NOVARTIS | Reimagining Medicine

Novartis Second Quarter and Half Year 2020

Condensed interim financial report – Supplementary Data

Novartis Global Communications

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Condensed Interim Financial Report – Supplementary Data

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Group

Key figures [1]	Q2 2020 USDm	Q2 2019 USDm	% change USD	% change cc[2]	H1 2020 USDm	H1 2019 USDm	% change USD	% change cc[2]
Net sales to third parties from continuing operations	**11 347**	**11 764**	**-4**	**-1**	**23 630**	**22 870**	**3**	**6**
Divisional operating income from continuing operations	2 354	2 846	-17	-11	5 064	5 228	-3	4
Corporate income and expense, from continuing operations, net	-2	-183	nm	nm	32	-323	nm	nm
Operating income from continuing operations	**2 352**	**2 663**	**-12**	**-4**	**5 096**	**4 905**	**4**	**11**
As % of net sales	*20.7*	*22.6*			*21.6*	*21.4*		
Income from associated companies	183	176	4	5	306	256	20	20
Interest expense	-220	-205	-7	-10	-459	-431	-6	-8
Other financial income and expense	-27	0	nm	nm	-34	44	nm	nm
Taxes	-421	-525	20	13	-869	-797	-9	-17
Net income from continuing operations	**1 867**	**2 109**	**-11**	**-4**	**4 040**	**3 977**	**2**	**9**
Net income from discontinued operations		4 691				4 590		
Net income	**1 867**	**6 800**	**-73**	**-70**	**4 040**	**8 567**	**-53**	**-49**
Basic earnings per share from continuing operations (USD)	**0.82**	**0.91**	**-10**	**-3**	**1.77**	**1.72**	**3**	**11**
Basic earnings per share from discontinued operations (USD)		2.03				1.98		
Basic earnings per share (USD)	**0.82**	**2.94**	**-72**	**-70**	**1.77**	**3.70**	**-52**	**-49**
Cash flows from operating activities from continuing operations	**3 961**	**3 111**	**27**		**6 489**	**5 445**	**19**	
Free cash flow from continuing operations	**3 631**	**3 612**	**1**		**5 652**	**5 481**	**3**	
Core								
Core operating income from continuing operations	**3 669**	**3 648**	**1**	**6**	**7 846**	**6 902**	**14**	**19**
As % of net sales	*32.3*	*31.0*			*33.2*	*30.2*		
Core net income from continuing operations	**3 108**	**3 096**	**0**	**5**	**6 657**	**5 907**	**13**	**18**
Core net income from discontinued operations						278		
Core net income	**3 108**	**3 096**	**0**	**5**	**6 657**	**6 185**	**8**	**12**
Core basic earnings per share from continuing operations (USD)	**1.36**	**1.34**	**1**	**6**	**2.92**	**2.55**	**15**	**19**
Core basic earnings per share from discontinued operations (USD)						0.12		
Core basic earnings per share (USD)	**1.36**	**1.34**	**1**	**6**	**2.92**	**2.67**	**9**	**14**

nm = not meaningful

[1] Continuing operations include the businesses of Innovative Medicines and Sandoz Division including the US generic oral solids and dermatology portfolio and Corporate activities and discontinued operations include the business of Alcon. See page 42 for full explanation.

[2] Constant currencies (cc), core results and free cash flow are non-IFRS measures. An explanation of non-IFRS measures can be found on page 54. Unless otherwise noted, all growth rates in this Release refer to same period in prior year.

COVID-19 Impacts

- First half results, sales grew 6% (cc) and core operating income grew 19% (cc), are more representative of performance than Q2 as Q1 forward purchasing largely reversed.
- Our operations remain stable with record high customer service levels. Product flow across country borders is working smoothly.
- Our cash collections continue to be according to our normal trade terms and days sales outstanding remains at normal levels.
- Our product portfolio remains resilient despite COVID-19 negatively impacting demand in April and May, particularly: *Lucentis* and mature ophthalmology (approximately USD 0.3 billion in Q2), new

patient starts in dermatology and Sandoz retail. There was some increase in demand for oral chronic treatments.

- Sales were mostly affected by lower new patient starts and significant reduction in patient visits to physicians. This impact showed improvement in the latter part of the quarter. Novartis is closely monitoring the situation and will provide an update with Q3 results.
- We implemented and embraced new ways of working, which include less travel and meeting costs.
- At present drug development operations are continuing with manageable disruptions. Thus far, these measures have limited COVID-19 related impacts to our expected submission timelines over the next several years.
- Novartis is well positioned to meet its ongoing financial obligations and has sufficient liquidity to support our normal business dynamics.
- First half dynamics are reflected in our full year guidance, which assumes that we see a continuation of the return to normal global healthcare systems including prescription dynamics, particularly ophthalmology, in H2 2020.

Financials

In order to comply with International Financial Reporting Standards (IFRS), Novartis has separated the Group's reported financial data into "continuing" and "discontinued" operations. The results of the Alcon business in 2019 are reported as discontinued operations. See page 42 and Notes 2, 3 and 10 for a full explanation.

The commentary below focuses on continuing operations including the businesses of Innovative Medicines and Sandoz, as well as the continuing Corporate functions. We also provide information on discontinued operations.

Continuing operations second quarter

Net sales

Net sales were USD 11.3 billion (-4%, -1% cc) in the second quarter. Volume contributed 5 percentage points to sales growth driven by *Entresto, Zolgensma* and *Cosentyx*, partly offset by the impacts of COVID-19. Volume growth was offset by price erosion of 3 percentage points and negative impact from generic competition of 3 percentage points.

Corporate income and expense, net

Corporate income and expense, which includes the cost of Group headquarter and coordination functions, amounted to an expense of USD 2 million compared to an expense of USD 183 million in the second quarter of 2019, mainly driven by favorable contributions from the Novartis Venture Fund.

Operating income

Operating income was USD 2.4 billion (-12%, -4% cc) mainly due to lower sales and higher impairments, partly offset by lower spending and improved gross margin.

Core operating income was USD 3.7 billion (+1%, +6% cc) due to lower spending and improved gross margin, driven by productivity and product mix, partly offset by lower sales. Core operating income margin was 32.3% of net sales, increasing by 1.3 percentage points (+2.1 percentage points cc).

Income from associated companies

Income from associated companies increased from USD 176 million in prior year to USD 183 million in the second quarter of 2020 driven by a higher estimated share of income from Roche Holding AG.

Core income from associated companies increased from USD 253 million in prior year to USD 272 million in the second quarter of 2020 driven by 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 220 million compared to prior year interest expense of USD 205 million. Other financial income and expense amounted to a loss of USD 27 million compared to prior year when they were negligible mainly due to lower interest income for the current period.

Taxes

The tax rate for continuing operations in the second quarter was 18.4% compared to 19.9% in the prior year. The second quarter tax rate was negatively impacted by the effect of adjusting to the updated estimated full year tax rate. The prior year second quarter tax rate was impacted by the Swiss federal tax reform and a change to uncertain tax positions.

Excluding these impacts, the second quarter tax rate would have been 16.8% compared to 15.4% in the prior year. The increase from prior year was mainly the result of a change in profit mix.

The core tax rate for continuing operations was 16.0% compared to 16.7% in prior year.

Net income, EPS and Free cash flow

Net income was USD 1.9 billion (-11%, -4% cc) mainly due to lower operating income. EPS was USD 0.82 (-10%, -3% cc), decreasing less than net income benefiting from lower weighted average number of shares outstanding.

Core net income was USD 3.1 billion (0%, +5% cc) mainly driven by growth in core operating income. Core EPS was USD 1.36 (+1%, +6% cc), growing faster than core net income benefiting from lower weighted average number of shares outstanding.

Free cash flow from continuing operations amounted to USD 3.6 billion (+1%), broadly in line with the prior year quarter, as favorable working capital was offset by lower divestment proceeds.

Continuing operations first half

Net sales

Net sales were USD 23.6 billion (+3%, +6% cc) in the first half mainly driven by *Entresto, Zolgensma* and *Cosentyx*. Volume contributed 11 percentage points to sales growth, despite being impacted by COVID-19. Strong volume growth was partly offset by price erosion of 3 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 income of USD 32 million, compared to an expense of USD 323 million in the first half of 2019, mainly driven by a royalty settlement gain related to intellectual property rights and favorable contributions from the Novartis Venture Fund.

Operating income

Operating income was USD 5.1 billion (+4%, +11% cc) mainly driven by sales growth and lower legal expenses, partly offset by higher amortization and lower divestments.

Core operating income was USD 7.8 billion (+14%, +19% cc) mainly driven by higher sales and improved gross margin, partly offset by launch investments. Core operating income margin was 33.2% of net sales, increasing by 3.0 percentage points (+3.8 percentage points cc).

Income from associated companies

Income from associated companies amounted to USD 306 million in the first half compared to USD 256 million in the prior year.

The share of income from Roche was USD 308 million compared to USD 257 million in the prior year. The estimated income for Roche Holding AG, net of amortization, was USD 372 million compared to USD 343 million in the prior year. This was partly offset by the negative prior year true up of USD 64 million in the first quarter of 2020, compared to a negative prior year true up of USD 129 million recognized in the first quarter of 2019. In addition, a USD 43 million income from the revaluation of the deferred tax liability, recognized upon initial accounting for the Roche investment, was recorded in the first quarter of 2019, following a change in the enacted tax rate in February 2019, of the Swiss Canton Basel-Stadt, effective January 1, 2019.

Core income from associated companies in the first half increased to USD 580 million compared to USD 531 million in prior year driven by a higher estimated core income contribution from Roche Holding AG. The core income contribution from Roche Holding AG increased to USD 582 million from USD 532 million in the prior year, driven by a higher estimated core income contribution from Roche for the current period. In addition a favorable prior year core income true up of USD 38 million was recorded in the first quarter of 2020, compared to a favorable true up of USD 32 million in the first quarter of 2019.

Interest expense and other financial income/expense

Interest expense increased to USD 459 million from USD 431 million in the prior year, mainly due to an increase in interest expense from discounting long term liabilities.

Other financial income and expense amounted to a loss of USD 34 million compared to an income of USD 44 million in prior year mainly due to lower interest income for the current period.

Taxes

The tax rate for continuing operations in the first half was 17.7% compared to 16.7% in the prior year. The tax rate was negatively impacted by the effect of non-deductible legal settlement expenses in the first half and the impact of Swiss tax reform in the prior year.

Excluding these impacts, the first half tax rate would have been 16.8% compared to 15.4% in the prior year. The increase from prior year was mainly the result of a change in profit mix.

The core tax rate for continuing operations was 16.0% compared to 16.4% in prior year.

Net income, EPS and Free cash flow

Net income was USD 4.0 billion (+2%, +9% cc) mainly driven by higher operating income, partly offset by higher financial expenses. EPS was USD 1.77 (+3%, +11% cc), growing faster than net income benefiting from lower weighted average number of shares outstanding.

Core net income was USD 6.7 billion (+13%, +18% cc) mainly driven by growth in core operating income. Core EPS was USD 2.92 (+15%, +19% cc), growing faster than core net income benefiting from lower weighted average number of shares outstanding.

Free cash flow from continuing operations amounted to USD 5.7 billion (+3%) compared to USD 5.5 billion in the prior year period. This increase was mainly driven by higher operating income adjusted for non-cash items and other adjustments, partly offset by lower divestment proceeds.

Discontinued operations

Discontinued operations include the business of Alcon and certain corporate costs directly attributable to Alcon up to the spin-off date. As the Alcon spin-off was completed on April 9, 2019, the first half of the prior year includes three months of operating results of the divested business.

In the first half of 2020, there were no activities related to discontinued operations. In the first half of 2019, discontinued operations net sales were USD 1.8 billion, operating income amounted to USD 71 million and net income from discontinued operations was USD 4.6 billion, including the non-taxable non-cash net gain on distribution of Alcon Inc. to Novartis AG shareholders which amounted to USD 4.7 billion. For further details see Note 2 “Distribution of Alcon Inc. to Novartis AG shareholders”, Note 3

“Significant transactions – Completion of the spin-off of the Alcon business through a dividend in kind distribution to Novartis AG shareholders” and Note 10 “Discontinued operations”.

Total Group first half

For the total Group, net income amounted to USD 4.0 billion compared to USD 8.6 billion in prior year, including the non-taxable non-cash net gain on distribution of Alcon Inc. Basic earnings per share was USD 1.77 compared to USD 3.70 in prior year. Cash flow from operating activities for the total Group amounted to USD 6.5 billion and free cash flow to USD 5.7 billion.

Innovative Medicines

	Q2 2020 USD m	Q2 2019 USD m	% change USD	% change cc	H1 2020 USD m	H1 2019 USD m	% change USD	% change cc
Net sales	**9 188**	**9 326**	**-1**	**1**	**18 943**	**18 106**	**5**	**7**
Operating income	**2 033**	**2 564**	**-21**	**-15**	**4 788**	**4 673**	**2**	**9**
As % of net sales	22.1	27.5			25.3	25.8		
Core operating income	**3 301**	**3 306**	**0**	**5**	**6 908**	**6 228**	**11**	**16**
As % of net sales	35.9	35.4			36.5	34.4		

COVID-19 Impacts

First half results are more representative of performance as Q1 forward purchasing largely reversed in Q2. In Q2 there was significant disruption to practices limiting patient access to treatments, particularly in our ophthalmology and dermatology businesses. New patient starts slowed in most therapeutic areas. Sales were mostly affected in April and May, and showed improvement in June. Despite this, H1 sales grew 7% (cc) with core operating income growing 16% (cc) driven by the launch uptake of *Zolgensma* and *Piqray* as well as continuing momentum on *Entresto*, *Cosentyx Promacta/Revolade*, *Kisqali, Kymriah* and *Tafinlar* + *Mekinist.* Spending was lower in Q2 due to the pandemic, as we implemented and embraced new ways of working, which include lower travel and meeting costs. We will closely monitor the impact of these trends on future quarters.

Second quarter

Net sales

Net sales were USD 9.2 billion (-1%, +1% cc) as continued uptake in launches and growth drivers were offset by the impact of the COVID-19 pandemic, particularly in ophthalmology and new patient starts in dermatology. Generic competition had a negative impact of 4 percentage points, mainly due to *Afinitor, Exjade* and *Travatan* and net pricing had a negative impact of 4 percentage points. Volume contributed 9 percentage points to sales growth.

In the US (USD 3.5 billion) sales grew 5% driven by *Zolgensma, Entresto, Cosentyx* and *Piqray*. In Europe (USD 3.0 billion, -8%, -5% cc) sales declined despite continued strong performance of *Entresto, Kymriah, Promacta* and *Kisqali*. Japan sales were USD 0.6 billion (-8%, -10% cc). Emerging Growth Markets grew 1% (+9% cc), including double digit growth in China, with the launches of *Entresto* and *Cosentyx.*

Pharmaceuticals BU sales were broadly in line with prior year (USD 5.6 billion, -1%, +1% cc). Continued growth momentum from *Zolgensma* (USD 205 million), *Entresto* (USD 580 million, +38%, +40% cc) and *Cosentyx* (USD 944 million, +10%, +12% cc) was offset by the negative impact of the COVID-19 pandemic, particularly in *Lucentis* and mature ophthalmology (approximately USD 0.3 billion) and new patient starts in dermatology.

Oncology BU sales were also broadly in line with prior year (USD 3.5 billion, -2%, +1% cc). Strong performance of *Promacta/Revolade* (USD 422 million, +21%, +23% cc), *Piqray* (USD 79 million), *Kymriah* (USD 118 million, +103%, +103% cc) and *Kisqali* (USD 159 million, +43%, +49% cc) was offset by generic competition for *Afinitor* and *Exjade* and the negative impact of the COVID-19 pandemic, particularly in radioligand therapy.

Operating income

Operating income was USD 2.0 billion (-21%, -15% cc) mainly due to lower divestment gains and higher impairments, partly offset by lower legal expenses. Operating income margin was 22.1% of net sales decreasing 5.4 percentage points (-4.2 percentage points in cc).

Core adjustments were USD 1.3 billion, mainly due to USD 0.7 billion for amortization. Core adjustments increased compared to prior year mainly due to lower divestment income and higher impairments and amortization, partly offset by lower legal provisions.

Core operating income was USD 3.3 billion (0%, +5% cc) mainly driven by lower spending. Core operating income margin was 35.9% of net sales, increasing 0.5 percentage points (+1.3 percentage points cc). Core gross margin increased by 0.4 percentage points (cc). Core R&D expenses as a percentage of net sales decreased by 0.7 percentage points (cc) mainly driven by productivity, portfolio prioritization and COVID-19 related spending impacts. Core SG&A expenses declined by 1.0 percentage points (cc) benefiting from COVID-19 related spending impacts. Core Other Income and Expense net decreased the margin by 0.8 percentage points (cc), mainly due to the *Zolgensma* pre-launch inventory provision release in prior year.

First half

Net sales

Net sales were USD 18.9 billion (+5%, +7% cc). Pharmaceuticals BU grew 5% (+8% cc) driven by *Entresto* (USD 1.1 billion, +48%, +50% cc), *Zolgensma* (USD 0.4 billion), *Cosentyx* (USD 1.9 billion, +14%, +15% cc) and the *Xiidra* acquisition, partly offset by declines in *Lucentis* and other ophthalmology products, driven mainly by lower demand due to COVID-19. Oncology BU grew 4% (+6% cc) driven by *Promacta/Revolade* (USD 0.8 billion, +26%, +28% cc), *Piqray* (USD 0.2 billion) and *Kisqali* (USD 0.3 billion, +58%, +64% cc). Volume contributed 13 percentage points to sales growth. Generic competition had a negative impact of 3 percentage points. Net pricing had a negative impact of 3 percentage points

The US (USD 7.1 billion, +12%) delivered strong performance of *Zolgensma, Cosentyx* and *Entresto*. Europe sales (USD 6.4 billion, 0%, +3% cc) grew driven by *Entresto, Jakavi, Kymriah* and *Kisqali*. Japan sales were USD 1.2 billion (0%, -2% cc). Emerging Growth Markets sales grew (+5%, +11% cc), led by double digit growth in China, including the launches of *Cosentyx* and *Entresto*.

Operating income

Operating income was USD 4.8 billion (+2%, +9% cc), mainly driven by sales growth and lower legal expenses, partly offset by higher amortization and lower divestment gains. Operating income margin was 25.3% of net sales, decreasing 0.5 percentage points (+0.4 percentage points cc).

Core adjustments were USD 2.1 billion, mainly due to USD 1.4 billion of amortization. Core adjustments increased compared to prior year mainly due to lower divestment income and higher amortization, partly offset by lower legal expenses.

Core operating income was USD 6.9 billion (+11%, +16% cc) mainly driven by sales growth and lower spending due to COVID-19 impacts, partly offset by launch investments. Core operating income margin was 36.5% of net sales, increasing 2.1 percentage points (+2.8 percentage points cc). Core gross margin increased by 0.7 percentage points (cc) mainly driven by productivity. Core R&D expenses as a percentage of net sales decreased by 1.3 percentage points (cc) mainly driven by the higher net sales, productivity and portfolio prioritization. Core SG&A expenses declined by 1.2 percentage points (cc) benefiting from COVID-19 related spending impacts. Core Other Income and Expense net decreased the margin by 0.4 percentage points (cc).

ONCOLOGY BUSINESS UNIT

	Q2 2020	Q2 2019	% change		**H1 2020**	H1 2019	% change	
	USD m	USD m	USD	cc	USD m	USD m	USD	cc
Tasigna	480	468	3	5	967	902	7	9
Promacta/Revolade	422	349	21	23	825	656	26	28
Tafinlar + Mekinist[1]	371	340	9	12	737	637	16	19
Sandostatin	341	403	-15	-13	715	795	-10	-8
Jakavi	310	284	9	14	628	542	16	20
Gleevec/Glivec	288	323	-11	-8	617	630	-2	0
Afinitor/Votubia	266	401	-34	-33	562	774	-27	-26
Exjade/Jadenu	163	253	-36	-35	335	491	-32	-31
Votrient	162	193	-16	-14	328	380	-14	-12
Kisqali	159	111	43	49	320	202	58	64
Lutathera	105	109	-4	-3	217	215	1	1
Kymriah	118	58	103	103	211	103	105	106
Piqray	79	6	nm	nm	153	6	nm	nm
Adakveo	21		nm	nm	36		nm	nm
Other	263	308	-15	-13	545	594	-8	-6
Total Oncology business unit	**3 548**	**3 606**	**-2**	**1**	**7 196**	**6 927**	**4**	**6**

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

Tasigna (USD 480 million, +3%, +5% cc) grew due to a strong performance in key markets including the US and China, partly offset by a decline in Europe.

Promacta/Revolade (USD 422 million, +21%, +23% cc) grew at a double digit rate in most regions driven by increased use in chronic immune thrombocytopenia (ITP) and as first-line treatment for severe aplastic anemia (SAA) in the US.

Tafinlar + Mekinist (USD 371 million, +9%, +12% cc), the worldwide leader in BRAF/MEK-inhibition, continued to show growth driven by demand in adjuvant melanoma as well as NSCLC.

Sandostatin (USD 341 million, -15%, -13% cc) sales declined due to competitive pressure in Europe, US and Japan. The brand was also impacted by generic competition in Europe and the COVID-19 pandemic in the US.

Jakavi (USD 310 million, +9%, +14% cc) grew in all regions, driven by demand in the myelofibrosis and polycythemia vera indications.

Gleevec/Glivec (USD 288 million, -11%, -8% cc) declined due to increased generic competition.

Afinitor/Votubia (USD 266 million, -34%, -33% cc) declined due to generic competition in the US, Europe and Emerging Growth Markets.

Exjade/Jadenu (USD 163 million, -36%, -35% cc) declined due to pressure from generic competition in the US and other regions.

Votrient (USD 162 million, -16%, -14% cc) declined due to increased competition in Europe and the US.

Kisqali (USD 159 million, +43%, +49% cc) continued strong double digit growth driven by demand in the US, strong uptake in Europe and other regions benefiting from the ongoing impact of positive overall survival data from two pivotal Phase III trials (MONALEESA-7 and MONALEESA-3).

Lutathera (USD 105 million, -4%, -3% cc) declined versus prior year due to the negative impact of the COVID-19 pandemic. There are almost 350 total centers now actively treating patients. Sales from all AAA brands (including *Lutathera* and radiopharmaceutical diagnostic products) were USD 153 million.

Kymriah (USD 118 million, +103%, +103% cc) grew strongly in Europe and US. More than 240 qualified treatment centers and 25 countries have coverage for at least one indication. The EMA approved commercial manufacturing of *Kymriah* at the Novartis-owned facilities in Stein, Switzerland which will support existing manufacturing at the facility in Morris Plains, New Jersey, US.

Piqray (USD 79 million) grew in the US driven by strong demand. *Piqray* in combination with fulvestrant received a positive CHMP opinion to treat HR+/HER2- advanced breast cancer with a PIK3CA mutation.

Piqray is the first and only therapy specifically for the approximately 40% of HR+/HER2- advanced breast cancer patients who have a PIK3CA mutation, which is associated with poor prognosis.

Adakveo (USD 21 million) US launch is progressing well, with close to 100% brand awareness among hematologists. Payer coverage decisions are expanding, including published Medicaid policies in 19 states and 85% coverage among commercial plans to date. The permanent J-code took effect July 1, which provides more confidence around the billing process. *Adakveo* was approved by the FDA following priority review as the first and only monthly therapy to reduce the frequency of pain crises, or vaso-occlusive crises (VOCs), in adults and pediatric patients aged 16 years and older with sickle cell disease.

PHARMACEUTICAL BUSINESS UNIT

IMMUNOLOGY, HEPATOLOGY and DERMATOLOGY

	Q2 2020	Q2 2019	% change		**H1 2020**	H1 2019	% change	
	USD m	USD m	USD	cc	USD m	USD m	USD	cc
Cosentyx	944	858	10	12	1 874	1 649	14	15
Ilaris	200	165	21	23	413	316	31	33
Total Immunology, Hepatology and Dermatology	**1 144**	**1 023**	**12**	**13**	**2 287**	**1 965**	**16**	**18**

Xolair sales for all indications are reported in the Respiratory franchise

Cosentyx (USD 944 million, +10%, +12% cc) continued growth across indications and grew market share in the US. Growth was impacted by significant disruption to dermatology and rheumatology practices due to the COVID-19 pandemic. US sales grew 15% based on broad first line access across psoriasis, psoriatic arthritis and ankylosing spondylitis (AS). In April and June, respectively, *Cosentyx* received approval and launched in the EU and US for non-radiographic axial spondyloarthritis (nr-axSpA), its fourth major indication, which is now already launched in major markets including the US and Germany. In April, *Cosentyx* also became the first IL17A inhibitor approved in China for the treatment of AS. *Cosentyx* also received a positive CHMP opinion for pediatric psoriasis, reinforcing its strong safety profile.

Ilaris (USD 200 million, +21%, +23% cc) sales were driven by strong double digit volume growth, particularly in Europe and the US. In June, *Ilaris* was granted a new indication in the US for active Still's disease including Adult-Onset Still's Disease (AOSD); this is in addition to its previously-granted indication for systemic juvenile idiopathic arthritis (SJIA). *Ilaris* is the first FDA-approved treatment for AOSD.

OPHTHALMOLOGY

	Q2 2020	Q2 2019	% change		**H1 2020**	H1 2019	% change	
	USD m	USD m	USD	cc	USD m	USD m	USD	cc
Lucentis	401	536	-25	-24	888	1 069	-17	-15
Xiidra	79		nm	nm	169		nm	nm
Beovu	34		nm	nm	102		nm	nm
Other	423	638	-34	-32	974	1 266	-23	-21
Total Ophthalmology	**937**	**1 174**	**-20**	**-18**	**2 133**	**2 335**	**-9**	**-7**

nm = not meaningful

Lucentis (USD 401 million, -25%, -24% cc) declined double digit versus prior year, as did the market, due to the negative impact of the COVID-19 pandemic, which has significantly disrupted ophthalmology practices and limited patient access to treatment of retinal diseases. *Lucentis* sales started to recover in May with confirmed positive trend in June.

Xiidra (USD 79 million) was impacted by COVID-19 as ophthalmology visits declined significantly. In the latter part of the quarter, the US dry eye market began to rebound as eye care practices began opening. A significant direct to consumer campaign was launched in the US in May with a new professional campaign rolling out over the summer. In an effort to support and expand patient access to care in the US, a new telemedicine program and new zero copay program launched at the end of June. Novartis has informed the European Medicines Agency of its decision to withdraw the centralized application for Marketing Authorization of *Xiidra*®.

Beovu (USD 34 million) is now approved in more than 30 countries. Launches progress despite the operational challenges coming from the COVID-19 pandemic. Post marketing cases termed as "retinal vasculitis" and/or "retinal vascular occlusion" that may result in severe vision loss, typically associated with intraocular inflammation and the current COVID-19 situation had an unfavorable impact on US sales. Novartis initiated its own internal review of these post-marketing safety case reports including the establishment of an external Safety Review Committee (SRC) to provide an independent, objective review of these cases and a comparison with events seen in the brolucizumab Phase III trials (HAWK and HARRIER). Novartis also initiated a safety information update to *Beovu* prescribing information worldwide and in June 2020, the FDA approved a label update for *Beovu* to include additional safety information. Novartis has established a fully dedicated internal team collaborating with a coalition of top global experts to examine the root causes, risk factors, mitigation and potential treatment protocols. Novartis continues to believe *Beovu* represents an important treatment option for patients with wet AMD, with an overall favorable benefit-risk profile.

Other ophthalmology products declined due to the negative impact of the COVID-19 pandemic and generic impacts in the US, primarily for *Travatan.*

NEUROSCIENCE

	Q2 2020	Q2 2019	% change		**H1 2020**	H1 2019	% change	
	USD m	USD m	USD	cc	USD m	USD m	USD	cc
Gilenya	738	825	-11	-9	1 510	1 591	-5	-4
Zolgensma	205	15	nm	nm	375	15	nm	nm
Aimovig	33	24	38	45	69	42	64	72
Mayzent	34	5	nm	nm	64	5	nm	nm
Other	15	17	-12	-26	27	30	-10	-15
Total Neuroscience	**1 025**	**886**	**16**	**17**	**2 045**	**1 683**	**22**	**23**

nm = not meaningful

Gilenya (USD 738 million, -11%, -9% cc) sales declined due to the impacts of the COVID-19 pandemic and increased competition. *Gilenya* remains the top prescribed high efficacy therapy in 40 countries around the world and the only one approved to treat pediatric RMS. Novartis is in US ANDA litigations with a generic manufacturer. In parallel, an appeal against a USPTO decision upholding the dosage regimen patent in IPR proceedings is ongoing.

Zolgensma (USD 205 million) newborn screening in the US continues to progress with 28 states representing 60% of newborns. Additional growth was driven by geographic expansion outside of the US. This includes the recent approval in Japan, with unrestricted reimbursement in place directly following approval by end of May; and approval in the EU, with immediate access to label in France (cohort ATU) and Germany, with the product in market as of July 1 and ~90% of patients covered through agreements already in place with sickness funds. We are in dialogue with all EU markets regarding our Day One access program, and have confidential agreements in place with five additional markets.

Mayzent (USD 34 million) grew versus the first quarter despite new patients starts being impacted by COVID-19. Patient uptake is showing signs of improvement towards the end of Q2. Uptake is driven by important unmet needs in patients showing signs of progression despite being on other treatments. *Mayzent* is the first and only oral DMT studied and proven to delay disease progression in a broad SPMS patient population. In addition to the US and EU experience, *Mayzent* is now approved in Australia, Canada, China and Japan, and could be approved in Switzerland.

Aimovig (USD 33 million, +38%, +45% cc) is the most prescribed anti-CGRP worldwide, with more than 440,000 patients prescribed worldwide in the post-trial setting. It has now been launched for the preventive treatment of migraine in 44 countries and additional launches are underway. *Aimovig* is co-commercialized with Amgen in the US, where Amgen records sales and Novartis has exclusive rights in all ex-US territories excluding Japan. The collaboration continues during the litigation between the companies and will remain in force until a final court resolution.

CARDIOVASCULAR, RENAL AND METABOLISM

	Q2 2020 USD m	Q2 2019 USD m	% change USD	% change cc	**H1 2020** USD m	H1 2019 USD m	% change USD	% change cc
Entresto	580	421	38	40	1 149	778	48	50
Other		6	nm	nm	1	12	-92	-98
Total Cardiovascular, Renal & Metabolism	**580**	**427**	**36**	**38**	**1 150**	**790**	**46**	**48**

nm = not meaningful

Entresto (USD 580 million, +38%, +40% cc) delivered sustained growth and increased market share, driven by demand as the essential first choice therapy for HF patients. *Entresto* was approved in Japan on June 29 and launch is expected in H2 2020 while in the US *Entresto* filed with the FDA on April 22 an additional indication to treat HFpEF with a decision anticipated in Q1 2021. Novartis is in US ANDA litigation with generic manufacturers.

RESPIRATORY

	Q2 2020 USD m	Q2 2019 USD m	% change USD	% change cc	**H1 2020** USD m	H1 2019 USD m	% change USD	% change cc
Xolair	289	290	0	4	596	571	4	8
Ultibro Group	149	166	-10	-7	309	323	-4	-1
Other	6	5	20	-10	10	12	-17	-18
Total Respiratory	**444**	**461**	**-4**	**0**	**915**	**906**	**1**	**5**

Xolair sales for all indications are reported in the Respiratory franchise

Xolair (USD 289 million, 0%, +4% cc) continued growth in constant currency in both indications, Severe Allergic Asthma (SAA) and Chronic Spontaneous Urticaria (CSU). Novartis co-promotes *Xolair* with Genentech in the US and share a portion of operating income, but we do not record any US sales.

***Ultibro* Group** (USD 149 million, -10%, -7% cc) sales declined due to competitive pressures in all regions. *Ultibro* Group consists of inhaled COPD therapies *Ultibro Breezhaler*, *Seebri Breezhaler* and *Onbrez Breezhaler*.

ESTABLISHED MEDICINES

	Q2 2020 USD m	Q2 2019 USD m	% change USD	% change cc	**H1 2020** USD m	H1 2019 USD m	% change USD	% change cc
Galvus Group	279	320	-13	-8	617	635	-3	1
Diovan Group	268	283	-5	0	542	544	0	4
Exforge Group	238	264	-10	-5	496	531	-7	-3
Zortress/Certican	106	124	-15	-12	233	240	-3	0
Neoral/Sandimmun(e)	96	110	-13	-11	197	213	-8	-5
Voltaren/Cataflam	82	95	-14	-11	174	208	-16	-15
Other	441	553	-20	-16	958	1 129	-15	-12
Total Established Medicines	**1 510**	**1 749**	**-14**	**-9**	**3 217**	**3 500**	**-8**	**-5**

***Galvus* Group** (USD 279 million, -13%, -8% cc) declined primarily due to price reduction and inventory transfer cycle related to our co-promotion in Japan as well as generic competition in India.

***Diovan* Group** (USD 268 million, -5%, 0% cc) declined in Europe and Japan, partly offset by growth in Emerging Growth Markets.

***Exforge* Group** (USD 238 million, -10%, -5% cc) declined in Europe due to generic competition, partly compensated by growth in Emerging Growth Markets.

Zortress/Certican (USD 106 million, -15%, -12% cc) declined mainly due to generic competition in the US.

Neoral/Sandimmun(e) (USD 96 million, -13%, -11% cc) declined mainly due to generic competition and mandatory price reductions.

Voltaren/Cataflam (USD 82 million, -14%, -11% cc) declined mainly due to generic competition.

Sandoz

	Q2 2020	Q2 2019	% change		H1 2020	H1 2019	% change	
	USD m	USD m	USD	cc	USD m	USD m	USD	cc
Net sales	**2 159**	**2 438**	**-11**	**-9**	**4 687**	**4 764**	**-2**	**1**
Operating income	**321**	**282**	**14**	**25**	**276**	**555**	**-50**	**-40**
As % of net sales	14.9	11.6			5.9	11.6		
Core operating income	**475**	**501**	**-5**	**1**	**1 148**	**962**	**19**	**26**
As % of net sales	22.0	20.5			24.5	20.2		

COVID-19 Impacts

First half results are more representative of performance as Q1 forward purchasing largely reversed in Q2. In Q2 there was significant disruption to practices limiting patient access to treatments, especially to our retail business. Despite this, H1 sales grew 1% (cc) and core operating income grew 26% (cc). Spending was lower in both quarters as we implemented and embraced new ways of working, which include lower travel and meeting costs, as well as lower promotional activities. We will closely monitor the impact of these trends on future quarters.

Second quarter

Net sales

Sandoz net sales were USD 2.2 billion (-11%, -9% cc) in the second quarter with volume decline of 9 percentage points (cc) and pricing was in line with prior year, benefiting from favorable revenue deduction adjustments. The sales decline was due to COVID-19 negative impacts, mainly the reversal of Q1 forward purchasing and lower retail demand, some contract discontinuations in the US and a higher prior year base that included several first to market launches. The decline was partly offset by global sales of Biopharmaceuticals growing 19% (cc), driven by double digit growth in Europe and the US.

Sales in Europe were USD 1.1 billion (-11%, -8% cc), impacted by COVID-19. Sales in the US were USD 508 million (-21%), impacted by the oral solids decline as well as US first-to-market launches in prior year. Sales in Asia / Africa / Australasia were USD 341 million (+2%, +4% cc) including the contribution from the Aspen Japan acquisition. Sales in Canada and Latin America were USD 180 million (-7%, +5% cc).

Global sales of Biopharmaceuticals (biosimilars, biopharmaceutical contract manufacturing and *Glatopa*) grew to USD 466 million (+16%, +19% cc), driven by continued strong double-digit growth in Europe from *Hyrimoz* (adalimumab), *Erelzi* (etanercept) and *Zessly* (infliximab) and growth from *Omnitrope* (somatropin). Launch roll-outs in other geographies also contributed to growth.

Retail sales were USD 1.6 billion (-17%, -14% cc), impacted by COVID-19. Total Anti-Infectives franchise sales were USD 251 million (-22%, -19% cc), including finished dosage forms sold under the Sandoz name (USD 134 million, -28%, -24% cc) and Anti-Infectives sold to third parties for sale under their own name (USD 117 million, -13%, -12% cc).

Operating income

Operating income was USD 321 million (+14%, +25% cc), mainly driven by lower restructuring expenses, continued gross margin improvements and lower costs, partly offset by the lower sales. Operating income margin increased by 4.3 percentage points in constant currencies; currency had a negative impact of 1.0 percentage points, resulting in a net increase of 3.3 percentage points to 14.9% of net sales.

Core adjustments were USD 154 million, including USD 70 million of amortization. Prior year core adjustments were USD 219 million. The change in core adjustments compared to prior year was driven by lower net restructuring expenses from Sandoz Transformation.

Core operating income was USD 475 million (-5%, +1% cc) as lower spending linked to COVID-19, cost discipline and gross margin improvements were mostly offset by sales decline. Core operating income

margin improved by 2.2 percentage points in constant currencies, currency had a negative impact of 0.7 percentage points, resulting in a net increase of 1.5 percentage points to 22.0% of net sales. Core gross margin as a percentage of net sales increased by 2.0 percentage points (cc), driven by favorable product and geographic mix, ongoing productivity improvements and lower price erosion. Core R&D expenses increased by 1.1 percentage points (cc). Core SG&A expenses decreased by 0.4 percentage points (cc). Core Other Income and Expense decreased by 0.9 percentage points (cc), mainly due to lower net legal settlement provisions.

First half

Net sales

Net sales were USD 4.7 billion (-2%, +1% cc) with volume growth of 3 percentage points (cc) partially offset by 2 percentage points (cc) of price erosion, benefiting from favorable revenue deduction adjustments. Excluding the US, net sales grew (+2%, +6% cc).

Sales in Europe were USD 2.6 billion (+2%, +5% cc). Sales in the US were USD 1.1 billion (-12%), due to the volume decline in oral solids. Sales in Asia / Africa / Australasia were USD 675 million (+4%, +5% cc) including the contribution from the Aspen Japan acquisition. Sales in Canada and Latin America were USD 376 million (+1%, +12% cc).

Global sales of Biopharmaceuticals (biosimilars, biopharmaceutical contract manufacturing and *Glatopa*) grew to USD 916 million (+22%, +25% cc), driven by continued strong double digit growth in Europe and the US. Launch roll-outs in other geographies also contributed to growth.

Retail sales were USD 3.5 billion (-6%, -3% cc) as declines in the US were partly offset by growth in Europe. Total Anti-Infectives franchise sales were USD 582 million (-10%, -8% cc), including finished dosage forms sold under the Sandoz name (USD 356 million, -9%, -5% cc) and Anti-Infectives sold to third parties for sale under their own name (USD 226 million, -13%, -11% cc), which were impacted by a planned contract discontinuation.

Operating income

Operating income was USD 276 million (-50%, -40% cc), impacted by USD 0.4 billion legal provisions and cumulative depreciation and amortization from the termination of the planned Aurobindo transaction. Operating income margin decreased by 4.7 percentage points in constant currencies; currency had a negative impact of 1.0 percentage points, resulting in a net decrease of 5.7 percentage points to 5.9% of net sales.

Core adjustments were USD 0.9 billion, including USD 0.2 billion of amortization and USD 0.4 billion legal settlements charges and provisions. Prior year core adjustments were USD 0.4 billion, which were impacted by net restructuring expenses from Sandoz Transformation.

Core operating income was USD 1.1 billion (+19%, +26% cc), driven by gross margin improvements, lower spending linked to COVID-19, cost discipline and sales growth. Core operating income margin was 24.5% of net sales, increasing 4.3 percentage points (4.9 percentage points cc). Core gross margin increased by 2.3 percentage points (cc), driven by favorable product and geographic mix along with ongoing productivity improvements and lower price erosion. Core R&D expenses increased by 0.1 percentage points (cc). Core SG&A expenses decreased by 2.0 percentage points (cc). Core Other Income and Expense decreased by 0.7 percentage points (cc), mainly due to lower net legal settlement provisions.

GROUP CASH FLOW AND BALANCE SHEET

Cash flow

Second quarter

Net cash flows from operating activities from continuing operations amounted to USD 4.0 billion, compared to USD 3.1 billion in the prior year quarter. This increase was mainly driven by favorable working capital and lower taxes paid, partly offset by higher provision payments including legal settlements.

Net cash outflows from investing activities from continuing operations amounted to USD 0.3 billion, compared to net cash inflows of USD 0.2 billion in the prior year quarter.

The current year quarter cash outflows were mainly driven by USD 0.5 billion for the purchase of property, plant and equipment, intangible assets, financial assets and other non-current assets. These were partly offset by cash inflows of USD 0.2 billion mainly from the sale of financial and intangible assets.

In the prior year quarter, net cash inflows of USD 0.2 billion from investing activities from continuing operations were mainly related to USD 1.0 billion in proceeds from the sale of property, plant and equipment (including the proceeds from the sale and leaseback of real estate), intangible assets and financial assets. These were partly offset by cash outflows of USD 0.5 billion for the purchase of property, plant and equipment, intangible assets and financial assets. Cash outflows for acquisitions and divestments of business, net, amounted to USD 0.3 billion (acquisition of IFM Tre, Inc.).

Net cash flows used in investing activities from discontinued operations amounted to USD 0.1 billion compared to USD 0.7 billion in the prior year quarter. The current year period includes payments related to the portfolio transformation transactions and payments attributable to the spin-off of the Alcon business. The prior year quarter mainly included the cash outflow of USD 0.6 billion due to the derecognized cash and cash equivalent following the completion of the spin-off of the Alcon business.

Net cash flows used for financing activities from continuing operations amounted to USD 2.2 billion, compared to USD 2.7 billion in the prior year quarter.

The current year quarter cash outflows includes mainly USD 1.2 billion from the net decrease in current financial debts and the repayment of a US dollar bond of USD 1.0 billion at maturity.

In the prior year quarter, net cash outflows of USD 2.7 billion from financing activities from continuing operations mainly included the cash outflows for net treasury share transactions of USD 2.4 billion, the net repayment of financial debts of USD 0.8 billion, partly offset by other net financing cash inflows of USD 0.5 billion.

Net cash inflows from financing activities from discontinued operations in the prior year quarter amounted to USD 2.7 billion, which included mainly the cash inflows of USD 3.2 billion from Alcon borrowings, partly offset by USD 0.1 billion in payments for Alcon transaction costs.

Free cash flow from continuing operations amounted to USD 3.6 billion (+1%), broadly in line with the prior year quarter, as favorable working capital was offset by lower divestment proceeds.

First half

Net cash flows from operating activities from continuing operations amounted to USD 6.5 billion, compared to USD 5.4 billion in the prior year period. This increase was driven by higher net income adjusted for non-cash items and other adjustments, including divestment gains, partly offset by higher provision payments including legal settlements.

Net cash outflows from investing activities from continuing operations amounted to USD 10.5 billion, compared to net cash inflows of USD 2.0 billion in the prior year period.

The current year period cash outflows were mainly driven by the USD 9.9 billion used 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 the purchase of property, plant and equipment, intangible assets, financial assets and other non-current assets. These were partly offset by cash inflows of USD 0.5 billion mainly 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 sales and purchases of marketable securities and commodities.

In the prior year period, net cash inflows of USD 2.0 billion from investing activities from continuing operations were mainly related to USD 2.3 billion from the net sale of marketable securities and commodities, and of USD 1.3 billion in proceeds from the sale of property, plant and equipment (including the proceeds from the sale and leaseback of real estate), intangible assets and financial assets. These were partly offset by cash outflows of USD 1.2 billion for the purchase of property, plant and equipment, intangible assets and financial assets. Cash outflows for acquisitions and divestments of business, net, amounted to USD 0.4 billion including the acquisition of IFM Tre, Inc. (USD 0.3 billion).

Net cash flows used in investing activities from discontinued operations amounted to USD 0.1 billion compared to USD 1.1 billion in the prior year period. The current year period includes payments related to the portfolio transformation transactions and payments attributable to the spin-off of the Alcon business.

The prior year period includes mainly the cash outflow for the acquisition of PowerVision, Inc. of USD 0.3 billion and USD 0.6 billion due to the derecognized cash and cash equivalent following the completion of Alcon spin-off, on April 9, 2019.

Net cash flows used in financing activities from continuing operations amounted to USD 1.1 billion, compared to USD 13.0 billion in the prior year period.

The current year period includes net cash inflows of USD 0.7 billion from net treasury share transactions and USD 5.4 billion from current and non-current financial debt; 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. These net cash inflows were offset by cash outflows of USD 7.0 billion for the dividend payment and USD 0.3 billion for the net payments for lease liabilities and other financing cash flows.

In the prior year period, net cash outflows of USD 13.0 billion from financing activities from continuing operations mainly included the cash outflows of USD 6.6 billion for the dividend payment, the repayment of a US dollar bond of USD 3.0 billion and for the net treasury share transactions of USD 2.4 billion. The net repayments of current financial debts amounted to USD 0.9 billion.

Net cash inflows from financing activities from discontinued operations in the prior year period amounted to USD 3.3 billion, which included mainly the cash inflows of USD 3.5 billion from Alcon borrowings, partly offset by USD 0.2 billion payments for transaction costs.

Free cash flow from continuing operations amounted to USD 5.7 billion (+3%) compared to USD 5.5 billion in the prior year period. This increase was mainly driven by higher operating income adjusted for non-cash items and other adjustments, partly offset by lower divestment proceeds.

Balance sheet

In December 31, 2019, the assets and liabilities of the Sandoz US generic oral solids and dermatology businesses were reported as current assets and liabilities held for sale in the consolidated balance sheet. Novartis decided to retain the Sandoz US generic oral solids and dermatology businesses in March 2020, after mutual agreement with Aurobindo to terminate the transaction. This decision was taken as approval from the U.S. Federal Trade Commission for the transaction was not obtained within the agreed timelines. As such, these assets and liabilities are reclassified to their respective consolidated balance sheet lines as from March 31, 2020, the prior year consolidated balance sheet is not restated (see Notes 2 and 3).

Assets

Total non-current assets of USD 99.9 billion at June 30, 2020, increased by USD 11.0 billion compared to December 31, 2019. Intangible assets other than goodwill increased by USD 7.9 billion mainly due to the acquisitions of The Medicines Company and of the Japanese business of Aspen Global Incorporated, net additions and the reclassification of the intangible assets of the disposal group held for sale of USD 0.3 billion, partially offset by amortization and impairments. Goodwill increased by USD 2.6 billion and deferred tax assets by USD 0.7 billion mainly due to the acquisition of The Medicines Company. Property, plant and equipment decreased by USD 0.1 billion, as the increase due to net additions and the reclassification of the property, plant and equipment of the disposal group held for sale of USD 0.1 billion were more than offset by depreciation. Investments in associated companies and financial assets decreased by USD 0.1 billion in total, while other non-current assets increased by USD 0.1 billion mainly due to an increase in the prepaid benefit costs of USD 0.1 billion, mainly resulting from actuarial losses primarily from changes in discount rates used to calculate the actuarial defined benefit obligations and valuation impact on plan assets. Right-of-use assets were broadly in line with December 31, 2019.

Total current assets of USD 23.9 billion at June 30, 2020, decreased by USD 5.6 billion compared to December 31, 2019. This was mainly driven by a decrease in cash and cash equivalents of USD 5.2 billion. Inventories increased by USD 0.9 billion, partly due to the reclassification of the inventory of the disposal group held for sale. Trade receivables decreased by USD 0.7 billion to USD 7.6 billion. Income tax receivables, other current assets and marketable securities, commodities, time deposits, and derivative financial instruments remained broadly in line with December 31, 2019.

Liabilities

Total non-current liabilities of USD 40.5 billion increased by USD 5.9 billion compared to December 31, 2019. Long-term financial debts increased by USD 3.6 billion, mainly driven by the issuance of US dollar denominated bonds for a notional amount of USD 5.0 billion, partly offset by the reclassification from non-current to current financial debt of EUR 1.3 billion (USD 1.4 billion) bonds due in 2021. Deferred tax liabilities increased by USD 1.6 billion mainly due to the acquisition of The Medicines Company. Provisions and other non-current liabilities increased by USD 0.7 billion, principally due to an increase in pension liabilities of USD 0.6 billion, mainly resulting from actuarial losses primarily from changes in discount rates used to calculate the actuarial defined benefit obligations and valuation impact on plan assets. Lease liabilities were broadly in line compared to December 31, 2019.

Total current liabilities of USD 29.4 billion increased by USD 1.1 billion compared to December 31, 2019. Financial debts and derivative financial instruments increased by USD 1.8 billion, due to the reclassification from non-current to current financial debt of EUR 1.3 billion (USD 1.4 billion) bonds due in 2021 and higher short-term borrowings, partly offset by the repayment at maturity of two US dollar bonds, totaling USD 2.0 billion. Current income tax liabilities increased by USD 0.4 billion. This net increase was partially offset by a decrease of USD 0.6 billion in trade payables and a decrease of USD 0.5 billion in provisions and other current liabilities. Lease liabilities were broadly in line compared to December 31, 2019.

Group equity

The Group's equity decreased by USD 1.7 billion to USD 53.9 billion at June 30, 2020 compared to December 31, 2019. This decrease was mainly due to the cash-dividend payment of USD 7.0 billion, net actuarial losses of USD 0.3 billion and purchase of treasury shares of USD 0.1 billion. This was partially offset by net income of USD 4.0 billion, the net effect of the exercise of options and employee transactions of USD 0.8 billion, equity-based compensation of USD 0.4 billion, favorable currency translation differences of USD 0.4 billion and the net favorable effect of fair value adjustments on financial instruments of USD 0.1 billion.

Net debt and debt/equity ratio

The Group's liquidity amounted to USD 6.3 billion at June 30, 2020, compared to USD 11.4 billion at December 31, 2019. Total non-current and current financial debts, including derivatives, amounted to USD 32.8 billion at June 30, 2020, compared to USD 27.4 billion at December 31, 2019. The debt/equity

ratio increased to 0.61:1 at June 30, 2020, compared to 0.49:1 at December 31, 2019. The net debt increased to USD 26.5 billion at June 30, 2020, compared to USD 15.9 billion at December 31, 2019.

Group liquidity

We continuously track our liquidity positions and assets / liabilities profile. We have a strong balance sheet and related funding capabilities to meet our funding needs. The Group has not experienced liquidity or cash flow disruptions during the first half of 2020 due to COVID-19 pandemic, and maintains a cash and cash equivalents position of USD 5.9 billion as per June 30, 2020. We believe that our strong credit rating allows for continued access to short term funding in the US commercial paper market. The Group further has a committed credit facility of USD 6.0 billion as a backstop for the US commercial paper program, which was undrawn as of June 30, 2020, providing a further source of liquidity if needed. Novartis is well positioned to meet its ongoing financial obligations and has sufficient liquidity to support our normal business activities.

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 approvals: US, EU and Japan in Q2

Product	Active ingredient/ Descriptor	Indication	Region
Atectura Breezhaler (QMF149)	indacaterol/mometasone fuorate	Asthma	EU – May JP – June
Cosentyx	secukinumab	Non-radiographic axial spondyloarthritis	EU – April US – June
Enerzair Breezhaler (QVM149)	indacaterol acetate + mometasone fuorate + glycopyrronium bromide	Asthma	EU – July JP – June
Entresto	valsartan/sacubitril	Chronic heart failure	JP - June
Mayzent	siponimod	SPMS	JP - June
Tabrecta	capmatinib	NSCLC (cMET amp and mut)[1]	US – May JP – June
Zolgensma		Spinal Muscular Atrophy (IV formulation)	EU – May conditional approval

[1] indication is approved under accelerated approval based on overall response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trial(s).

Selected Innovative Medicines projects awaiting regulatory decisions

		Completed submissions			
Product	**Indication**	**US**	**EU**	**Japan**	**News update**
BYL719 (*Piqray* in US, alpelisib)	PIK3CA mutant HR+, HER2 (-) postmenopausal adv BC 2nd line (+fulv)	Approved	Q4 2018		- CHMP positive opinion – May 2020
Cosentyx	Non-radiographic axial spondyloarthritis	Approved	Approved	Q4 2019	- Phase III PREVENT data show significant and sustained improvement in signs and symptoms of non-radiographic axial spondyloarthritis (nr-axSpA) up to week 52
Entresto	Chronic heart failure with preserved ejection fraction	Q2 2020			- Filing accepted by FDA in June 2020
KJX839 (inclisiran)	Hyperlipidemia	Q4 2019	Q1 2020		
OMB157 (ofatumumab)	Relapsing Multiple Sclerosis	Q4 2019	Q1 2020		- FDA extend BLA review – regulatory action date September 2020
SEG101 (*Adakveo* in US)	Sickle cell disease	Approved	Q2 2019		
Xolair	Nasal polyps	Q3 2019	Q4 2019		- CHMP positive opinion received – June 2020

Selected Innovative Medicines pipeline projects

Project/ Compound	Potential indication/ Disease area	First planned submissions	Current Phase	News update
ABL001	Chronic myeloid leukemia 3rd line	2021	III	
ACZ885 (canakinumab)	Adjuvant NSCLC	2023	III	- Enrollment ongoing
	1st line NSCLC	2021	III	- Completed enrollment in Jan 2020
	2nd line NSCLC	2021	III	- Enrollment complete
Aimovig	Pediatric migraine	≥2024	III	
AVXS-101 IT	Spinal Muscular Atrophy (IT formulation)	2021	I / II	- Continued dialogue with FDA on partial clinical hold - Plan to approach FDA for pre-BLA meeting, with a BLA submission in 2021
AVXS-201	Rett Syndrome	2023	I	
BYL719 (alpelisib)	PROS (PIK3CA-related overgrowth spectrum)	2020	II	- Potential US filing in 2020 based on RWE data
	HER2+ adv breast cancer	2023	III	
	Triple negative breast cancer	2023	III	- Trial enrolled first patient in June 2020
	Head and neck squamous cell carcinoma	≥2024	III	
	Ovarian Cancer	2023	III	
CEE321	Atopic dermatitis	≥2024	I	
CFZ533 (iscalimab)	Renal Tx	2023	II	
	Liver Tx	≥2024	II	
	Sjögren's syndrome	≥2024	II	
Coartem	Malaria uncomplicated, <5kg patients	2023	III	
Cosentyx	Ankylosing spondylitis head-to-head vs. adalimumab	2022	III	
	Hidradenitis suppurativa	2022	III	
	Axial spondyloarthritis IV regimen	2022	III	
	Giant cell arteritis	≥2024	II	
	Lichen Planus	≥2024	II	
	Lupus Nephritis	≥2024	II	
CPK850	Retinitis pigmentosa	≥2024	II	
CSJ117	Asthma	≥2024	II	
ECF843	Dry eye	2023	II	
Entresto	Post-acute myocardial infarction	2021	III	-
INC280 (capmatinib)	Solid Tumors	≥2024	II	
Jakavi	Acute graft-versus-host disease (GvHD)	2021	III	- Phase III results published in NEJM, confirming significant improvement in overall response
	Chronic graft-versus-host disease (GvHD)	2021	III	- Readout is on track for 2020
KAE609 (cipargamin)	Malaria uncomplicated	≥2024	II	
	Malaria severe	≥2024	II	
KAF156 (ganaplacide)	Malaria uncomplicated	≥2024	II	

Project/ Compound	Potential indication/ Disease area	First planned submissions	Current Phase	News update
Kisqali + endocrine therapy	HR+/HER2- early BC (adjuvant)	2022	III	· Potential for registration as early as 2022 assuming positive, pre-planned interim analysis
KJX839 (inclisiran)	ORION-4: Secondary prevention of cardiovascular events in patients with elevated levels of LDLC	≥2024	III	· Acquired from The Medicines Company in Jan 2020
	ORION-5: Evaluate inclisiran in subjects with a rare genetic condition: homozygous familial hypercholesterolemia (n=56)		III	· July 2020: Preliminary analysis completed. Results inconclusive due to confounding factors. Trial continues with planned protocol amendment. Full results to be available in H2 2021 · No impact on ongoing submissions
Kymriah (tisagenlecleucel) + pembrolizumab	r/r Follicular lymphoma	2021	II	
	r/r DLBCL in 1st relapse	2021	III	
	r/r DLBCL	≥2024	II	
LAM320	Multi-drug resistant tuberculosis	2021	III	· WHO qualification only / US registration will not be pursued
LJC242 (tropifexor + cenicriviroc)	Non-alcoholic steatohepatitis (NASH)	≥2024	II	
LJN452 (tropifexor)	Non-alcoholic steatohepatitis (NASH)	≥2024	II	· FDA Fast Track designation
LMI070	Spinal Muscular Atrophy	≥2024	II	· FDA Orphan designation, EMA Orphan status obtained · Dose ranging study ongoing
LNA043	Osteoarthritis	≥2024	II	
LNP023	Paroxysmal nocturnal hemoglobinuria	2023	II	
	IgA nephropathy	2023	II	
	Membranous nephropathy	≥2024	II	
	C3 glomerulopathy	2023	II	- US orphan designation received
	Atypical haemolytic uraemic syndrome	2023	II	
LOU064 (remibrutinib)	Chronic Spontaneous Urticaria	2023	II	- Readout expected in 2021
	Sjögren's syndrome	≥2024	II	
Lutathera	GEP-NET 1L G3	2023	III	
^{177}Lu-PSMA-617	Metastatic castration-resistant prostate cancer	2021	III	- Event driven trial. H1 2021 readout
^{177}Lu-PSMA-R2	Prostate cancer	≥2024	I	
^{177}Lu-NeoB	Multiple Solid Tumor	≥2024	I	
LXE408	Visceral leishmaniosis	≥2024	II	
MBG453	Myelodysplastic syndrome	2021	III	- Study initiated in June 2020
	Unfit AML	≥2024	II	- Study expected to start in 2020
PDR001 + *Tafinlar* + *Mekinist*	Metastatic BRAF V600+ melanoma	2020	III	- Expected submission in H2 2020
PDR001 Combo	Malignant melanoma	≥2024	II	· Enrollment ongoing
QBW251	COPD	≥2024	II	· Phase IIb recruitment ongoing

Project/ Compound	Potential indication/ Disease area	First planned submissions	Current Phase	News update
QGE031 (ligelizumab)	Chronic Spontaneous Urticaria / Chronic Idiopathic Urticaria	2021	III	Enrollment on track to complete in 2020
RTH258 (brolucizumab)	Diabetic macular edema	2021	III	- Expected readout in H2 2020
	Retinal vein occlusion	2023	III	
	Diabetic retinopathy	2023	III	
SAF312	Chronic ocular surface pain	≥2024	II	
TQJ230	Secondary prevention of cardiovascular events in patients with elevated levels of lipoprotein(a)	≥2024	III	· Trial initiated, FPFV in Q4 2019
UNR844	Presbyopia	≥2024	II	
VAY736 (ianalumab)	Auto-immune hepatitis	≥2024	II	
	Primary Sjögren's syndrome	≥2024	II	· FDA Fast Track designation
VPM087	1st line colorectal cancer / 1st line renal cell carcinoma	≥2024	I	
Xolair	Food Allergy	2022	III	
ZPL389 (adriforant)	Atopic dermatitis	≥2024	II	· Project discontinued

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 Phase III · First patient enrolled July 2019
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 2020**	Q2 2019
Net sales to third parties from continuing operations	9	**11 347**	**11 764**
Other revenues	9	275	260
Cost of goods sold		-3 429	-3 406
Gross profit from continuing operations		**8 193**	**8 618**
Selling, general and administration		-3 368	-3 585
Research and development		-2 441	-2 051
Other income		432	989
Other expense		-464	-1 308
Operating income from continuing operations		**2 352**	**2 663**
Income from associated companies		183	176
Interest expense		-220	-205
Other financial income and expense		-27	0
Income before taxes from continuing operations		**2 288**	**2 634**
Taxes		-421	-525
Net income from continuing operations		**1 867**	**2 109**
Gain on distribution of Alcon Inc. to Novartis AG shareholders	3, 10		4 691
Net income from discontinued operations			**4 691**
Net income		**1 867**	**6 800**
Attributable to:			
Shareholders of Novartis AG		*1 867*	*6 799*
Non-controlling interests		*0*	*1*
Weighted average number of shares outstanding – Basic (million)		2 289	2 310
Basic earnings per share from continuing operations (USD) [1]		*0.82*	*0.91*
Basic earnings per share from discontinued operations (USD) [1]			*2.03*
Total basic earnings per share (USD) [1]		**0.82**	**2.94**
Weighted average number of shares outstanding – Diluted (million)		2 304	2 333
Diluted earnings per share from continuing operations (USD) [1]		*0.81*	*0.90*
Diluted earnings per share from discontinued operations (USD) [1]			*2.01*
Total diluted earnings per share (USD) [1]		**0.81**	**2.91**

[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 2020**	H1 2019
Net sales to third parties from continuing operations	9	**23 630**	**22 870**
Sales to discontinued segment			53
Net sales from continuing operations		**23 630**	**22 923**
Other revenues	9	700	556
Cost of goods sold		-7 151	-6 657
Gross profit from continuing operations		**17 179**	**16 822**
Selling, general and administration		-6 854	-6 915
Research and development		-4 501	-4 350
Other income		693	1 192
Other expense		-1 421	-1 844
Operating income from continuing operations		**5 096**	**4 905**
Income from associated companies		306	256
Interest expense		-459	-431
Other financial income and expense		-34	44
Income before taxes from continuing operations		**4 909**	**4 774**
Taxes		-869	-797
Net income from continuing operations		**4 040**	**3 977**
Net loss from discontinued operations before gain on distribution of Alcon Inc. to Novartis AG shareholders	10		-101
Gain on distribution of Alcon Inc. to Novartis AG shareholders	3, 10		4 691
Net income from discontinued operations			**4 590**
Net income		**4 040**	**8 567**
Attributable to:			
Shareholders of Novartis AG		*4 043*	*8 565*
Non-controlling interests		*-3*	*2*
Weighted average number of shares outstanding – Basic (million)		2 281	2 312
Basic earnings per share from continuing operations (USD) [1]		*1.77*	*1.72*
Basic earnings per share from discontinued operations (USD) [1]			*1.98*
Total basic earnings per share (USD) [1]		**1.77**	**3.70**
Weighted average number of shares outstanding – Diluted (million)		2 299	2 336
Diluted earnings per share from continuing operations (USD) [1]		*1.76*	*1.70*
Diluted earnings per share from discontinued operations (USD) [1]			*1.96*
Total diluted earnings per share (USD) [1]		**1.76**	**3.66**

[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 2020**	Q2 2019
Net income	**1 867**	**6 800**
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	-38	-27
Currency translation effects [1]	380	525
Total of items to eventually recycle	343	498
Other comprehensive income never to be recycled into the consolidated income statement:		
Actuarial gains/(losses) from defined benefit plans, net of taxes	319	-387
Fair value adjustments on equity securities, net of taxes	173	-21
Total of items never to be recycled	492	-408
Total comprehensive income	**2 702**	**6 890**
Attributable to:		
Shareholders of Novartis AG	*2 703*	*6 888*
Continuing operations	*2 703*	*2 298*
Discontinued operations		*4 590*
Non-controlling interests	*-1*	*2*

[1] In Q2 2019, cumulative currency translation gains of USD 123 million were recycled into the consolidated income statement as a result of the Alcon spin-off (see Notes 2, 3 and 10).

First half (unaudited)

(USD millions)	**H1 2020**	H1 2019
Net income	**4 040**	**8 567**
Other comprehensive income to be eventually recycled into the consolidated income statement:		
Fair value adjustments on debt securities, net of taxes		1
Fair value adjustments on deferred cash flow hedges, net of taxes		1
Total fair value adjustments on financial instruments, net of taxes		2
Novartis share of other comprehensive income recognized by associated companies, net of taxes	-12	-54
Net investment hedge	-1	12
Currency translation effects [1]	382	189
Total of items to eventually recycle	369	149
Other comprehensive income never to be recycled into the consolidated income statement:		
Actuarial losses from defined benefit plans, net of taxes [2]	-293	-890
Fair value adjustments on equity securities, net of taxes	99	74
Total of items never to be recycled	-194	-816
Total comprehensive income	**4 215**	**7 900**
Attributable to:		
Shareholders of Novartis AG	*4 219*	*7 898*
Continuing operations	*4 219*	*3 321*
Discontinued operations		*4 577*
Non-controlling interests	*-4*	*2*

[1] In H1 2019, cumulative currency translation gains of USD 123 million were recycled into the consolidated income statement as a result of the Alcon spin-off (see Notes 2, 3 and 10).
[2] Included in H1 2019 is a USD -358 million impact related to the revaluation of deferred tax assets on Swiss pension plans that were previously recognized through other comprehensive income. This revaluation resulted from the Swiss canton Basel-Stadt tax reform, enacted in February 2019.

Consolidated balance sheets

(USD millions)	Note	Jun 30, 2020 (unaudited)	Dec 31, 2019 (audited)
Assets			
Non-current assets			
Property, plant and equipment	9	11 955	12 069
Right-of-use assets		1 640	1 677
Goodwill	9	29 100	26 524
Intangible assets other than goodwill	9	36 669	28 787
Investments in associated companies		8 575	8 644
Deferred tax assets		8 601	7 909
Financial assets		2 475	2 518
Other non-current assets		866	738
Total non-current assets		**99 881**	**88 866**
Current assets			
Inventories		6 904	5 982
Trade receivables		7 644	8 301
Income tax receivables		308	254
Marketable securities, commodities, time deposits and derivative financial instruments		376	334
Cash and cash equivalents		5 917	11 112
Other current assets		2 733	2 680
Total current assets without disposal group		**23 882**	**28 663**
Assets of disposal group held for sale	3		841
Total current assets		**23 882**	**29 504**
Total assets		**123 763**	**118 370**
Equity and liabilities			
Equity			
Share capital		913	936
Treasury shares		-37	-80
Reserves		52 936	54 618
Issued share capital and reserves attributable to Novartis AG shareholders		**53 812**	**55 474**
Non-controlling interests		73	77
Total equity		**53 885**	**55 551**
Liabilities			
Non-current liabilities			
Financial debts		23 955	20 353
Lease liabilities		1 698	1 703
Deferred tax liabilities		7 499	5 867
Provisions and other non-current liabilities		7 344	6 632
Total non-current liabilities		**40 496**	**34 555**
Current liabilities			
Trade payables		4 820	5 424
Financial debts and derivative financial instruments		8 875	7 031
Lease liabilities		258	246
Current income tax liabilities		2 571	2 194
Provisions and other current liabilities		12 858	13 338
Total current liabilities without disposal group		**29 382**	**28 233**
Liabilities of disposal group held for sale	3		31
Total current liabilities		**29 382**	**28 264**
Total liabilities		**69 878**	**62 819**
Total equity and liabilities		**123 763**	**118 370**

Consolidated statements of changes in equity

Second quarter (unaudited)

(USD millions)	Share capital	Treasury shares	Retained earnings	Total value adjustments	Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
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		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**

(USD millions)	Note	Share capital	Treasury shares	Retained earnings	Total value adjustments	Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
Total equity at April 1, 2019		**944**	**-63**	**51 518**	**-5 170**	**47 229**	**78**	**47 307**
Net income				6 799		6 799	1	6 800
Other comprehensive income					89	89	1	90
Total comprehensive income				**6 799**	**89**	**6 888**	**2**	**6 890**
Dividend in kind	2, 3			2 927		2 927		2 927
Purchase of treasury shares			-16	-2 754		-2 770		-2 770
Reduction of share capital		-8	12	-4				
Equity-based compensation				175		175		175
Shares delivered to Alcon employees as a result of the Alcon spin-off				32		32		32
Taxes on treasury share transactions [1]				-185		-185		-185
Increase of treasury share repurchase obligation under a share buyback trading plan				-2 573		-2 573		-2 573
Transaction costs, net of taxes [2]				-301		-301		-301
Fair value adjustments on financial assets sold				3	-3			
Fair value adjustments related to divestments				4	-4			
Impact of change in ownership of consolidated entities				-3		-3	-2	-5
Other movements				7		7		7
Total of other equity movements		**-8**	**-4**	**-2 672**	**-7**	**-2 691**	**-2**	**-2 693**
Total equity at June 30, 2019		**936**	**-67**	**55 645**	**-5 088**	**51 426**	**78**	**51 504**

[1] Included in Q2 2019 is a USD 69 million impact related to the revaluation of deferred tax liability on treasury shares that are recognized through retained earnings. This revaluation resulted from the Swiss Federal tax reform enacted in May 2019, effective January 1, 2020.

[2] Transaction costs directly attributable to the distribution (spin-off) of the Alcon business to Novartis AG shareholders.

Consolidated statements of changes in equity

First half 2020 (unaudited)

(USD millions)	Share capital	Treasury shares	Retained earnings	Total value adjustments	Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
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			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 changes in equity

First half 2019 (unaudited)

(USD millions)	Note	Share capital	Treasury shares	Retained earnings	Total value adjustments	Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
Total equity at January 1, 2019, as previously reported		**944**	**-69**	**82 191**	**-4 452**	**78 614**	**78**	**78 692**
Impact of change in accounting policies	4			3		3		3
Restated equity at January 1, 2019		**944**	**-69**	**82 194**	**-4 452**	**78 617**	**78**	**78 695**
Net income				8 565		8 565	2	8 567
Other comprehensive income				-54	-613	-667		-667
Total comprehensive income				**8 511**	**-613**	**7 898**	**2**	**7 900**
Dividends				-6 645		-6 645		-6 645
Dividend in kind	2, 3			-23 434		-23 434		-23 434
Purchase of treasury shares			-17	-2 955		-2 972		-2 972
Reduction of share capital		-8	12	-4				
Exercise of options and employee transactions			3	197		200		200
Equity-based compensation			4	443		447		447
Shares delivered to Alcon employees as a result of the Alcon spin-off				32		32		32
Taxes on treasury share transactions	4			-185		-185		-185
Increase of treasury share repurchase obligation under a share buyback trading plan				-2 289		-2 289		-2 289
Transaction costs, net of taxes	4			-253		-253		-253
Fair value adjustments on financial assets sold				19	-19			
Fair value adjustments related to divestments				4	-4			
Impact of change in ownership of consolidated entities				-3		-3	-2	-5
Other movements				13		13		13
Total of other equity movements		**-8**	**2**	**-35 060**	**-23**	**-35 089**	**-2**	**-35 091**
Total equity at June 30, 2019		**936**	**-67**	**55 645**	**-5 088**	**51 426**	**78**	**51 504**

Consolidated statements of cash flows

Second quarter (unaudited)

(USD millions)	Note	**Q2 2020**	Q2 2019
Net income from continuing operations		**1 867**	**2 109**
Adjustments to reconcile net income from continuing operations to net cash flows from operating activities from continuing operations			
Reversal of non-cash items and other adjustments	6.1	2 345	2 085
Dividends received from associated companies and others		2	3
Interest received		5	55
Interest paid		-227	-239
Other financial receipts		52	10
Other financial payments		-10	28
Taxes paid	6.2	-303	-560
Net cash flows from operating activities from continuing operations before working capital and provision changes		**3 731**	**3 491**
Payments out of provisions and other net cash movements in non-current liabilities		-420	-323
Change in net current assets and other operating cash flow items		650	-57
Net cash flows from operating activities from continuing operations		**3 961**	**3 111**
Total net cash flows from operating activities		**3 961**	**3 111**
Purchases of property, plant and equipment		-238	-279
Proceeds from sale of property, plant and equipment		1	648
Purchases of intangible assets		-214	-161
Proceeds from sale of intangible assets		49	210
Purchases of financial assets		-38	-45
Proceeds from sale of financial assets		117	142
Purchases of other non-current assets		-7	-14
Acquisitions and divestments of interests in associated companies, net		-2	-1
Acquisitions and divestments of businesses, net	6.3	0	-286
Purchases of marketable securities and commodities		-74	-75
Proceeds from sale of marketable securities and commodities		72	69
Net cash flows used in/from investing activities from continuing operations		**-334**	**208**
Net cash flows used in investing activities from discontinued operations	10	-91	-682
Total net cash flows used in investing activities		**-425**	**-474**
Acquisitions of treasury shares		-9	-2 368
Proceeds from exercised options and other treasury share transactions		30	
Repayments of non-current financial debts		-1 002	-7
Change in current financial debts		-1 169	-793
Payment of lease liabilities, net		-74	-69
Impact of change in ownership of consolidated entities			-5
Other financing cash flows, net		52	532
Net cash flows used in financing activities from continuing operations		**-2 172**	**-2 710**
Net cash flows used in/from financing activities from discontinued operations	10	-13	2 682
Total net cash flows used in financing activities		**-2 185**	**-28**
Net change in cash and cash equivalents before effect of exchange rate changes		**1 351**	**2 609**
Cash and cash equivalents of discontinued operations at March 31, 2019	6.4		499
Effect of exchange rate changes on cash and cash equivalents		38	76
Total net change in cash and cash equivalents		**1 389**	**3 184**
Cash and cash equivalents at April 1		4 528	6 807
Cash and cash equivalents at June 30		**5 917**	**9 991**

Consolidated statements of cash flows

First half (unaudited)

(USD millions)	Note	**H1 2020**	H1 2019
Net income from continuing operations		**4 040**	**3 977**
Adjustments to reconcile net income from continuing operations to net cash flows from operating activities from continuing operations			
Reversal of non-cash items and other adjustments	6.1	5 202	4 101
Dividends received from associated companies and others		489	463
Interest received		37	140
Interest paid		-321	-406
Other financial receipts		261	10
Other financial payments		-19	-16
Taxes paid	6.2	-899	-960
Net cash flows from operating activities from continuing operations before working capital and provision changes		**8 790**	**7 309**
Payments out of provisions and other net cash movements in non-current liabilities		-824	-516
Change in net current assets and other operating cash flow items		-1 477	-1 348
Net cash flows from operating activities from continuing operations		**6 489**	**5 445**
Net cash flows from operating activities from discontinued operations			78
Total net cash flows from operating activities		**6 489**	**5 523**
Purchases of property, plant and equipment		-475	-561
Proceeds from sale of property, plant and equipment		4	812
Purchases of intangible assets		-460	-498
Proceeds from sale of intangible assets		105	281
Purchases of financial assets		-90	-154
Proceeds from sale of financial assets		359	177
Purchases of other non-current assets		-48	-24
Proceeds from sale of other non-current assets		0	3
Acquisitions and divestments of interests in associated companies, net		-4	-3
Acquisitions and divestments of businesses, net	6.3	-9 901	-382
Purchases of marketable securities and commodities		-345	-120
Proceeds from sale of marketable securities and commodities		394	2 428
Net cash flows used in/from investing activities from continuing operations		**-10 461**	**1 959**
Net cash flows used in investing activities from discontinued operations	10	-105	-1 105
Total net cash flows used in/from investing activities		**-10 566**	**854**
Dividends paid to shareholders of Novartis AG		-6 987	-6 645
Acquisitions of treasury shares		-150	-2 590
Proceeds from exercised options and other treasury share transactions		846	200
Increase in non-current financial debts		4 945	
Repayments of non-current financial debts		-2 002	-3 008
Change in current financial debts		2 486	-942
Payment of lease liabilities, net		-142	-91
Impact of change in ownership of consolidated entities			-5
Other financing cash flows, net		-142	71
Net cash flows used in financing activities from continuing operations		**-1 146**	**-13 010**
Net cash flows used in/from financing activities from discontinued operations	10	-26	3 299
Total net cash flows used in financing activities		**-1 172**	**-9 711**
Net change in cash and cash equivalents before effect of exchange rate changes		**-5 249**	**-3 334**
Effect of exchange rate changes on cash and cash equivalents		54	54
Total net change in cash and cash equivalents		**-5 195**	**-3 280**
Cash and cash equivalents at January 1		11 112	13 271
Cash and cash equivalents at June 30		**5 917**	**9 991**

Notes to the Condensed Interim Consolidated Financial Statements for the three-month and six-month period ended June 30, 2020 (unaudited)

1. Basis of preparation

These Condensed Interim Consolidated Financial Statements for the three-month and six-month period ended June 30, 2020, were prepared in accordance with International Accounting Standard 34 *Interim Financial Reporting* and accounting policies set out in the 2019 Annual Report published on January 29, 2020.

2. Selected critical accounting policies

The Group's principal accounting policies are set out in Note 1 to the Consolidated Financial Statements in the 2019 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 assets and liabilities, including any contingent amounts, the distribution liability recognized in connection with the distribution of Alcon Inc. to Novartis AG shareholders, as well as of revenues and expenses. Actual outcomes and results could differ from those estimates and assumptions.

As disclosed in the 2019 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.

Non-current assets held for sale or held for distribution to owners

Non-current assets are classified as assets held for sale or related to discontinued operations when their carrying amount is to be recovered principally through a sale transaction or distribution to owners and a sale or distribution to owners is considered highly probable. They are stated at the lower of carrying amount and fair value less costs to sell with any resulting impairment recognized. Assets related to discontinued operations and assets of disposal group held for sale are not depreciated or amortized. The prior year consolidated balance sheet is not restated.

If in a subsequent period, the criteria for classification as held for sale are no longer met, the recoverable amount of assets and liabilities are reclassified out of assets held for sale into the respective balance sheet lines, prior year consolidated balance sheet is not restated. The cumulative amount of depreciation and amortization not recorded since the date of their classification to assets held for sale, and any required adjustments to the recoverable amounts of assets are recognized in the consolidated income statement.

Distribution of Alcon Inc. to Novartis AG shareholders

During the first quarter of 2019, at the Annual General Meeting (AGM) of Novartis AG shareholders, held on February 28, 2019, the Novartis AG shareholders approved a special distribution by way of a dividend in kind to effect the spin-off of Alcon Inc.

The February 28, 2019, shareholder approval for the spin-off required the Alcon Division and selected portions of corporate activities attributable to Alcon's business (the "Alcon business") to be reported as discontinued operations.

The shareholder approval to spin off the Alcon business also required the recognition of a distribution liability at the fair value of the Alcon business. The Group elected to measure the distribution liability at the fair value of the Alcon business net assets taken as a whole. The distribution liability was recognized through a reduction in retained earnings. It was required to be adjusted at each balance sheet date for changes in its estimated

fair value, up to the date of the distribution to shareholders through retained earnings. Any resulting impairment of the business assets to be distributed would have been recognized in the consolidated income statements in "Other expense" of discontinued operations, at the date of initial recognition of the distribution liability or at subsequent dates resulting from changes of the distribution liability valuation. At the April 8, 2019 distribution settlement date, the resulting gain, which was measured as the excess amount of the distribution liability over the then-carrying value of the net assets of the business distributed, was recognized on the line "Gain on distribution of Alcon Inc. to Novartis AG shareholders" in the income statement of discontinued operations.

The recognition of the distribution liability required the use of valuation techniques for purposes of impairment testing of the Alcon business' assets to be distributed and for the measurement of the fair value of the distribution liability. These valuations required the use of management assumptions and estimates related to the Alcon business' future cash flows, market multiples to estimate day one market value, and control premiums to apply in estimating the Alcon business fair value. These fair value measurements were classified as "Level 3" in the fair value hierarchy. The section "—Impairment of goodwill and intangible assets" in Note 1 to the Consolidated Financial Statements of the 2019 Annual Report provides additional information on key assumptions that are highly sensitive in the estimation of fair values using valuation techniques.

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

For additional disclosures, refer to Notes 3 and 10.

New IFRS standard effective as of January 1, 2020

IFRS 3 Business Combination amendments

The IASB issued amendments to IFRS 3 Business Combinations that revised the definition of a business, which assist entities with the evaluation of when an asset or group of assets acquired or disposed of should be considered a business. This amended standard has been applied to transactions entered into on or after January 1, 2020. The amended standard allows an entity to apply an optional concentration test, on a transaction-by-transaction basis, to evaluate whether substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. If this optional concentration test is met, the entity may choose to consider the transaction an acquisition of an asset or set of assets. The adoption of this amended standard on January 1, 2020 did not have a significant impact on our consolidated financial statements and is not expected to have a significant impact in future periods. However, this will depend on the facts and circumstances of future transactions and if the Group decides to apply the optional concentration test in the assessment of whether an acquired set of activities and assets is or is not a business.

There are no other IFRS standards or interpretations not yet effective that would be expected to have a material impact on the Group.

3. Significant transactions

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 preliminary 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.

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 300 million (USD 331 million) upfront payment, less customary purchase price adjustment of EUR 27 million (USD 30 million), plus potential milestone payments of up to EUR 120 million (USD 132 million), which AGI is eligible to receive upon the achievement of specified milestones.

The fair value of the total purchase consideration was EUR 345 million (USD 381 million). The amount consisted of an initial cash payment of EUR 273 million (USD 301 million) and the fair value of contingent consideration of EUR 72 million (USD 80 million), which AGI is eligible to receive upon the achievement of specified milestones. The purchase price allocation resulted in net identifiable assets of approximately USD 309 million, consisting of USD 269 million intangible assets, USD 26 million other net assets, USD 14 million net deferred tax assets and goodwill of approximately USD 72 million. 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 entered into a mutual agreement with Aurobindo to terminate the transaction. The decision was taken as regulatory approval from the US Federal Trade Commission was not obtained within the SAPA agreed timelines.

The cumulative amount of the depreciation on property, plant and equipment and amortization on intangible assets, not recorded in the consolidated income statement since the date of classification as held for sale, amounting to USD 38 million and USD 102 million, respectively, 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 the Group's consolidated balance sheet at December 31, 2019, the assets and liabilities classified as disposal group assets and liabilities held for sale consisted of the following:

(USD millions)	Dec 31, 2019
Assets of disposal group classified as held for sale	
Property, plant and equipment	169
Intangible assets other than goodwill	475
Deferred tax assets	11
Other non-current assets	2
Inventories	181
Other current assets	3
Total	**841**
Liabilities of disposal group classified as held for sale	
Deferred tax liabilities	2
Provisions and other non-current liabilities	4
Provisions and other current liabilities	25
Total	**31**

There are no cumulative income or expenses included in other comprehensive income relating to the disposal group.

Significant transactions in 2019

Completion of the spin-off of the Alcon business through a dividend in kind distribution to Novartis AG shareholders

On June 29, 2018, Novartis announced its intention to seek shareholder approval for the spin-off of the Alcon business into a separately traded standalone company, following the complete structural separation of the Alcon business into a standalone company (the Alcon business or Alcon Inc.).

The Novartis AG shareholders approved the spin-off of the Alcon business at the 2019 Annual General Meeting held on February 28, 2019, subject to completion of certain conditions precedent to the distribution. Upon shareholder approval, the Alcon business was reported as discontinued operations, and the fair value of the Alcon business exceeded the carrying value of its net assets.

The conditions precedent to the spin-off were met and on April 8, 2019 the spin-off of the Alcon business was effected by way of a distribution of a dividend in kind

of Alcon Inc. shares to Novartis AG shareholders and ADR (American Depositary Receipt) holders (the Distribution), which amounted to USD 23.4 billion and is recognized as a reduction to retained earnings. Through the Distribution, each Novartis AG shareholder received one Alcon Inc. share for every five Novartis AG shares/ADRs they held on April 8, 2019, close of business. As of April 9, 2019, the shares of Alcon Inc. are listed on the SIX Swiss Exchange (SIX) and on the New York Stock Exchange (NYSE) under the symbol "ALC."

The dividend in kind distribution liability to effect the spin-off of the Alcon business (the distribution liability) amounted to USD 26.4 billion at March 31, 2019, unchanged from its initial recognition on February 28, 2019, and was in excess of the carrying value of the Alcon business net assets as of February 28, 2019, and as of March 31, 2019. The net assets of the Alcon business amounted to USD 23.1 billion as at March 31, 2019.

On March 6, 2019, Alcon entered into financing arrangements with a syndicate of banks under which it borrowed on April 2, 2019, a total amount of USD 3.2 billion. These borrowings consisted of approximately USD 2.8 billion and the equivalent of USD 0.4 billion in EUR in bridge and other term loans under such Alcon facilities agreement. In addition, approximately USD 0.3 billion of borrowings under a number of local bilateral facilities in different countries, with the largest share of borrowings in Japan, were raised. This resulted in a total gross debt of USD 3.5 billion. These outstanding borrowings of the Alcon legal entities were recorded in the balance sheet and financing cash flow from discontinued operations. Prior to the spin-off, through a series of intercompany transactions, Alcon legal entities paid approximately USD 3.1 billion in cash to Novartis and its affiliates.

At the April 8, 2019 Distribution, the fair value of the distribution liability of the Alcon business amounted to USD 23.4 billion, a decrease of USD 3.0 billion from March 31, 2019. As mentioned above, prior to the spin-off, through a series of intercompany transactions, Alcon legal entities incurred additional net financial debt and paid approximately USD 3.1 billion in cash to Novartis and its affiliates. This additional net debt and transactions resulted in a decrease in Alcon's net assets to USD 20.0 billion at the date of the Distribution of the dividend in kind to Novartis AG shareholders on April 8, 2019. The distribution liability at April 8, 2019, remained in excess of the then-carrying value of the Alcon business net assets.

Certain consolidated foundations own Novartis AG dividend-bearing shares restricting their availability for use by the Group. These Novartis AG shares are accounted for as treasury shares. Through the Distribution, these foundations received Alcon Inc. shares representing an approximate 4.7% equity interest in Alcon Inc. Upon the loss of control of Alcon Inc. through the Distribution, the financial investment in Alcon Inc. was recognized at its fair value based on the opening traded share price of Alcon Inc. on April 9, 2019 (a Level 1 hierarchy valuation). At initial recognition, its fair value of USD 1.3 billion was reported on the Group's consolidated balance sheet as a financial asset. Management has designated this investment at fair value through other comprehensive income.

The total non-taxable, non-cash gain recognized at the distribution date of the spin-off of the Alcon business amounted to USD 4.7 billion consisting of:

(USD millions)	April 8, 2019
Net assets derecognized[1]	-20 025
Derecognition of distribution liability	23 434
Difference between net assets and distribution liability	**3 409**
Recognition of Alcon Inc. shares obtained through consolidated foundations	1 273
Currency translation gains recycled into the consolidated income statement	123
Transaction costs recognized in the consolidated income statement	-114
Gain on distribution of Alcon Inc. to Novartis AG shareholders	**4 691**

[1] See Note 10 for additional information.

For additional disclosure on discontinued operations, refer to Note 10.

Innovative Medicines – acquisition of IFM Tre, Inc.

On May 7, 2019, Novartis acquired IFM Tre, Inc., a privately held, US-based biopharmaceutical company focused on developing anti-inflammatory medicines targeting the NLRP3 inflammasome. The acquisition gives Novartis full rights to IFM Tre, Inc.'s portfolio of NLRP3 antagonists. The NLRP3 antagonists portfolio consists of one clinical program and two preclinical programs: IFM-2427, a first-in-class, clinical-stage systemic antagonist for an array of chronic inflammatory disorders, including atherosclerosis and nonalcoholic steatohepatitis (NASH); a preclinical-stage gutdirected molecule for the treatment of inflammatory bowel disease; and a preclinical-stage central nervous system (CNS)-penetrant molecule.

The previously held interest of 9% was adjusted to its fair value of USD 33 million through the consolidated income statement at acquisition date. This remeasurement resulted in a gain of USD 14 million. The fair value of the total purchase consideration for acquiring the 91% stake Novartis did not already own amounted to USD 361 million. The amount consisted of an initial cash payment of USD 285 million, and the fair value of the contingent consideration of USD 76 million due to the IFM Tre, Inc. shareholders, which they are eligible to receive upon the achievement of specified development and commercialization milestones. The purchase price allocation resulted in net identifiable assets of USD 355 million, mainly intangibles, and goodwill of USD 39 million. The 2019 results of operations since the date of acquisition were not material.

Innovative Medicines – acquisition of *Xiidra*

On May 8, 2019, Novartis entered into an agreement with Takeda Pharmaceutical Company Limited (Takeda) to acquire the assets associated with *Xiidra* (lifitegrast ophthalmic solution) 5% worldwide. *Xiidra* is the first and only prescription treatment approved to treat both signs and symptoms of dry eye by inhibiting inflammation caused by the disease. The transaction bolsters the Novartis front-of-the-eye portfolio and ophthalmic leadership. The transaction closed on July 1, 2019. The purchase

price consists of a USD 3.4 billion upfront payment, customary purchase price adjustments of USD 0.1 billion, and the potential milestone payments of up to USD 1.9 billion, which Takeda is eligible to receive upon the achievement of specified commercialization milestones.

The fair value of the total purchase consideration was USD 3.7 billion. The amount consists of an initial cash payment of USD 3.5 billion, and the fair value of the contingent consideration of USD 0.2 billion, which Takeda is eligible to receive upon the achievement of specified commercialization milestones.

The purchase price allocation resulted in net identifiable assets of approximately USD 3.6 billion, consisting mainly of intangible assets of USD 3.6 billion, and goodwill amounted to approximately USD 0.1 billion. In 2019, from the date of acquisition, the business generated net sales of USD 0.2 billion. Management estimated that net sales for the entire year of 2019 would have amounted to USD 0.3 billion, had the business been acquired at the beginning of the 2019 reporting period. The 2019 results of operations since the date of acquisition were not material.

4. Summary of equity attributable to Novartis AG shareholders

	Number of outstanding shares (in millions)		Issued share capital and reserves attributable to Novartis AG shareholders (in USD millions)	
	2020	2019	**H1 2020**	H1 2019
Balance at beginning of year	**2 265.0**	**2 311.2**	**55 474**	**78 614**
Impact of change in accounting policy [1]				3
Restated equity at January 1			**55 474**	**78 617**
Shares acquired to be cancelled		-32.8		-2 819
Other share purchases	-1.6	-1.6	-150	-153
Exercise of options and employee transactions	14.7	5.5	823	200
Equity-based compensation	10.6	9.5	365	447
Shares delivered to Alcon employees as a result of the Alcon spin-off	0.3		29	32
Taxes on treasury share transactions [2]			30	-185
Increase of treasury share repurchase obligation under a share buyback trading plan				-2 289
Dividends to shareholders of Novartis AG			-6 987	-6 645
Dividend in kind to effect the spin-off of Alcon Inc. [3]				-23 434
Net income of the period attributable to shareholders of Novartis AG			4 043	8 565
Other comprehensive income attributable to shareholders of Novartis AG			176	-667
Transaction costs, net of taxes [4]				-253
Impact of change in ownership of consolidated entities				-3
Other movements [5]			9	13
Balance at June 30	**2 289.0**	**2 291.8**	**53 812**	**51 426**

[1] In H1 2019, the impact of change in accounting policy includes USD 3 million related to the implementation of IFRS 16 Leases.
[2] Included in H1 2019 is a USD 69 million impact related to the revaluation of deferred tax liability on treasury shares that are recognized through retained earnings. This revaluation resulted from the Swiss Federal tax reform enacted in May 2019, effective January 1, 2020.
[3] Fair value of the dividend in kind of Alcon Inc. shares to Novartis AG shareholders (see Notes 2 and 3 for further details).
[4] In H1 2019, Transaction costs directly attributable to the distribution (spin-off) of the Alcon business to Novartis AG shareholders.
[5] Impact of hyperinflationary economies

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, 2020 and December 31, 2019. For additional information on the hierarchies and other matters, please refer to the Consolidated Financial Statements in the 2019 Annual Report, published on January 29, 2020.

	Level 1		Level 2		Level 3		Total	
(USD millions)	**Jun 30, 2020**	Dec 31, 2019	**Jun 30, 2020**	Dec 31, 2019	**Jun 30, 2020**	Dec 31, 2019	**Jun 30, 2020**	Dec 31, 2019
Marketable securities								
Debt securities			24	24			24	24
Fund investments	33	37					33	37
Total marketable securities	**33**	**37**	**24**	**24**			**57**	**61**
Derivative financial instruments			136	102			136	102
Total marketable securities and derivative financial instruments	**33**	**37**	**160**	**126**			**193**	**163**
Long-term financial investments								
Debt and equity securities	904	976			539	581	1 443	1 557
Fund investments					235	233	235	233
Contingent consideration receivables					444	399	444	399
Total long-term financial investments	**904**	**976**			**1 218**	**1 213**	**2 122**	**2 189**
Associated companies at fair value through profit or loss					**175**	**186**	**175**	**186**
Contingent consideration payables					-1 039	-1 036	-1 039	-1 036
Other financial liabilities					-20	-29	-20	-29
Derivative financial instruments			-126	-185			-126	-185
Total financial liabilities at fair value			**-126**	**-185**	**-1 059**	**-1 065**	**-1 185**	**-1 250**

During the first half of 2020, there were no significant transfers from one level to the other and no significant transactions associated with level 3 financial instruments. During the second quarter of 2020, there were two non-significant transfers of equity securities from level 3 to level 1 for USD 26 million due to Initial Public Offerings.

The fair value of straight bonds amounted to USD 27.7 billion at June 30, 2020 (USD 23.7 billion at December 31, 2019) compared to the balance sheet value of USD 25.2 billion at June 30, 2020 (USD 22.2 billion at December 31, 2019). For all other financial assets and liabilities, the carrying amount is a reasonable approximation of the fair value. The carrying amount of financial assets included in the line total long-term financial investments of USD 2.1 billion at June 30, 2020 (USD 2.2 billion at December 31, 2019) is included in line “Financial and other non-current assets” of the consolidated balance sheets.

In accordance with the consolidated foundations Alcon Inc. share divestment plans, Alcon Inc. shares with a fair value of USD 287 million were sold, or otherwise disposed of, in the first half of 2020 and the USD 16 million gain on disposal was transferred from other comprehensive income to retained earnings (second quarter : nil).

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.

Non-current financial debt – issuance of bonds

On February 11, 2020, Novartis issued the following straight bonds:

Coupon	Currency	Nominal amount (USD millions)	Maturity year	Issuer	Issue price	Carrying value Jun 30, 2020 (USD millions)
1.75%	USD	1 000	2025	Novartis Capital Corporation, New York, United States	99.852%	996
2.00%	USD	1 250	2027	Novartis Capital Corporation, New York, United States	99.909%	1 245
2.20%	USD	1 500	2030	Novartis Capital Corporation, New York, United States	99.869%	1 492
2.75%	USD	1 250	2050	Novartis Capital Corporation, New York, United States	97.712%	1 213

6. Details to the consolidated statements of cash flows

6.1. Reversal of non-cash items and other adjustments from continuing operations

(USD millions)	**Q2 2020**	Q2 2019
Depreciation, amortization and impairments on:		
Property, plant and equipment	319	371
Right-of-use assets	78	74
Intangible assets	1 306	601
Financial assets [1]	-166	-32
Change in provisions and other non-current liabilities	118	958
Losses/gains on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	6	-615
Equity-settled compensation expense	199	174
Income from associated companies	-183	-176
Taxes	421	525
Net financial expense	247	205
Total	**2 345**	**2 085**

[1] Includes fair value adjustments

(USD millions)	**H1 2020**	H1 2019
Depreciation, amortization and impairments on:		
Property, plant and equipment	700	719
Right-of-use assets	154	149
Intangible assets	2 259	1 619
Financial assets [1]	-127	-20
Change in provisions and other non-current liabilities	838	1 018
Gains on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	-55	-684
Equity-settled compensation expense	377	372
Income from associated companies	-306	-256
Taxes	869	797
Net financial expense	493	387
Total	**5 202**	**4 101**

[1] Includes fair value adjustments

6.2. Total amount of taxes paid

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 from continuing operations", and USD 88 million (Q2 2020: USD 88 million) was included within "Net cash flows used in investing activities from discontinued operations."

During the first half of 2019, the total amount of taxes paid was USD 998 million (Q2 2019: USD 560 million), of which USD 960 million (Q2 2019: USD 560 million) was included within "Net cash flows from operating activities from continuing operations" and USD 38 million (Q2 2019: nil) was included within "Net cash flows from operating activities from discontinued operations."

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

(USD millions)	**Q2 2020**	Q2 2019	**H1 2020**	H1 2019
Net assets recognized as a result of business combinations	**-32**	**-407**	**-10 030**	**-486**
Fair value of previously held equity interests		34		34
Receivables and payables contingent consideration, net	17	88	77	88
Payments, deferred consideration and other adjustments, net	13	-3	65	-3
Cash flows used for acquisitions of businesses	**-2**	**-288**	**-9 888**	**-367**
Cash flows from/used for divestments of businesses, net [1]	2	2	-13	-15
Cash flows used for acquisitions and divestments of businesses, net	**0**	**-286**	**-9 901**	**-382**

[1] In the second quarter of 2020 and 2019, the USD 2 million represented the net cash inflows for previous years divestments.
During the first half of 2020, the USD 13 million included USD 15 million net cash outflows for previous years divestments (H1 2019: USD 15 million) 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 and cash equivalents of discontinued operations at March 31, 2019

Cash and cash equivalents of discontinued operations at March 31, 2019,represents the amount of the Alcon business cash and cash equivalents included in the March 31, 2019, consolidated balance sheets in the line "Assets related to discontinued operations."

For net cash flows used in investing activities from discontinued operations, see Note 10.

7. Acquisition of businesses

Fair value of assets and liabilities arising from acquisitions:

(USD millions)	**H1 2020**	H1 2019
Property, plant and equipment	26	44
Right-of-use assets	32	
Currently marketed products	269	
Acquired research and development	8 602	449
Deferred tax assets	470	20
Financial and other assets	49	
Inventories	84	6
Trade receivables, marketable securities and other current assets	109	4
Cash and cash equivalents	76	
Deferred tax liabilities	-1 928	-101
Current and non-current financial debts	-32	-2
Current and non-current lease liabilities	-44	
Trade payables and other liabilities	-144	-9
Net identifiable assets acquired	**7 569**	**411**
Acquired cash and cash equivalents	-76	
Goodwill	2 537	75
Net assets recognized as a result of business combinations	**10 030**	**486**

Note 3 details significant acquisitions of businesses, specifically, The Medicines Company and the Japanese business of AGI in 2020, and IFM Tre, Inc. in 2019. The goodwill arising out of these acquisitions is attributable to the buyer specific synergies, the assembled workforce, and the accounting for deferred tax liabilities on the acquired assets. Goodwill of USD 59 million in 2020 (2019: nil) is 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 2019 Annual Report and 2019 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, 2020 of significant developments in those proceedings, as well as any new significant proceedings commenced since the date of the 2019 Annual Report and 2019 Form 20-F.

Investigations and related litigations

Government generic pricing antitrust investigations, antitrust class actions

Since 2016, Sandoz Inc. received grand jury subpoenas and a civil investigative demand and interrogatories from the Antitrust and Civil Divisions of the US Department of Justice (DOJ) in connection with alleged price fixing and market allocation of generic drugs in the US market as well as alleged False Claims Act violations. Sandoz Inc. reached a resolution with the DOJ Antitrust Division, pursuant to which Sandoz Inc. agreed to pay USD 195 million and entered into a deferred prosecution agreement. The Sandoz resolution related to instances of misconduct at the company between 2013 and 2015 with regard to certain generic drugs sold in the United States. Under the terms of that agreement, Sandoz Inc. will continue to take steps to enhance its compliance program, employee training and monitoring, and will continue to cooperate with the US government's ongoing investigation into the generic pharmaceutical industry. Sandoz Inc. is also in negotiations with the DOJ Civil Division to resolve potential related claims and has recorded a provision of USD 186 million.

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

In 2013, the US government filed a civil complaint in intervention to an individual *qui tam* action against Novartis Pharmaceuticals Corporation (NPC) in the United States District Court (USDC) for the S.D.N.Y. The complaint, as subsequently amended, asserted federal False Claims Act (FCA) and common law claims with respect to speaker programs and other promotional activities for certain NPC cardiovascular medications (*Lotrel*, *Starlix* and *Valturna*) allegedly serving as mechanisms to provide kickbacks to healthcare professionals (HCPs). Also in 2013, New York State filed a civil complaint in

intervention asserting similar claims. In July 2020, Novartis finalized its settlement agreement with the S.D.N.Y, the New York State Attorney General and the individual relator to resolve their claims. As part of this settlement, Novartis will pay USD 0.7 billion, and has agreed to new corporate integrity obligations with the Office of Inspector General of the US Department of Health & Human Services. As of June 30, a provision in the amount of USD 0.7 billion remained accrued in the Innovative Medicines Division for this matter. As of July 20, 2020, USD 0.6 billion have been paid out of this provision.

U.S. Government Foreign Corrupt Practices Act (FCPA) investigations

In June 2020, Novartis reached settlements with the DOJ and the US Securities and Exchange Commission (SEC) resolving all Foreign Corrupt Practices Act (FCPA) investigations into historical conduct by Novartis and its subsidiaries. These investigations were previously disclosed in Note 20 to the Consolidated Financial Statements in our 2019 Annual Report and 2019 Form 20-F under the headings "Greece investigation," "South Korea investigation" and "Asia/Russia investigation." As part of the coordinated resolution of these investigations, Novartis and certain of its current and former subsidiaries agreed to pay USD 0.3 billion. As of June 30, 2020, a provision in the amount of USD 0.1 billion remained accrued. As of July 20, 2020, USD 0.1 billion have been paid out of this provisions. To resolve the DOJ investigation, Novartis Hellas S.A.C.I. entered into a deferred prosecution agreement ("Novartis Hellas DPA") pertaining to inappropriate economic benefits provided to Greek healthcare professionals from 2012 to 2015 in connection with the ophthalmology product *Lucentis*. The Novartis Hellas DPA also covers books and records issues pertaining to the *Lucentis* conduct and to conduct related to a 2009 epidemiological study. The resolutions contain no allegations relating to any bribery of Greek politicians, which is consistent with what Novartis found in its own internal investigation. Alcon Pte Ltd, a former Novartis subsidiary, has entered into a separate deferred prosecution agreement with the DOJ ("Alcon DPA") pertaining to inappropriate economic benefits provided to Vietnamese healthcare professionals and books and records violations from 2011 to 2014 in Vietnam. This conduct related to a consultancy program run by a distributor in Vietnam. To resolve the SEC investigation, Novartis AG reached an agreement pertaining to internal controls and books and records violations in Greece, Vietnam and South Korea. The violations in Greece pertain to the *Lucentis*-related conduct covered in the Novartis Hellas DPA as well as controls issues with Novartis Hellas post-approval studies identified by internal review in 2012 and resolved by 2013. In Vietnam, the violations relate to the activities involving an Alcon distributor that are the subject of the Alcon DPA. In South Korea, the violations relate to conduct for which Novartis has already taken responsibility in South Korea, where Novartis is in the final stages of resolving these issues with the local authorities. The SEC agreement also addresses certain internal controls and books and records issues related to Alcon China's placement of surgical devices.

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 2019 Annual Report and 2019 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 franchise Oncology, and Novartis Pharmaceuticals consists of the global business franchises Ophthalmology; Immunology, Hepatology and Dermatology; Neuroscience; Respiratory; Cardiovascular, Renal and Metabolism; 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 internal use by Retail Generics and for sale to third-party customers. In Biopharmaceuticals, Sandoz develops, manufactures and markets protein- or other biotechnology-based products, including biosimilars, and provides biotechnology manufacturing services to other companies.

The divisions are supported by Novartis Institutes for BioMedical Research, Global Drug Development, Novartis Technical Operations and Novartis Business Services. 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. Further details are provided in Note 3 to the Consolidated Financial Statements of the 2019 Annual Report.

Following the February 28, 2019, shareholders' approval of the spin-off of the Alcon business, the Group reported its financial results as "continuing operations" and "discontinued operations" (refer to Notes 2, 3 and 10 for further details).

Continuing operations comprise the activities of Innovative Medicines and Sandoz Divisions and the continuing Corporate activities.

Discontinued operations included in 2019 the operational results from the Alcon eye care devices business and certain Corporate activities attributable to the Alcon business prior to the spin-off, the gain on distribution of Alcon Inc. to Novartis AG shareholders, and certain other expenses related to the Distribution (see Notes 2, 3 and 10).

Segmentation – Consolidated income statement

Second quarter

	Innovative Medicines		Sandoz		Corporate (including eliminations)		Group	
(USD millions)	**Q2 2020**	Q2 2019	**Q2 2020**	Q2 2019	**Q2 2020**	Q2 2019	**Q2 2020**	Q2 2019
Net sales to third parties from continuing operations	**9 188**	**9 326**	**2 159**	**2 438**			**11 347**	**11 764**
Sales to continuing segments	219	177	43	37	-262	-214		
Net sales from continuing operations	**9 407**	**9 503**	**2 202**	**2 475**	**-262**	**-214**	**11 347**	**11 764**
Other revenues	251	250	22	6	2	4	275	260
Cost of goods sold	-2 554	-2 327	-1 158	-1 315	283	236	-3 429	-3 406
Gross profit from continuing operations	**7 104**	**7 426**	**1 066**	**1 166**	**23**	**26**	**8 193**	**8 618**
Selling, general and administration	-2 764	-2 911	-496	-550	-108	-124	-3 368	-3 585
Research and development	-2 240	-1 853	-201	-198			-2 441	-2 051
Other income	154	847	17	45	261	97	432	989
Other expense	-221	-945	-65	-181	-178	-182	-464	-1 308
Operating income from continuing operations	**2 033**	**2 564**	**321**	**282**	**-2**	**-183**	**2 352**	**2 663**
as % of net sales	*22.1%*	*27.5%*	*14.9%*	*11.6%*			*20.7%*	*22.6%*
Income from associated companies	1	1	1	1	181	174	183	176
Interest expense							-220	-205
Other financial income and expense, net							-27	0
Income before taxes from continuing operations							**2 288**	**2 634**
Taxes							-421	-525
Net income from continuing operations							**1 867**	**2 109**
Gain on distribution of Alcon Inc. to Novartis AG shareholders								4 691
Net income from discontinued operations								**4 691**
Net income							**1 867**	**6 800**

First half

(USD millions)	Innovative Medicines H1 2020	Innovative Medicines H1 2019	Sandoz H1 2020	Sandoz H1 2019	Corporate (including eliminations) H1 2020	Corporate (including eliminations) H1 2019	Group H1 2020	Group H1 2019
Net sales to third parties from continuing operations	**18 943**	**18 106**	**4 687**	**4 764**			**23 630**	**22 870**
Sales to continuing and discontinued segments	409	426	92	76	-501	-449		53
Net sales from continuing operations	**19 352**	**18 532**	**4 779**	**4 840**	**-501**	**-449**	**23 630**	**22 923**
Other revenues	507	511	35	34	158	11	700	556
Cost of goods sold	-5 080	-4 551	-2 614	-2 591	543	485	-7 151	-6 657
Gross profit from continuing operations	**14 779**	**14 492**	**2 200**	**2 283**	**200**	**47**	**17 179**	**16 822**
Selling, general and administration	-5 621	-5 564	-1 016	-1 112	-217	-239	-6 854	-6 915
Research and development	-4 106	-3 958	-395	-392			-4 501	-4 350
Other income	326	922	49	82	318	188	693	1 192
Other expense	-590	-1 219	-562	-306	-269	-319	-1 421	-1 844
Operating income from continuing operations	**4 788**	**4 673**	**276**	**555**	**32**	**-323**	**5 096**	**4 905**
as % of net sales	*25.3%*	*25.8%*	*5.9%*	*11.6%*			*21.6%*	*21.4%*
Income from associated companies	1	1	1	1	304	254	306	256
Interest expense							-459	-431
Other financial income and expense, net							-34	44
Income before taxes from continuing operations							**4 909**	**4 774**
Taxes							-869	-797
Net income from continuing operations							**4 040**	**3 977**
Net loss from discontinued operations before gain on distribution of Alcon Inc. to Novartis AG shareholders								-101
Gain on distribution of Alcon Inc. to Novartis AG shareholders								4 691
Net income from discontinued operations								**4 590**
Net income							**4 040**	**8 567**

Segmentation – Additional consolidated balance sheet and income statement disclosure

(USD millions)	Innovative Medicines Jun 30, 2020	Innovative Medicines Dec 31, 2019	Sandoz Jun 30, 2020	Sandoz Dec 31, 2019	Corporate (including eliminations) Jun 30, 2020	Corporate (including eliminations) Dec 31, 2019	Group Jun 30, 2020	Group Dec 31, 2019
Total assets	**81 373**	**71 225**	**16 229**	**16 468**	**26 161**	30 677	**123 763**	**118 370**
Total liabilities	**-14 690**	**-15 332**	**-3 681**	**-3 804**	**-51 507**	-43 683	**-69 878**	**-62 819**
Total equity							**53 885**	**55 551**
Net debt					26 537	15 938	26 537	15 938
Net operating assets	**66 683**	**55 893**	**12 548**	**12 664**	**1 191**	2 932	**80 422**	**71 489**
Included in net operating assets are:								
Property, plant and equipment	9 485	9 632	1 943	1 888	527	549	11 955	12 069
Goodwill	21 257	18 750	7 835	7 767	8	7	29 100	26 524
Intangible assets other than goodwill	34 877	27 586	1 674	1 125	118	76	36 669	28 787

The following table shows the intangible asset impairment charges for continuing operations:

(USD millions)	Q2 2020	Q2 2019	H1 2020	H1 2019
Innovative Medicines [1]	-500	-20	-509	-466
Sandoz	0	-2	-42	-12
Total	**-500**	**-22**	**-551**	**-478**

[1] Q2 2020 and H1 2020 include an impairment of USD 485 million related to the write-down of IPR&D related to cessation of clinical development program ZPL389 for atopic dermatitis.
H1 2019 includes an impairment of USD 416 million related to the write-down of IPR&D acquired through the 2015 Spinifex Pharmaceuticals Inc. acquisition.

Segmentation – Net sales by region[1]

Second quarter

	Q2 2020 USD m	Q2 2019 USD m	% change USD	% change cc[2]	**Q2 2020 % of total**	Q2 2019 % of total
Innovative Medicines						
Europe	2 964	3 218	-8	-5	32	35
US	3 515	3 336	5	5	38	36
Asia/Africa/Australasia	2 123	2 106	1	2	23	23
Canada and Latin America	586	666	-12	5	7	6
Total	**9 188**	**9 326**	**-1**	**1**	**100**	**100**
Of which in Established Markets	6 909	7 071	-2	-2	75	76
Of which in Emerging Growth Markets	2 279	2 255	1	9	25	24
Sandoz						
Europe	1 130	1 269	-11	-8	52	52
US	508	642	-21	-21	24	26
Asia/Africa/Australasia	341	333	2	4	16	14
Canada and Latin America	180	194	-7	5	8	8
Total	**2 159**	**2 438**	**-11**	**-9**	**100**	**100**
Of which in Established Markets	1 621	1 796	-10	-9	75	74
Of which in Emerging Growth Markets	538	642	-16	-9	25	26
Continuing operations						
Europe	4 094	4 487	-9	-6	36	38
US	4 023	3 978	1	1	35	34
Asia/Africa/Australasia	2 464	2 439	1	2	22	21
Canada and Latin America	766	860	-11	5	7	7
Total	**11 347**	**11 764**	**-4**	**-1**	**100**	**100**
Of which in Established Markets	8 530	8 867	-4	-3	75	75
Of which in Emerging Growth Markets	2 817	2 897	-3	5	25	25

[1] Net sales from operations by location of third-party 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 54.

Segmentation – Net sales by region[1]

First half

	H1 2020 USD m	H1 2019 USD m	% change USD	% change cc[2]	H1 2020 % of total	H1 2019 % of total
Innovative Medicines						
Europe	6 366	6 352	0	3	34	35
US	7 057	6 329	12	12	37	35
Asia/Africa/Australasia	4 301	4 123	4	6	23	23
Canada and Latin America	1 219	1 302	-6	8	6	7
Total	**18 943**	**18 106**	**5**	**7**	**100**	**100**
Of which in Established Markets	14 266	13 638	5	6	75	75
Of which in Emerging Growth Markets	4 677	4 468	5	11	25	25
Sandoz						
Europe	2 558	2 510	2	5	55	53
US	1 078	1 232	-12	-12	23	26
Asia/Africa/Australasia	675	651	4	5	14	14
Canada and Latin America	376	371	1	12	8	7
Total	**4 687**	**4 764**	**-2**	**1**	**100**	**100**
Of which in Established Markets	3 466	3 491	-1	1	74	73
Of which in Emerging Growth Markets	1 221	1 273	-4	2	26	27
Continuing operations						
Europe	8 924	8 862	1	4	38	39
US	8 135	7 561	8	8	34	33
Asia/Africa/Australasia	4 976	4 774	4	6	21	21
Canada and Latin America	1 595	1 673	-5	9	7	7
Total	**23 630**	**22 870**	**3**	**6**	**100**	**100**
Of which in Established Markets	17 732	17 129	4	5	75	75
Of which in Emerging Growth Markets	5 898	5 741	3	9	25	25

[1] Net sales from operations by location of third-party 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 54.

Segmentation – Net sales by business franchise

Innovative Medicines Division net sales by business franchise

Second quarter

	Q2 2020 USD m	Q2 2019 USD m	% change USD	% change cc[1]
Oncology				
Tasigna	480	468	3	5
Promacta/Revolade	422	349	21	23
Tafinlar + Mekinist	371	340	9	12
Sandostatin	341	403	-15	-13
Jakavi	310	284	9	14
Gleevec/Glivec	288	323	-11	-8
Afinitor/Votubia	266	401	-34	-33
Exjade/Jadenu	163	253	-36	-35
Votrient	162	193	-16	-14
Kisqali	159	111	43	49
Lutathera	105	109	-4	-3
Kymriah	118	58	103	103
Piqray	79	6	nm	nm
Adakveo	21		nm	nm
Other	263	308	-15	-13
Total Novartis Oncology business unit	**3 548**	**3 606**	**-2**	**1**
Immunology, Hepatology and Dermatology				
Cosentyx	944	858	10	12
Ilaris	200	165	21	23
Total Immunology, Hepatology and Dermatology	**1 144**	**1 023**	**12**	**13**
Ophthalmology				
Lucentis	401	536	-25	-24
Xiidra	79		nm	nm
Beovu	34		nm	nm
Other	423	638	-34	-32
Total Ophthalmology	**937**	**1 174**	**-20**	**-18**
Neuroscience				
Gilenya	738	825	-11	-9
Zolgensma	205	15	nm	nm
Aimovig	33	24	38	45
Mayzent	34	5	nm	nm
Other	15	17	-12	-26
Total Neuroscience	**1 025**	**886**	**16**	**17**
Cardiovascular, Renal and Metabolism				
Entresto	580	421	38	40
Other		6	nm	nm
Total Cardiovascular, Renal and Metabolism	**580**	**427**	**36**	**38**
Respiratory				
Xolair	289	290	0	4
Ultibro Group	149	166	-10	-7
Other	6	5	20	-10
Total Respiratory	**444**	**461**	**-4**	**0**
Established Medicines				
Galvus Group	279	320	-13	-8
Diovan Group	268	283	-5	0
Exforge Group	238	264	-10	-5
Zortress/Certican	106	124	-15	-12
Neoral/Sandimmun(e)	96	110	-13	-11
Voltaren/Cataflam	82	95	-14	-11
Other	441	553	-20	-16
Total Established Medicines	**1 510**	**1 749**	**-14**	**-9**
Total Novartis Pharmaceuticals business unit	**5 640**	**5 720**	**-1**	**1**
Total division net sales	**9 188**	**9 326**	**-1**	**1**

[1] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 54.

nm = not meaningful

Innovative Medicines Division net sales by business franchise

First half

	H1 2020 USD m	H1 2019 USD m	% change USD	% change cc[1]
Oncology				
Tasigna	967	902	7	9
Promacta/Revolade	825	656	26	28
Tafinlar + Mekinist	737	637	16	19
Sandostatin	715	795	-10	-8
Jakavi	628	542	16	20
Gleevec/Glivec	617	630	-2	0
Afinitor/Votubia	562	774	-27	-26
Exjade/Jadenu	335	491	-32	-31
Votrient	328	380	-14	-12
Kisqali	320	202	58	64
Lutathera	217	215	1	1
Kymriah	211	103	105	106
Piqray	153	6	nm	nm
Adakveo	36		nm	nm
Other	545	594	-8	-6
Total Novartis Oncology business unit	**7 196**	**6 927**	**4**	**6**
Immunology, Hepatology and Dermatology				
Cosentyx	1 874	1 649	14	15
Ilaris	413	316	31	33
Total Immunology, Hepatology and Dermatology	**2 287**	**1 965**	**16**	**18**
Ophthalmology				
Lucentis	888	1 069	-17	-15
Xiidra	169		nm	nm
Beovu	102		nm	nm
Other	974	1 266	-23	-21
Total Ophthalmology	**2 133**	**2 335**	**-9**	**-7**
Neuroscience				
Gilenya	1 510	1 591	-5	-4
Zolgensma	375	15	nm	nm
Aimovig	69	42	64	72
Mayzent	64	5	nm	nm
Other	27	30	-10	-15
Total Neuroscience	**2 045**	**1 683**	**22**	**23**
Cardiovascular, Renal and Metabolism				
Entresto	1 149	778	48	50
Other	1	12	-92	-98
Total Cardiovascular, Renal and Metabolism	**1 150**	**790**	**46**	**48**
Respiratory				
Xolair	596	571	4	8
Ultibro Group	309	323	-4	-1
Other	10	12	-17	-18
Total Respiratory	**915**	**906**	**1**	**5**
Established Medicines				
Galvus Group	617	635	-3	1
Diovan Group	542	544	0	4
Exforge Group	496	531	-7	-3
Zortress/Certican	233	240	-3	0
Neoral/Sandimmun(e)	197	213	-8	-5
Voltaren/Cataflam	174	208	-16	-15
Other	958	1 129	-15	-12
Total Established Medicines	**3 217**	**3 500**	**-8**	**-5**
Total Novartis Pharmaceuticals business unit	**11 747**	**11 179**	**5**	**8**
Total division net sales	**18 943**	**18 106**	**5**	**7**

[1] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 54.

nm = not meaningful

Net sales of the top 20 Innovative Medicines Division products in 2020

Second quarter

			US		Rest of world			**Total**		
Brands	**Business franchise**	**Key indication**	USD m	% change USD/cc[1]	USD m	% change USD	% change cc[1]	USD m	% change USD	% change cc[1]
Cosentyx	Immunology, Hepatology and Dermatology	Psoriasis, ankylosing spondylitis and psoriatic arthritis and non-radiographic axial spondyloarthritis	614	15	330	2	6	944	10	12
Gilenya	Neuroscience	Relapsing multiple sclerosis	416	-6	322	-16	-13	738	-11	-9
Entresto	Cardiovascular, Renal and Metabolism	Chronic heart failure	308	39	272	36	41	580	38	40
Tasigna	Oncology	Chronic myeloid leukemia	221	8	259	-2	2	480	3	5
Lucentis	Ophthalmology	Age-related macular degeneration			401	-25	-24	401	-25	-24
Promacta/Revolade	Oncology	Immune thrombocytopenia (ITP), severe aplastic anemia (SAA)	212	25	210	17	22	422	21	23
Tafinlar + Mekinist	Oncology	BRAF V600+ metastatic and adjuvant melanoma; advanced non-small cell lung cancer (NSCLC)	147	20	224	3	8	371	9	12
Sandostatin	Oncology	Carcinoid tumors and acromegaly	200	-8	141	-24	-19	341	-15	-13
Jakavi	Oncology	Myelofibrosis (MF), polycytomia vera (PV)			310	9	14	310	9	14
Gleevec/Glivec	Oncology	Chronic myeloid leukemia and GIST	70	-27	218	-4	0	288	-11	-8
Galvus Group	Established Medicines	Diabetes			279	-13	-8	279	-13	-8
Xolair	Respiratory	Severe Allergic Asthma (SAA) and Chronic Spontaneous Urticaria (CSU)			289	0	4	289	0	4
Afinitor/Votubia	Oncology	Breast cancer/TSC	163	-37	103	-27	-24	266	-34	-33
Diovan Group	Established Medicines	Hypertension	34	21	234	-8	-2	268	-5	0
Exforge Group	Established Medicines	Hypertension	2	-50	236	-9	-5	238	-10	-5
Ilaris	Immunology, Hepatology and Dermatology	Auto-inflammatory (CAPS, TRAPS, HIDS/MKD, FMF, SJIA, AOSD and gout)	95	23	105	19	22	200	21	23
Zolgensma	Neuroscience	Spinal muscular atrophy (SMA)	105	nm	100	nm	nm	205	nm	nm
Exjade/Jadenu	Oncology	Chronic iron overload	34	-71	129	-4	-3	163	-36	-35
Votrient	Oncology	Renal cell carcinoma	72	-17	90	-15	-12	162	-16	-14
Kisqali	Oncology	HR+/HER2- metastatic breast cancer	79	36	80	51	63	159	43	49
Top 20 products total			**2 772**	**5**	**4 332**	**-3**	**1**	**7 104**	**0**	**2**
Rest of portfolio			743	8	1 341	-13	-9	2 084	-6	-4
Total division sales			**3 515**	**5**	**5 673**	**-5**	**-1**	**9 188**	**-1**	**1**

[1] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 54.

nm = not meaningful

Net sales of the top 20 Innovative Medicines Division products in 2020

First half

			US		Rest of world			**Total**		
Brands	**Business franchise**	**Key indication**	USD m	% change USD/cc[1]	USD m	% change USD	% change cc[1]	USD m	% change USD	% change cc[1]
Cosentyx	Immunology, Hepatology and Dermatology	Psoriasis, ankylosing spondylitis and psoriatic arthritis and non-radiographic axial spondyloarthritis	1 190	18	684	7	11	1 874	14	15
Gilenya	Neuroscience	Relapsing multiple sclerosis	804	-3	706	-7	-4	1 510	-5	-4
Entresto	Cardiovascular, Renal and Metabolism	Chronic heart failure	601	43	548	53	58	1 149	48	50
Tasigna	Oncology	Chronic myeloid leukemia	424	10	543	5	9	967	7	9
Lucentis	Ophthalmology	Age-related macular degeneration			888	-17	-15	888	-17	-15
Promacta/Revolade	Oncology	Immune thrombocytopenia (ITP), severe aplastic anemia (SAA)	399	25	426	26	30	825	26	28
Tafinlar + Mekinist	Oncology	BRAF V600+ metastatic and adjuvant melanoma; advanced non-small cell lung cancer (NSCLC)	279	21	458	13	17	737	16	19
Sandostatin	Oncology	Carcinoid tumors and acromegaly	413	-5	302	-17	-12	715	-10	-8
Jakavi	Oncology	Myelofibrosis (MF), polycytomia vera (PV)			628	16	20	628	16	20
Gleevec/Glivec	Oncology	Chronic myeloid leukemia and GIST	174	-1	443	-3	1	617	-2	0
Galvus Group	Established Medicines	Diabetes			617	-3	1	617	-3	1
Xolair	Respiratory	Severe Allergic Asthma (SAA) and Chronic Spontaneous Urticaria (CSU)			596	4	8	596	4	8
Afinitor/Votubia	Oncology	Breast cancer/TSC	332	-33	230	-18	-15	562	-27	-26
Diovan Group	Established Medicines	Hypertension	60	33	482	-3	2	542	0	4
Exforge Group	Established Medicines	Hypertension	6	-14	490	-6	-3	496	-7	-3
Ilaris	Immunology, Hepatology and Dermatology	Auto-inflammatory (CAPS, TRAPS, HIDS/MKD, FMF, SJIA, AOSD and gout)	183	29	230	32	36	413	31	33
Zolgensma[2]	Neuroscience	Spinal muscular atrophy (SMA)	231	nm	144	nm	nm	375	nm	nm
Exjade/Jadenu	Oncology	Chronic iron overload	78	-66	257	-1	1	335	-32	-31
Votrient	Oncology	Renal cell carcinoma	136	-21	192	-8	-5	328	-14	-12
Kisqali	Oncology	HR+/HER2- metastatic breast cancer	153	37	167	86	97	320	58	64
Top 20 products total			**5 463**	**9**	**9 031**	**4**	**8**	**14 494**	**6**	**8**
Rest of portfolio			1 594	21	2 855	-7	-4	4 449	1	4
Total division sales			**7 057**	**12**	**11 886**	**1**	**5**	**18 943**	**5**	**7**

[1] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 54.

[2] Includes a reclassification of export sales from the US into rest of the world in the amount of USD 44 million that were in Q1 2020 classified within US net sales. This reclassification has no impact on the reported Q1 2020 total Zolgensma net sales.

nm = not meaningful

Sandoz Division net sales by business franchise

Second quarter

	Q2 2020 USD m	Q2 2019 USD m	% change USD	% change cc[2]
Retail Generics [1]	1 576	1 903	-17	-14
Biopharmaceuticals	466	401	16	19
Anti-Infectives	117	134	-13	-12
Total division net sales	**2 159**	**2 438**	**-11**	**-9**

[1] Of which USD 134 million (2019: USD 186 million) represents Anti-Infectives sold under Sandoz name

[2] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 54.

First half

	H1 2020 USD m	H1 2019 USD m	% change USD	% change cc[2]
Retail Generics [1]	3 545	3 753	-6	-3
Biopharmaceuticals	916	752	22	25
Anti-Infectives	226	259	-13	-11
Total division net sales	**4 687**	**4 764**	**-2**	**1**

[1] Of which USD 356 million (2019: USD 390 million) represents Anti-Infectives sold under Sandoz name

[2] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 54.

The product portfolio of Sandoz is widely spread in 2020 and 2019.

Segmentation – Other revenue

Second quarter

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions)	**Q2 2020**	Q2 2019	**Q2 2020**	Q2 2019	**Q2 2020**	Q2 2019	**Q2 2020**	Q2 2019
Profit sharing income	209	181		1			209	182
Royalty income	24	15	5	4	2	6	31	25
Milestone income	5	47	11				16	47
Other [1]	13	7	6	1		-2	19	6
Total other revenues	**251**	**250**	**22**	**6**	**2**	**4**	**275**	**260**

[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

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions)	**H1 2020**	H1 2019	**H1 2020**	H1 2019	**H1 2020**	H1 2019	**H1 2020**	H1 2019
Profit sharing income	407	350		1			407	351
Royalty income	54	49	13	7	158	13	225	69
Milestone income	25	98	11	23			36	121
Other [1]	21	14	11	3		-2	32	15
Total other revenues	**507**	**511**	**35**	**34**	**158**	**11**	**700**	**556**

[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. Discontinued operations

Discontinued operations included in 2019 the operational results from the Alcon eye care devices business and certain Corporate activities attributable to the Alcon business prior to the spin-off, the gain on distribution of Alcon Inc. to Novartis AG shareholders, and certain other expenses related to the Distribution (refer to Note 3 for further details).

The Alcon eye care devices business researched, discovered, developed, manufactured, distributed and sold a broad range of eye care products. Alcon was organized into two global business franchises, Surgical and Vision Care. Alcon also provided services, training, education and technical support for both the Surgical and Vision Care businesses.

Consolidated income statement

(USD millions)	Q2 2019[1]	H1 2019
Net sales to third parties from discontinued operations		**1 777**
Sales to continuing segments		32
Net sales from discontinued operations		**1 809**
Cost of goods sold		-860
Gross profit from discontinued operations		**949**
Selling, general and administration		-638
Research and development		-142
Other income		15
Other expense		-113
Operating income from discontinued operations		**71**
as % of net sales		*4.0%*
Interest expense		-10
Other financial income and expense		-3
Income before taxes from discontinued operations		**58**
Taxes		-159
Net loss from discontinued operations before gain on distribution of Alcon Inc. to Novartis AG shareholders		**-101**
Gain on distribution of Alcon Inc. to Novartis AG shareholders[2]	4 691	4 691
Net income from discontinued operations[2]	**4 691**	**4 590**

[1] As the Alcon spin-off was completed on April 9, 2019, the Q2 2019 results of operations from the Alcon business were not material.
[2] See Note 3 for further details on the non-taxable non-cash gain on distribution of Alcon Inc. to Novartis AG shareholders recognized on April 8, 2019, date of Distribution.

Supplemental disclosures related to the Alcon business distributed to Novartis AG shareholders

Cash flows used in investing activities from discontinued operations

Cash flows used in investing activities from discontinued operations include the investing activities of the Alcon business in all periods.

(USD millions)	**Q2 2020**	Q2 2019	**H1 2020**	H1 2019
Payments attributable to the spin-off of the Alcon business	-3	-14	-17	-14
Divested cash and cash equivalents		-628		-628
Cash flows attributable to the spin-off of the Alcon business	**-3**	**-642**	**-17**	**-642**
Other cash flows used in investing activities, net	-88	-40	-88	-463
Net cash flows used in investing activities from discontinued operations	**-91**	**-682**	**-105**	**-1 105**

Cash flows from financing activities from discontinued operations

During the first half of 2020, the net cash outflows from financing activities from discontinued operations of USD 26 million (Q2 2020: USD 13 million) was for transaction cost payments directly attributable to the distribution (spin-off) of the Alcon business to Novartis shareholders.

During the first half of 2019, the net cash inflows from financing activities from discontinued operations of USD 3.3 billion (Q2 2019: USD 2.7 billion) included mainly USD 3.5 billion (Q2 2019: USD 3.2 billion) from Alcon borrowings, partly offset by USD 0.2 billion (Q2 2019: USD 0.1 billion) transaction cost payments directly attributable to the distribution (spin-off) of the Alcon business to Novartis shareholders (see Note 3).

Significant transaction closed in 2019

In March 2019, Alcon acquired PowerVision, Inc. (PowerVision), a privately-held, US-based medical device

development company focused on developing accommodative, implantable intraocular lenses. The fair value of the total purchase consideration was USD 424 million. The amount consisted of an initial cash payment of USD 289 million and the net present value of the contingent consideration of USD 135 million, due to PowerVision shareholders, which they are eligible to receive upon the achievement of specified regulatory and commercialization milestones. The purchase price allocation resulted in net identifiable assets of USD 418 million, consisting of intangible assets, of USD 505 million, net deferred tax liabilities of USD 93 million, other net assets of USD 6 million, and goodwill of USD 6 million. The 2019 results of operations since the date of the acquisition were not material.

For additional information related to the distribution (spin-off) of the Alcon business to Novartis AG shareholders, effected through a dividend in kind distribution that was completed on April 8, 2019, refer to Note 3.

11. Events subsequent to the June 30, 2020, consolidated balance sheet date

In July 2020, Novartis paid USD 0.7 billion out of certain legal provisions. For additional information see Note 8.

Supplementary information (unaudited)

Non-IFRS disclosures

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, as well as 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 because, since they exclude items which can vary significantly from year to year, the core measures 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.

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 usefulness to investors.

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

As an internal measure of Group performance, these core measures have limitations, and the Group's performance management process is not solely restricted to these metrics. A limitation of the core 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 exchanges rates:

- The impact of translating the income statements of consolidated entities from their non-USD functional currencies to USD; and
- 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 which 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.

Net debt and free cash flow

Net debt and free cash flow are non-IFRS financial measures, which means they should not be interpreted as measures 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. 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 debt repayment, investment in strategic opportunities and for returning to shareholders. Cash flows in connection with the acquisition or divestment of subsidiaries, associated companies and non-controlling interests in subsidiaries are not taken into account to determine free cash flow. Free cash flow is not intended to be a substitute measure for net cash flows from operating activities as determined under IFRS.

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

Second quarter

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions unless indicated otherwise)	**Q2 2020**	Q2 2019	**Q2 2020**	Q2 2019	**Q2 2020**	Q2 2019	**Q2 2020**	Q2 2019
IFRS operating income from continuing operations	**2 033**	**2 564**	**321**	**282**	**-2**	**-183**	**2 352**	**2 663**
Amortization of intangible assets	**714**	**521**	**70**	**81**			**784**	**602**
Impairments								
Intangible assets	500	-17		2			500	-15
Property, plant and equipment related to the Group-wide rationalization of manufacturing sites		30		5				35
Other property, plant and equipment				6				6
Total impairment charges	**500**	**13**		**13**			**500**	**26**
Acquisition or divestment of businesses and related items								
- Income	-2	-4			-17	-38	-19	-42
- Expense	30	10	11		24	37	65	47
Total acquisition or divestment of businesses and related items, net	**28**	**6**	**11**		**7**	**-1**	**46**	**5**
Other items								
Divestment gains	-8	-598			24	5	16	-593
Financial assets – fair value adjustments	1	-22			-167	-10	-166	-32
Restructuring and related items								
- Income	-5	-15	-2	-1	-2	-1	-9	-17
- Expense	107	151	42	127	21	19	170	297
Legal-related items								
- Income				-31				-31
- Expense		682	7	27			7	709
Additional income	-86	-57		-3	-4	-5	-90	-65
Additional expense	17	61	26	6	16	17	59	84
Total other items	**26**	**202**	**73**	**125**	**-112**	**25**	**-13**	**352**
Total adjustments	**1 268**	**742**	**154**	**219**	**-105**	**24**	**1 317**	**985**
Core operating income from continuing operations	**3 301**	**3 306**	**475**	**501**	**-107**	**-159**	**3 669**	**3 648**
as % of net sales	*35.9%*	*35.4%*	*22.0%*	*20.5%*			*32.3%*	*31.0%*
Income from associated companies	1	1	1	1	181	174	183	176
Core adjustments to income from associated companies, net of tax					89	77	89	77
Interest expense							-220	-205
Other financial income and expense							-27	
Core adjustments to other financial income and expense							7	20
Taxes, adjusted for above items (core taxes)							-593	-620
Core net income from continuing operations							**3 108**	**3 096**
Core net income from discontinued operations [1]								
Core net income							**3 108**	**3 096**
Core net income attributable to shareholders of Novartis AG							**3 108**	**3 095**
Core basic EPS from continuing operations (USD) [2]							**1.36**	**1.34**
Core basic EPS from discontinued operations (USD) [2]								
Core basic EPS (USD) [2]							**1.36**	**1.34**

[1] For details on discontinued operations reconciliation from IFRS to core net income, please refer to page 61.

[2] 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

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions unless indicated otherwise)	**H1 2020**	H1 2019	**H1 2020**	H1 2019	**H1 2020**	H1 2019	**H1 2020**	H1 2019
IFRS operating income from continuing operations	**4 788**	**4 673**	**276**	**555**	**32**	**-323**	**5 096**	**4 905**
Amortization of intangible assets	**1 432**	**978**	**233**	**160**			**1 665**	**1 138**
Impairments								
Intangible assets	509	429	42	12			551	441
Property, plant and equipment related to the Group-wide rationalization of manufacturing sites	10	34	10	8			20	42
Other property, plant and equipment		1	2	6			2	7
Total impairment charges	**519**	**464**	**54**	**26**			**573**	**490**
Acquisition or divestment of businesses and related items								
- Income	-3	-5			-53	-39	-56	-44
- Expense	74	26	22		61	39	157	65
Total acquisition or divestment of businesses and related items, net	**71**	**21**	**22**		**8**		**101**	**21**
Other items								
Divestment gains	-148	-624			22	2	-126	-622
Financial assets – fair value adjustments	25	-8			-152	-12	-127	-20
Restructuring and related items								
- Income	-11	-23	-12	-1	-2	-2	-25	-26
- Expense	218	228	136	179	25	32	379	439
Legal-related items								
- Income				-31				-31
- Expense	87	688	392	72	-26		453	760
Additional income	-90	-253	-1	-4	-140	-6	-231	-263
Additional expense	17	84	48	6	23	21	88	111
Total other items	**98**	**92**	**563**	**221**	**-250**	**35**	**411**	**348**
Total adjustments	**2 120**	**1 555**	**872**	**407**	**-242**	**35**	**2 750**	**1 997**
Core operating income from continuing operations	**6 908**	**6 228**	**1 148**	**962**	**-210**	**-288**	**7 846**	**6 902**
as % of net sales	*36.5%*	*34.4%*	*24.5%*	*20.2%*			*33.2%*	*30.2%*
Income from associated companies	1	1	1	1	304	254	306	256
Core adjustments to income from associated companies, net of tax					274	275	274	275
Interest expense							-459	-431
Other financial income and expense							-34	44
Core adjustments to other financial income and expense							-8	20
Taxes, adjusted for above items (core taxes)							-1 268	-1 159
Core net income from continuing operations							**6 657**	**5 907**
Core net income from discontinued operations [1]								278
Core net income							**6 657**	**6 185**
Core net income attributable to shareholders of Novartis AG							**6 660**	**6 183**
Core basic EPS from continuing operations (USD) [2]							**2.92**	**2.55**
Core basic EPS from discontinued operations (USD) [2]								0.12
Core basic EPS (USD) [2]							**2.92**	**2.67**

[1] For details on discontinued operations reconciliation from IFRS to core net income, please refer to page 62.

[2] 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 2020 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items[3]	Other items[4]	Q2 2020 Core results	Q2 2019 Core results
Gross profit from continuing operations	**8 193**	**773**		**22**	**70**	**9 058**	**9 277**
Operating income from continuing operations	**2 352**	**784**	**500**	**46**	**-13**	**3 669**	**3 648**
Income before taxes from continuing operations	**2 288**	**873**	**500**	**46**	**-6**	**3 701**	**3 716**
Taxes from continuing operations[5]	-421					-593	-620
Net income from continuing operations	**1 867**					**3 108**	**3 096**
Net income from discontinued operations[6]							
Net income	**1 867**					**3 108**	**3 096**
Basic EPS from continuing operations (USD)[7]	**0.82**					**1.36**	**1.34**
Basic EPS from discontinued operations (USD)[7]							
Basic EPS (USD)[7]	**0.82**					**1.36**	**1.34**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-3 429	773		22	70	-2 564	-2 723
The following are adjustments to arrive at core operating income							
Selling, general and administration	-3 368			5	45	-3 318	-3 515
Research and development	-2 441	11	500	3	-83	-2 010	-2 054
Other income	432			-19	-223	190	214
Other expense	-464			35	178	-251	-274
The following are adjustments to arrive at core income before taxes							
Income from associated companies	183	89				272	253
Other financial income and expense	-27				7	-20	20

[1] Amortization of intangible assets: cost of goods sold includes the amortization of acquired rights to in-market products and other production-related intangible assets; research and development includes the amortization of acquired rights for technologies; income from associated companies includes USD 89 million for the Novartis share of the estimated Roche core items

[2] Impairments: research and development includes impairment charges related to intangible assets

[3] Acquisition or divestment of businesses and related items, including restructuring and integration charges: cost of goods sold, selling, general and administration, research and development and other expense include net charges related to acquisitions; other income and other expense include transitional service-fee income and expenses related to the Alcon distribution

[4] Other items: cost of goods sold and other expense include restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, other income and other expense include other restructuring income and charges and related items; selling, general and administration and other expense also include expenses related to COVID-19 donations; selling, general and administration also includes adjustments to provisions; research and development includes adjustments to contingent considerations; other income and other expense include fair value adjustments and divestment gains and losses on financial assets; other expense includes legal-related items; other financial income and expense includes 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 1.4 billion to arrive at the core results before tax amounts to USD 172 million. The average tax rate on the adjustments is 12.2%, since the estimated quarterly core tax charge of 16.0% has been applied to the pre-tax income of the period.

[6] For details on discontinued operations reconciliation from IFRS to core net income please refer to page 61.

[7] 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 2020 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items[3]	Other items[4]	H1 2020 Core results	H1 2019 Core results
Gross profit from continuing operations	**17 179**	**1 640**	**42**	**45**	**36**	**18 942**	**18 049**
Operating income from continuing operations	**5 096**	**1 665**	**573**	**101**	**411**	**7 846**	**6 902**
Income before taxes from continuing operations	**4 909**	**1 939**	**573**	**101**	**403**	**7 925**	**7 066**
Taxes from continuing operations[5]	-869					-1 268	-1 159
Net income from continuing operations	**4 040**					**6 657**	**5 907**
Net income from discontinued operations[6]							278
Net income	**4 040**					**6 657**	**6 185**
Basic EPS from continuing operations (USD)[7]	**1.77**					**2.92**	**2.55**
Basic EPS from discontinued operations (USD)[7]							0.12
Basic EPS (USD)[7]	**1.77**					**2.92**	**2.67**
The following are adjustments to arrive at core gross profit							
Other revenues	700				-136	564	490
Cost of goods sold	-7 151	1 640	42	45	172	-5 252	-5 364
The following are adjustments to arrive at core operating income							
Selling, general and administration	-6 854			14	67	-6 773	-6 835
Research and development	-4 501	25	509	3	-80	-4 044	-4 018
Other income	693			-56	-406	231	334
Other expense	-1 421		22	95	794	-510	-628
The following are adjustments to arrive at core income before taxes							
Income from associated companies	306	274				580	531
Other financial income and expense	-34				-8	-42	64

[1] Amortization of intangible assets: cost of goods sold includes the amortization of acquired rights to in-market products and other production-related intangible assets; research and development includes the amortization of acquired rights for technologies; income from associated companies includes USD 274 million for the Novartis share of the estimated Roche core items

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

[3] Acquisition or divestment of businesses and related items, including restructuring and integration charges: cost of goods sold, selling, general and administration, research and development and other expense include net charges related to acquisitions; other income and other expense include transitional service-fee income and expenses related to the Alcon distribution

[4] Other items: other revenues includes a settlement of royalties; cost of goods sold includes the cumulative amount of the depreciation up to December 31, 2019, recognized with the reclassification of property, plant and equipment out of assets of disposal group held for sale (see Note 3); cost of goods sold, other income and other expense include 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 and other expense also include expenses related to COVID-19 donations; selling, general and administration also includes adjustments to provisions; research and development includes adjustments to contingent considerations; other income and other expense include fair value adjustments and divestment gains and losses on financial assets; other income also includes net gains from the divestment of products; other expense also includes a legal provision and legal-related items; other financial income and expense includes 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 for continuing operations of USD 3.0 billion to arrive at the core results before tax amounts to USD 399 million. The average tax rate on the adjustments is 13.2%, since the estimated full year core tax charge of 16.0% has been applied to the pre-tax income of the period.

[6] For details on discontinued operations reconciliation from IFRS to core net income please refer to page 62.

[7] 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 2020 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items[3]	Other items[4]	Q2 2020 Core results	Q2 2019 Core results
Gross profit	**7 104**	**703**		**11**	**47**	**7 865**	**7 962**
Operating income	**2 033**	**714**	**500**	**28**	**26**	**3 301**	**3 306**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-2 554	703		11	47	-1 793	-1 767
The following are adjustments to arrive at core operating income							
Selling, general and administration	-2 764			5	22	-2 737	-2 848
Research and development	-2 240	11	500	3	-83	-1 809	-1 856
Other income	154			-2	-19	133	163
Other expense	-221			11	59	-151	-115

[1] Amortization of intangible assets: cost of goods sold includes the amortization of acquired rights to in-market 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

[3] Acquisition or divestment of businesses and related items, including restructuring and integration charges: cost of goods sold, selling, general and administration, research and development and other expense include net charges related to acquisitions; other income and other expense include transitional service-fee income and expenses related to the Alcon spin-off

[4] Other items: cost of goods sold and other expense include restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, other income and other expense include other restructuring income and charges and related items; selling, general and administration includes expenses related to COVID-19 donations and adjustments to provisions; research and development includes adjustments to contingent considerations; other income and other expense include fair value adjustments on financial assets; other income also includes net gains from the divestment of financial assets

First half

(USD millions)	H1 2020 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items[3]	Other items[4]	H1 2020 Core results	H1 2019 Core results
Gross profit	**14 779**	**1 407**		**23**	**93**	**16 302**	**15 471**
Operating income	**4 788**	**1 432**	**519**	**71**	**98**	**6 908**	**6 228**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-5 080	1 407		23	93	-3 557	-3 506
The following are adjustments to arrive at core operating income							
Selling, general and administration	-5 621			14	43	-5 564	-5 494
Research and development	-4 106	25	509	3	-80	-3 649	-3 626
Other income	326			-3	-174	149	199
Other expense	-590		10	34	216	-330	-322

[1] Amortization of intangible assets: cost of goods sold includes the amortization of acquired rights to in-market 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 expense includes impairment charges related to property, plant and equipment

[3] Acquisition or divestment of businesses and related items, including restructuring and integration charges: cost of goods sold, selling, general and administration, research and development and other expense include net charges related to acquisitions; other income and other expense include transitional service-fee income and expenses related to the Alcon spin-off

[4] Other items: cost of goods sold and other expense include 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 includes expenses related to COVID-19 donations and adjustments to provisions; research and development includes adjustments to contingent considerations; other income and other expense include fair value adjustments on financial assets; other income also includes net gains from the divestment of products and financial assets; other expense includes legal-related items

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

Second quarter

(USD millions)	Q2 2020 IFRS results	Amortization of intangible assets[1]	Impairments	Acquisition or divestment of businesses and related items[2]	Other items[3]	Q2 2020 Core results	Q2 2019 Core results
Gross profit	**1 066**	**70**		**11**	**23**	**1 170**	**1 289**
Operating income	**321**	**70**		**11**	**73**	**475**	**501**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-1 158	70		11	23	-1 054	-1 192
The following are adjustments to arrive at core operating income							
Selling, general and administration	-496				23	-473	-543
Other income	17				-2	15	12
Other expense	-65				29	-36	-59

[1] Amortization of intangible assets: cost of goods sold includes the amortization of acquired rights to in-market products and other production-related intangible assets
[2] Acquisition or divestment of businesses and related items, including restructuring and integration charges: cost of goods sold includes net charges related to an acquisition
[3] Other items: cost of goods sold and other expense include restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, other income and other expense include restructuring income and charges and related items; selling, general and administration includes expenses related to COVID-19 donations and adjustments to provisions; other expense includes legal-related items

First half

(USD millions)	H1 2020 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items[3]	Other items[4]	H1 2020 Core results	H1 2019 Core results
Gross profit	**2 200**	**233**	**42**	**22**	**79**	**2 576**	**2 531**
Operating income	**276**	**233**	**54**	**22**	**563**	**1 148**	**962**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-2 614	233	42	22	79	-2 238	-2 343
The following are adjustments to arrive at core operating income							
Selling, general and administration	-1 016				24	-992	-1 102
Other income	49				-12	37	49
Other expense	-562		12		472	-78	-124

[1] Amortization of intangible assets: cost of goods sold includes the amortization of acquired rights to in-market products and other production-related intangible assets
[2] Impairments: cost of goods sold includes impairment charges related to intangible assets, other expense includes impairment charges related to property, plant and equipment
[3] Acquisition or divestment of businesses and related items, including restructuring and integration charges: cost of goods sold includes net charges related to an acquisition
[4] Other items: cost of goods sold includes the cumulative amount of the depreciation up to December 31, 2019, recognized with the reclassification of property, plant and equipment out of assets of disposal group held for sale (see Note 3); cost of goods sold, other income and other expense include restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, other income and other expense include other restructuring income and charges and related items; selling, general and administration also includes expenses related to COVID-19 donations and adjustments to provisions; other expense includes a legal provision and legal-related items

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

Second quarter

(USD millions)	Q2 2020 IFRS results	Amortization of intangible assets	Impairments	Acquisition or divestment of businesses and related items[1]	Other items[2]	Q2 2020 Core results	Q2 2019 Core results
Gross profit	**23**					**23**	**26**
Operating loss	**-2**			**7**	**-112**	**-107**	**-159**
The following are adjustments to arrive at core operating income							
Other income	261			-17	-202	42	39
Other expense	-178			24	90	-64	-100

[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 spin-off

[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 expenses related to COVID-19 donations

First half

(USD millions)	H1 2020 IFRS results	Amortization of intangible assets	Impairments	Acquisition or divestment of businesses and related items[1]	Other items[2]	H1 2020 Core results	H1 2019 Core results
Gross profit	**200**				**-136**	**64**	**47**
Operating income/loss	**32**			**8**	**-250**	**-210**	**-288**
The following are adjustments to arrive at core gross profit							
Other revenues	158				-136	22	11
The following are adjustments to arrive at core operating income							
Other income	318			-53	-220	45	86
Other expense	-269			61	106	-102	-182

[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 spin-off

[2] Other items: other revenues includes a settlement of royalties; 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 adjustments to legal provisions and expenses related to COVID-19 donations

CORE RESULTS – Reconciliation from IFRS results to core results – Discontinued operations 2019

Second quarter

(USD millions)	Q2 2019 IFRS results	Amortization of intangible assets	Impairments	Acquisition or divestment of businesses and related items[1]	Other items	Q2 2019 Core results
Net income from discontinued operations before gain on distribution of Alcon Inc. to Novartis AG shareholders[2]						
Gain on distribution of Alcon Inc. to Novartis AG shareholders	4 691			-4 691		
Net income from discontinued operations	**4 691**					
Basic EPS (USD)[3]	**2.03**					

[1] Acquisition or divestment of businesses and related items represents the non-taxable non-cash gain related to the distribution (spin-off) of Alcon Inc. to Novartis AG shareholders
[2] As the Alcon spin-off was completed on April 9, 2019, the Q2 results of operations from the Alcon business were not material.
[3] Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

First half

(USD millions)	H1 2019 IFRS results	Amortization of intangible assets[1]	Impairments	Acquisition or divestment of businesses and related items[2]	Other items[3]	H1 2019 Core results
Gross profit	**949**	**165**			**9**	**1 123**
Operating income of discontinued operations	**71**	**167**			**112**	**350**
Income before taxes of discontinued operations	**58**					**337**
Taxes[4]	-159					-59
Net loss/income from discontinued operations before gain on distribution of Alcon Inc. to Novartis AG shareholders	**-101**					**278**
Gain on distribution of Alcon Inc. to Novartis AG shareholders	4 691			-4 691		
Net income from discontinued operations	**4 590**					**278**
Basic EPS (USD)[5]	**1.98**					**0.12**
The following are adjustments to arrive at core gross profit						
Cost of goods sold	-860	165			9	-686
The following are adjustments to arrive at core operating income						
Selling, general and administration	-638				14	-624
Research and development	-142	2			4	-136
Other income	15				-3	12
Other expense	-113				88	-25

[1] Amortization of intangible assets: cost of goods sold includes amortization of acquired rights to in-market products and other production-related intangible assets; research and development includes the amortization of acquired rights for technologies
[2] Acquisition or divestment of businesses and related items represents the non-taxable non-cash gain related to the distribution of Alcon Inc. (spin-off) to Novartis AG shareholders
[3] Other items: cost of goods sold, selling, general and administration, research and development and other expense include other restructuring charges and related items; research and development also includes amortization of option rights and the fair value adjustment of a contingent consideration liability; other income includes fair value adjustments on a financial asset; other expense also includes legal-related items
[4] 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. Due to these factors and the differing effective tax rates in the various jurisdictions, the tax on the total adjustments, excluding the non-taxable non-cash gain on the distribution (spin-off) of Alcon Inc. to Novartis AG shareholders of USD 279 million to arrive at the core results before tax amounts to USD 100 million. The 2019 core tax rate excluding the effect of the gain on distribution of Alcon Inc. to Novartis AG shareholders is 17.5%.
[5] Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

Income from associated companies

(USD millions)	Q2 2020	Q2 2019	H1 2020	H1 2019
Share of estimated Roche reported results	*225*	206	*455*	412
Prior-year adjustment			*-64*	*-129*
Amortization of additional intangible assets recognized by Novartis on initial accounting for the equity interest	*-41*	*-29*	*-83*	*-69*
Partial release of deferred tax liability recognized				*43*
Net income effect from Roche Holding AG	184	177	308	257
Others	-1	-1	-2	-1
Income from associated companies	**183**	**176**	**306**	**256**

Core income from associated companies

(USD millions)	Q2 2020	Q2 2019	H1 2020	H1 2019
Income from associated companies	**183**	**176**	**306**	**256**
Share of estimated Roche core adjustments	89	77	172	114
Roche prior year adjustment			102	161
Core income from associated companies	**272**	**253**	**580**	**531**

Condensed consolidated changes in net debt

Second quarter

(USD millions)	Q2 2020	Q2 2019
Change in cash and cash equivalents	**1 389**	**3 184**
Change in marketable securities, commodities, financial debts and financial derivatives	1 857	471
Reduction in net debt	**3 246**	**3 655**
Net debt at April 1	-29 783	-21 541
Net debt at June 30	**-26 537**	**-17 886**

First half

(USD millions)	H1 2020	H1 2019
Change in cash and cash equivalents	**-5 195**	**-3 280**
Change in marketable securities, commodities, financial debts and financial derivatives	-5 404	1 578
Increase in net debt	**-10 599**	**-1 702**
Net debt at January 1	-15 938	-16 184
Net debt at June 30	**-26 537**	**-17 886**

Components of net debt

(USD millions)	Jun 30, 2020	Jun 30, 2019
Non-current financial debts	-23 955	-20 364
Current financial debts and derivative financial instruments	-8 875	-7 857
Total financial debt	**-32 830**	**-28 221**
Less liquidity:		
Cash and cash equivalents	5 917	9 991
Marketable securities, commodities, time deposits and derivative financial instruments	376	344
Total liquidity	**6 293**	**10 335**
Net debt at June 30	**-26 537**	**-17 886**

Share information

	Jun 30, 2020	Jun 30, 2019
Number of shares outstanding	**2 288 979 612**	2 291 765 401
Registered share price (CHF)	**82.42**	89.20
ADR price (USD)	**87.34**	91.31
Market capitalization (USD billions) [1]	**198.1**	209.7
Market capitalization (CHF billions) [1]	**188.7**	204.4

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

Free cash flow

Second quarter

(USD millions)	**Q2 2020**	Q2 2019
Operating income from continuing operations	**2 352**	**2 663**
Adjustments for non-cash items		
Depreciation, amortization and impairments	1 537	1 014
Change in provisions and other non-current liabilities	118	958
Other	205	-441
Operating income adjusted for non-cash items	**4 212**	**4 194**
Dividends received from associated companies and others	2	3
Interest and other financial receipts	57	65
Interest and other financial payments	-237	-211
Taxes paid	-303	-560
Payments out of provisions and other net cash movements in non-current liabilities	-420	-323
Change in inventory and trade receivables less trade payables	354	-609
Change in other net current assets and other operating cash flow items	296	552
Net cash flows from operating activities from continuing operations	**3 961**	**3 111**
Purchases of property, plant and equipment	-238	-279
Proceeds from sale of property, plant and equipment	1	648
Purchases of intangible assets	-214	-161
Proceeds from sale of intangible assets	49	210
Purchases of financial assets	-38	-45
Proceeds from sale of financial assets	117	142
Purchases of other non-current assets	-7	-14
Free cash flow from continuing operations	**3 631**	**3 612**
Total free cash flow	**3 631**	**3 612**

Free cash flow

First half

(USD millions)	**H1 2020**	H1 2019
Operating income from continuing operations	**5 096**	**4 905**
Adjustments for non-cash items		
Depreciation, amortization and impairments	2 986	2 467
Change in provisions and other non-current liabilities	838	1 018
Other	322	-312
Operating income adjusted for non-cash items	**9 242**	**8 078**
Dividends received from associated companies and others	489	463
Interest and other financial receipts	298	150
Interest and other financial payments	-340	-422
Taxes paid	-899	-960
Payments out of provisions and other net cash movements in non-current liabilities	-824	-516
Change in inventory and trade receivables less trade payables	-1 064	-1 306
Change in other net current assets and other operating cash flow items	-413	-42
Net cash flows from operating activities from continuing operations	**6 489**	**5 445**
Purchases of property, plant and equipment	-475	-561
Proceeds from sale of property, plant and equipment	4	812
Purchases of intangible assets	-460	-498
Proceeds from sale of intangible assets	105	281
Purchases of financial assets	-90	-154
Proceeds from sale of financial assets [1]	127	177
Purchases of other non-current assets	-48	-24
Proceeds from sale of other non-current assets	0	3
Free cash flow from continuing operations	**5 652**	**5 481**
Free cash flow from discontinued operations [2]		-62
Total free cash flow	**5 652**	**5 419**

[1] For the first half of 2020 free cash flow, proceeds from the sales of financial assets excludes the cash inflows from the sale of a portion of the Alcon Inc. shares recognized by certain consolidated foundations through the Alcon spin-off, which amounted to USD 232 million (H1 2019: nil). See Note 3.

[2] In the first half of 2019, the free cash flow from discontinued operation was a cash outflow of USD 62 million consisting of USD 78 million net cash inflows from operating activities from discontinued operations, USD 1.1 billion net cash flows used in investing activities from discontinued operations adjusted by USD 283 million of net cash outflows for acquisitions and divestments of businesses, by USD 642 million of cash outflows attributable to the spin-off of the Alcon business and by USD 40 million of other net investing cash outflows.

Effects of currency fluctuations

Principal currency translation rates

(USD per unit)	**Average rates Q2 2020**	Average rates Q2 2019	**Average rates H1 2020**	Average rates H1 2019	**Period-end rates Jun 30, 2020**	Period-end rates Jun 30, 2019
1 CHF	1.037	0.998	1.035	1.000	1.050	1.026
1 CNY	0.141	0.147	0.142	0.147	0.141	0.146
1 EUR	1.101	1.124	1.101	1.130	1.121	1.138
1 GBP	1.241	1.285	1.260	1.294	1.228	1.268
100 JPY	0.930	0.910	0.924	0.909	0.929	0.929
100 RUB	1.382	1.548	1.444	1.533	1.424	1.583

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 2020	**Change in constant currencies % Q2 2020**	**Percentage point currency impact Q2 2020**	Change in USD % Q2 2019	Change in constant currencies % Q2 2019	Percentage point currency impact Q2 2019
Total Group – Continuing operations						
Net sales to third parties	-4	-1	-3	4	8	-4
Operating income	-12	-4	-8	10	17	-7
Net income	-11	-4	-7	-73	-71	-2
Basic earnings per share (USD)	-10	-3	-7	-73	-71	-2
Core operating income	1	6	-5	14	20	-6
Core net income	0	5	-5	13	19	-6
Core basic earnings per share (USD)	1	6	-5	14	20	-6
Innovative Medicines						
Net sales to third parties	-1	1	-2	5	9	-4
Operating income	-21	-15	-6	14	22	-8
Core operating income	0	5	-5	16	22	-6
Sandoz						
Net sales to third parties	-11	-9	-2	-1	3	-4
Operating income	14	25	-11	-14	-7	-7
Core operating income	-5	1	-6	4	10	-6
Corporate						
Operating loss	nm	nm	nm	-23	-28	5
Core operating loss	33	34	-1	-25	-28	3

nm = not meaningful

Currency impact on key figures

First half

	Change in USD % H1 2020	Change in constant currencies % H1 2020	Percentage point currency impact H1 2020	Change in USD % H1 2019	Change in constant currencies % H1 2019	Percentage point currency impact H1 2019
Total Group – Continuing operations						
Net sales to third parties	3	6	-3	3	8	-5
Operating income	4	11	-7	2	11	-9
Net income	2	9	-7	-59	-56	-3
Basic earnings per share (USD)	3	11	-8	-59	-55	-4
Core operating income	14	19	-5	12	19	-7
Core net income	13	18	-5	9	16	-7
Core basic earnings per share (USD)	15	19	-4	9	17	-8
Innovative Medicines						
Net sales to third parties	5	7	-2	5	10	-5
Operating income	2	9	-7	7	15	-8
Core operating income	11	16	-5	14	21	-7
Sandoz						
Net sales to third parties	-2	1	-3	-4	1	-5
Operating income	-50	-40	-10	-25	-17	-8
Core operating income	19	26	-7	-2	6	-8
Corporate						
Operating loss/income	nm	nm	nm	0	-4	4
Core operating loss	27	28	-1	-4	-8	4

nm = not meaningful

Disclaimer

This press release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995, that can generally be identified by words such as “continue,” “growth,” “expected,” “to grow,” “demonstrating,” “to advance,” “to support,” “increasing,” “to deliver,” “to drive,” “to evolve,” “remain,” “taking,” “to take,” “to help,” “trends,” “continuing,” “allowing,” “to start,” “ evaluating,” “will,” “until,” “to build,” “evolve,” “launch,” “continued,” “continues,” “to progress,” “may,” “retaining,” “remains,” “believe,” “including,” “can,” “to create,” “to find,” “estimated,” “impact,” “ongoing,” “submissions,” “focus,” “launches,” “launch investments,” “innovation,” “potential,” “guidance,” “commitment,” “pipeline,” “aims,” “momentum,” “could,” “would,” “launched,” “on track,” “growing,” “progressing,” “expanding,” “pending,” “strongly,” “priority,” “filings,” “outlook,” “unforeseen,” “forecast,” “prevail,” “enter,” “to improve,” “transformative,” “innovative,” “inventive,” “manageable disruptions,” “expect,” “planned,” “working,” “monitoring,” “anticipated,” “continuously,” “on track,” 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 on sales and on our performance; or regarding the impact of the COVID-19 pandemic on clinical trials, and research and development timelines; or regarding potential future, pending or announced transactions; regarding potential future sales or earnings of the Group or any of its divisions; or by discussions of strategy, plans, expectations or intentions; or regarding the Group’s liquidity or cash flow positions and its ability to meet its ongoing financial obligations and operational needs; or regarding efforts to provide a not-for-profit portfolio of medicines for symptomatic treatment of COVID-19. 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 ophthalmology, in the second half of 2020; 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 that commenced in prior years and is expected to continue this year; safety, quality, data integrity, or manufacturing issues; uncertainties involved in the development or adoption of potentially transformational technologies and business models; uncertainties regarding actual or potential legal proceedings, investigations or disputes; our performance on environmental, social and governance measures; general political, economic and business conditions, including the effects of and efforts to mitigate pandemic diseases such as COVID-19; uncertainties regarding future global exchange rates; uncertainties regarding future demand for our products; and other risks and factors referred to in Novartis AG’s current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements as a result of new information, future events or otherwise.

About Novartis

Novartis is reimagining medicine to improve and extend people's lives. 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 110,000 people of more than 145 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 01, 2020	ESG investor day
October 27, 2020	Third quarter results 2020
November 24, 2020	Capital Markets day