debt at June 30	-28 547	-26 537

Components of net debt

(USD millions)	Jun 30, 2021	Dec 31, 2020	Jun 30, 2020
Non-current financial debts	-24 828	-26 259	-23 955
Current financial debts and derivative financial instruments	-9 075	-9 785	-8 875
Total financial debt	-33 903	-36 044	-32 830
Less liquidity:			
Cash and cash equivalents	5 117	9 658	5 917
Marketable securities, commodities, time deposits and derivative financial instruments	239	1 905	376
Total liquidity	5 356	11 563	6 293
Net debt at end of period	-28 547	-24 481	-26 537

Share information

	Jun 30, 2021	Jun 30, 2020
Number of shares outstanding	2 236 739 037	2 288 979 612
Registered share price (CHF)	84.32	82.42
ADR price (USD)	91.24	87.34
Market capitalization (USD billions) ¹	204.8	198.1
Market capitalization (CHF billions) ¹	188.6	188.7

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

Free cash flow

Second quarter

(USD millions)	Q2 2021	Q2 2020
Operating income	3 479	2 352
Adjustments for non-cash items		
Depreciation, amortization and impairments	1 503	1 537
Change in provisions and other non-current liabilities	139	118
Other	-326	205
Operating income adjusted for non-cash items	4 795	4 212
Dividends received from associated companies and others	1	2
Interest and other financial receipts	2	57
Interest and other financial payments	-228	-237
Taxes paid	-409	-303
Payments out of provisions and other net cash movements in non-current liabilities	-159	-420
Change in inventory and trade receivables less trade payables	-308	354
Change in other net current assets and other operating cash flow items	438	296
Net cash flows from operating activities	4 132	3 961
Purchases of property, plant and equipment	-321	-238
Proceeds from sale of property, plant and equipment	19	1
Purchases of intangible assets	-276	-214
Proceeds from sale of intangible assets	546	49
Purchases of financial assets	-42	-38
Proceeds from sale of financial assets	204	117
Purchases of other non-current assets	-30	-7
Proceeds from sale of other non-current assets	3	
Free cash flow	4 235	3 631

First half

(USD millions)	H1 2021	H1 2020
Operating income	5 894	5 096
Adjustments for non-cash items		
Depreciation, amortization and impairments	3 099	2 986
Change in provisions and other non-current liabilities	416	838
Other	-189	322
Operating income adjusted for non-cash items	9 220	9 242
Dividends received from associated companies and others	523	489
Interest and other financial receipts	6	298
Interest and other financial payments	-623	-340
Taxes paid	-1 144	-899
Payments out of provisions and other net cash movements in non-current liabilities	-376	-824
Change in inventory and trade receivables less trade payables	-1 051	-1 064
Change in other net current assets and other operating cash flow items	-293	-413
Net cash flows from operating activities	6 262	6 489
Purchases of property, plant and equipment	-567	-475
Proceeds from sale of property, plant and equipment	85	4
Purchases of intangible assets	-888	-460
Proceeds from sale of intangible assets	629	105
Purchases of financial assets	-78	-90
Proceeds from sale of financial assets ¹	428	127
Purchases of other non-current assets	-42	-48
Proceeds from sale of other non-current assets	3	0
Free cash flow	5 832	5 652

¹ For the free cash flow in the first half of 2020, proceeds from the sales of financial assets excludes the cash inflows from the sale of a portion of the Alcon Inc. shares received by certain consolidated foundations through the Alcon spin-off, which amounted to USD 232 million.

Effects of currency fluctuations

Principal currency translation rates

(USD per unit)	Average rates Q2 2021	Average rates Q2 2020	Average rates H1 2021	Average rates H1 2020	Period-end rates Jun 30, 2021	Period-end rates Jun 30, 2020
1 CHF	1.098	1.037	1.102	1.035	1.086	1.050
1 CNY	0.155	0.141	0.155	0.142	0.155	0.141
1 EUR	1.206	1.101	1.206	1.101	1.190	1.121
1 GBP	1.398	1.241	1.388	1.260	1.384	1.228
100 JPY	0.914	0.930	0.929	0.924	0.905	0.929
100 RUB	1.348	1.382	1.346	1.444	1.376	1.424

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.

Second quarter

	Change in USD % Q2 2021	Change in constant currencies % Q2 2021	Percentage point currency impact Q2 2021	Change in USD % Q2 2020	Change in constant currencies % Q2 2020	Percentage point currency impact Q2 2020
Total Group						
Net sales to third parties	14	9	5	-4	-1	-3
Operating income	48	41	7	-12	-4	-8
Net income	55	49	6	-11	-4	-7
Basic earnings per share (USD)	57	52	5	-10	-3	-7
Core operating income	18	13	5	1	6	-5
Core net income	20	14	6	0	5	-5
Core basic earnings per share (USD)	22	16	6	1	6	-5
Innovative Medicines						
Net sales to third parties	15	10	5	-1	1	-2
Operating income	56	50	6	-21	-15	-6
Core operating income	19	14	5	0	5	-5
Sandoz						
Net sales to third parties	11	5	6	-11	-9	-2
Operating income	44	37	7	14	25	-11
Core operating income	9	3	6	-5	1	-6
Corporate						
Operating loss	nm	nm	nm	nm	nm	nm
Core operating loss	-4	2	-6	33	34	-1

nm = not meaningful

Currency impact on key figures

First half

	Change in USD % H1 2021	Change in constant currencies % H1 2021	Percentage point currency impact H1 2021	Change in USD % H1 2020	Change in constant currencies % H1 2020	Percentage point currency impact H1 2020
Total Group						
Net sales to third parties	7	3	4	3	6	-3
Operating income	16	12	4	4	11	-7
Net income	23	19	4	2	9	-7
Basic earnings per share (USD)	24	21	3	3	11	-8
Core operating income	6	2	4	14	19	-5
Core net income	7	3	4	13	18	-5
Core basic earnings per share (USD)	9	5	4	15	19	-4
Innovative Medicines						
Net sales to third parties	9	5	4	5	7	-2
Operating income	13	10	3	2	9	-7
Core operating income	10	6	4	11	16	-5
Sandoz						
Net sales to third parties	0	-5	5	-2	1	-3
Operating income	180	175	5	-50	-40	-10
Core operating income	-16	-19	3	19	26	-7
Corporate						
Operating (loss)/income	nm	nm	nm	nm	nm	nm
Core operating loss	-26	-22	-4	27	28	-1

nm = not meaningful

Estimated prior year COVID-19 related forward purchasing de-stocking impact in constant currencies on second quarter key figures

In the first quarter of 2020, COVID-19 resulted in increased forward purchasing by customers, including at the patient level, as some patients filled prescriptions to cover a longer period of time. This forward purchasing largely reversed during Q2 2020. We estimate the second quarter of 2021 constant currency measures excluding COVID-19 related forward purchasing de-stocking by adjusting second quarter of 2020 net sales and core operating income by our estimate of the COVID-19 forward purchasing de-stocking amount. Using the adjusted prior year amount, we calculate the constant currency growth rate according to our constant currency calculation as described above in this section “Non-IFRS measure as defined by Novartis – Constant currencies” on page 48. We use these constant currency measures excluding COVID-19 related forward purchasing de-stocking in evaluating the Group’s performance, since they may assist us in evaluating our ongoing performance during the second quarter of 2021. However, in performing our evaluation, we also consider equivalent measures of performance that are not affected by COVID-19 related forward purchasing de-stocking and changes in the relative value of currencies

The following tables provide a summary of the estimated prior year COVID-19 related forward purchasing de-stocking impact in USD and constant currencies on key Q2 Group figures.

Second quarter

	In USD			In constant currencies		
		Excl. prior year COVID-19 related forward purchasing impact %	Percentage point impact		Excl. prior year COVID-19 related forward purchasing impact %	Percentage point impact
Total Group						
Net sales to third parties growth	14	10	4	9	5	4
Core operating income growth	18	10	8	13	4	9
Core operating income margin change	1.2	-0.3	1.5	1.2	-0.3	1.5
Innovative Medicines						
Net sales to third parties growth	15	11	4	10	7	3
Core operating income growth	19	11	8	14	6	8
Core operating income margin change	1.4	-0.1	1.5	1.3	-0.2	1.5
Sandoz						
Net sales to third parties growth	11	6	5	5	-1	6
Core operating income growth	9	-2	11	3	-8	11
Core operating income margin change	-0.3	-1.7	1.4	-0.4	-1.8	1.4

Disclaimer

This press release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995, that can generally be identified by words such as “growth,” “starting,” “expected,” “to grow,” “to support,” “to drive,” “to evolve,” “taking,” “evaluating,” “will,” “to accelerate,” “to build,” “evolve,” “launch,” “continued,” “continues,” “to progress,” “may,” “retaining,” “remains,” “including,” “can,” “to create,” “to find,” “confident,” “estimate,” “estimated,” “impact,” “ongoing,” “resubmission,” “focus,” “launches,” “innovation,” “guidance,” “commitment,” “pipeline,” “momentum,” “would,” “growing,” “to expand,” “expanding,” “assumes,” “assume,” “continuation,” “strongly,” “priority,” “outlook,” “unforeseen,” “forecast,” “prevail,” “enter,” “to improve,” “transformative,” “innovative,” “expect,” “working,” “to meet,” “actively treating,” “awaiting,” “filings,” 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 our estimates of the impact of past and future COVID-19 related forward purchasing de-stocking on our performance; or regarding the impact of the COVID-19 pandemic on parts of our business including oncology, generics, and certain geographies; 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. 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 the COVID-19 pandemic on enrollment in, initiation and completion of our clinical trials in the future, and research and development timelines; the impact of a partial or complete failure of the return to normal global healthcare systems including prescription dynamics, particularly oncology, in the second half of 2021; 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 strategic benefits, synergies or opportunities expected from the transactions described, 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. As a leading global medicines company, we use innovative science and digital technologies to create transformative treatments in areas of great medical need. In our quest to find new medicines, we consistently rank among the world's top companies investing in research and development. Novartis products reach nearly 800 million people globally and we are finding innovative ways to expand access to our latest treatments. About 109,000 people of more than 140 nationalities work at Novartis around the world. Find out more at <https://www.novartis.com>.

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

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

Important dates

September 30, 2021	ESG Investor Day
October 26, 2021	Third quarter & nine months 2021 results