

Novartis International AG

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CONDENSED INTERIM FINANCIAL REPORT – SUPPLEMENTARY DATA

Novartis Q3 and 9M 2019 Condensed Interim Financial Report - Supplementary Data

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Novartis Q3 and 9M 2019 Condensed Interim Financial Report - Supplementary Data

Key figures ¹	-	Q3 2018	% ch USD	ange	9M 2019		% ch	
Net sales to third parties from continuing	USD m	USD m			USD m	USD m		CC ²
operations	12 172	11 016	10	13	35 042	33 270	5	9
Divisional operating income from continuing operations	2 595	2 542	2	5	7 823	7 666	2	9
Corporate income and expense, from continuing operations, net	- 237	- 303	22	21	- 560	- 625	10	8
Operating income from continuing	2 358	2 239	5	9	7 263	7 041	3	10
operations			3	9			3	10
As % of net sales	19.4	20.3			20.7	21.2		
Income from associated companies	253	213	19	19	509	6 297	nm	nm
Interest expense	- 216	- 229	6	5	- 647	- 684	5	4
Other financial income and expense	12	28	- 57	- 33	56	108	- 48	- 37
Taxes	- 366	- 369	1	- 3	-1 163	-1 182	2	- 5
Net income from continuing operations	2 041	1 882	8	12	6 018	11 580	- 48	- 45
Net loss from discontinued operations before gain on distribution of Alcon Inc. to Novartis AG shareholders		- 258	nm	nm	- 101	- 160	nm	nm
Gain on distribution of Alcon Inc. To Novartis AG shareholders					4 691		nm	nm
Net income	2 041	1 624	26	30	10 608	11 420	- 7	- 3
Basic earnings per share from continuing operations (USD)	0.90	0.81	11	14	2.62	4.99	- 47	-44
Basic earnings per share from discontinued operations (USD)		-0.11	nm	nm	2.00	-0.07	nm	nm
Basic earnings per share (USD)	0.90	0.70	29	32	4.62	4.92	- 6	-2
Cash flows from operating activities from continuing operations	4 562	3 720	23		10 007	9 613	4	
Free cash flow from continuing operations ²	3 968	3 156	26		9 449	8 343	13	
Core ² Core operating income from continuing operations	3 748	3 258	15	18	10 650	9 445	13	18
As % of net sales	30.8	29.6			30.4	28.4		
Core net income from continuing operations	3 212	2 820	14	17	9 119	8 239	11	16
Core net income from discontinued operations		244	nm	nm	278	818	nm	nm
Core net income	3 212	3 064	5	7	9 397	9 057	4	9
Core basic earnings per share from continuing operations (USD)	1.41	1.22	16	19	3.97	3.55	12	17
Core basic earnings per share from discontinued operations (USD)		0.10	nm	nm	0.12	0.35	nm	nm
Core basic earnings per share (USD)	1.41	1.32	7	9	4.09	3.90	5	10
nm = not meaningful					-			

nm = not meaningful

Financials

In order to comply with International Financial Reporting Standards (IFRS), Novartis has separated the Group's reported financial data for the current and prior years into "continuing" and "discontinued" operations. The results of the Alcon business are reported as discontinued operations. See page 44 and Notes 2, 3 and 11 for a full explanation.

Novartis continues to expect the previously-announced divestment of the Sandoz US oral solids and dermatology portfolio to be completed in the coming months, pending regulatory approval. Novartis remains fully committed to this business until it is divested to Aurobindo. The results of this business are included in continuing operations.

The commentary below focuses on continuing operations including the businesses of Innovative Medicines and Sandoz (including the US generic oral solids and dermatology portfolio), as well as the continuing Corporate functions. We also provide information on discontinued operations.

¹ Continuing operations include the businesses of Innovative Medicines and Sandoz divisions and Corporate activities and discontinued operations include the business of Alcon. See page 44 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 56. Unless otherwise noted, all growth rates in this release refer to

same period in prior year

Continuing operations third quarter

Net sales

Net sales were USD 12.2 billion (+10%, +13% cc) in the third quarter driven by volume growth of 16 percentage points (cc), mainly from *Cosentyx*, *Entresto*, *Zolgensma* and the *Xiidra* acquisition. Strong volume growth was partly offset by the negative impacts of pricing (-2 percentage points cc) and generic competition (-1 percentage point cc).

Corporate income and expense, net

Corporate income and expense, which includes the cost of Group headquarters and coordination functions, amounted to an expense of USD 237 million in the third quarter compared to USD 303 million in prior year, mainly on account of lower impairment charges from the Novartis Venture Fund financial assets.

Operating income

Operating income was USD 2.4 billion (+5%, +9% cc) mainly driven by higher sales and productivity, partly offset by growth investments, lower divestments and higher amortization. Operating income margin was 19.4% of net sales, decreasing by 0.9 percentage points (-0.7 percentage points cc). Core adjustments amounted to USD 1.4 billion (2018: USD 1.0 billion).

Core operating income was USD 3.7 billion (+15%, +18% cc) mainly driven by higher sales and productivity programs, partly offset by growth investments. Core operating income margin was 30.8% of net sales, increasing by 1.2 percentage points (+1.4 percentage points cc).

Income from associated companies

Income from associated companies increased to USD 253 million from USD 213 million in prior year due to a higher estimated income from Roche Holding AG.

Core income from associated companies increased to USD 313 million from USD 293 million in prior year due to a higher estimated core income contribution from Roche Holding AG.

Interest expense and other financial income/expense

Interest expense decreased to USD 216 million from USD 229 million in prior year, as the decrease in interest expense due to lower outstanding debts more than offset the additional interest expense on lease liabilities of USD 18 million, following the implementation of IFRS 16 Leases as of January 1, 2019.

Other financial income and expense amounted to an income of USD 12 million in the quarter compared to an income of USD 28 million in prior year, mainly due to lower interest income and higher currency losses.

Taxes

The tax rate in the third quarter was 15.2% compared to 16.4% in prior year. The decrease from prior year was mainly the result of a change in profit mix.

The core tax rate for continuing operations was 16.4% compared to 15.8% in prior year, mainly as a result of a change in profit mix.

Net income and EPS

Net income was USD 2.0 billion (+8%, +12% cc) driven by higher operating income and higher income from associated companies. EPS was USD 0.90 (+11%, +14% cc), growing faster than net income driven by lower weighted average number of shares outstanding.

Core net income was USD 3.2 billion (+14%, +17% cc) driven by growth in core operating income. Core EPS was USD 1.41 (+16%, +19% cc) growing faster than core net income driven by lower weighted average number of shares outstanding.

Free cash flow from continuing operations amounted to USD 4.0 billion (+26% USD) compared to USD 3.2 billion in prior year, mainly driven by higher net cash flows from operating activities.

Continuing operations nine months

Net sales

Net sales were USD 35.0 billion (+5%, +9% cc) in the first nine months driven by volume growth of 12 percentage points (cc), mainly from *Cosentyx*, *Entresto* and *Lutathera*. Strong volume growth was partly offset by the negative impacts of pricing (-2 percentage points cc) and generic competition (-1 percentage point cc).

Corporate income and expense, net

Corporate income and expense, which includes the cost of Group headquarters and coordination functions, amounted to an expense of USD 560 million in the nine months compared to USD 625 million in prior year mainly driven by lower impairment charges from the Novartis Venture Fund financial assets.

Operating income

Operating income was USD 7.3 billion (+3%, +10% cc) mainly driven by higher sales, improved gross margin and productivity programs, partly offset by growth investments, legal provisions and higher restructuring charges. Operating income margin was 20.7% of net sales, decreasing by 0.5 percentage points (+0.2 percentage points cc). Core adjustments amounted to USD 3.4 billion (2018: USD 2.4 billion).

Core operating income was USD 10.7 billion (13%, +18% cc) mainly driven by higher sales, improved gross margin and productivity programs, partly offset by growth investments. Core operating income margin was 30.4% of net sales, increasing by 2.0 percentage points (+2.4 percentage points cc).

Income from associated companies

Income from associated companies amounted to USD 509 million in the first nine months of 2019 compared to USD 6.3 billion in prior year. This decrease is mainly due to the pre-tax gain of USD 5.8 billion recognized on the divestment of the 36.5% stake in the GSK consumer healthcare joint venture in 2018.

The share of income from Roche was USD 510 million compared to USD 384 million in prior year. The estimated income for Roche Holding AG, net of amortization, was USD 596 million compared to USD 509 million in prior year and was partly offset by the negative prior year true up of USD 129 million in the first quarter of 2019, compared to a negative prior year true up of USD 125 million recognized in the first quarter of 2018. In addition, a USD 43 million income from revaluation of deferred tax liability, recognized upon initial accounting of 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 nine months decreased to USD 844 million compared to USD 899 million in prior year due to the discontinuation of core income from the GSK consumer healthcare joint venture.

The core income contribution from Roche Holding AG increased to USD 845 million from USD 756 million in prior year. The increase is due to the recognition of a favorable prior year core income true up of USD 32 million compared to a favorable true up of USD 8 million in the first quarter of 2018, and to a higher estimated core income contribution from Roche for the current period.

Interest expense and other financial income/expense

Interest expense decreased to USD 647 million from USD 684 million in prior year, as the decrease in interest expense due to lower outstanding debts more than offset the additional interest expense on lease liabilities of USD 50 million, following the implementation of IFRS 16 Leases as of January 1, 2019.

Other financial income and expense amounted to an income of USD 56 million compared to USD 108 million in prior year, as higher currency losses were partly offset by higher interest income.

Taxes

The tax rate in the first nine months was 16.2% compared to 9.3% in prior year. In February 2019, the Swiss canton Basel-Stadt enacted a tax rate reduction effective January 1, 2019. In May 2019, Swiss federal tax reform was enacted, which eliminated certain tax privileges, effective January 1, 2020. This required a revaluation of certain deferred tax assets and liabilities to the newly enacted tax rates. The impact of this revaluation was offset by the impact of a change to uncertain tax positions. The prior year tax rate was significantly impacted by the divestment of the 36.5% stake in the GSK consumer healthcare joint venture.

Excluding the impacts of Swiss canton Basel-Stadt tax rate reduction, the Swiss federal tax reform and the changes to uncertain tax positions in the first half and the GSK consumer healthcare joint venture divestment in prior year, the tax rate in the first nine months would have been 15.4% compared to 16.2% in prior year. The decrease from prior year was mainly the result of a change in profit mix.

The core tax rate was 16.4% compared to 15.7% in prior year, mainly as a result of a change in profit mix.

Net income and EPS

Net income was USD 6.0 billion (-48%, -45% cc) as prior year benefited from a USD 5.7 billion net gain recognized from the sale of our stake in the GSK consumer healthcare joint venture. EPS was USD 2.62 (-47%, -44% cc) benefitting from lower weighted average number of shares outstanding.

Core net income was USD 9.1 billion (+11%, +16% cc) driven by growth in core operating income partly offset by the discontinuation of core income from the GSK consumer healthcare joint venture. Core EPS was USD 3.97 (+12%, +17% cc) growing faster than core net income driven by lower weighted average number of shares outstanding.

Free cash flow from continuing operations amounted to USD 9.4 billion (+13% USD) compared to USD 8.3 billion in prior year. The increase is mainly driven by higher operating income adjusted for non-cash items and higher real estate divestment proceeds, partly offset by higher working capital, which in prior year included the receipt of a GSK sales milestone from the divested Vaccines business of USD 0.4 billion, and lower dividends received from associated companies, as prior year included the GSK consumer healthcare joint venture which was divested in Q2 2018.

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, there were no operating results in the third quarter of 2019.

Discontinued operations net sales in the first nine months of 2019 were USD 1.8 billion compared to USD 5.4 billion in 2018 and operating income amounted to USD 71 million compared to an operating loss of USD 171 million in 2018. Net income from discontinued operations in the first nine months of 2019 amounted to USD 4.6 billion compared to a net loss of USD 160 million in 2018 driven by 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 3 "Significant transactions — Completion of the spin-off of the Alcon business through a dividend in kind distribution to Novartis AG shareholders".

Total Group third quarter

For the total Group, net income amounted to USD 2.0 billion compared to USD 1.6 billion in prior year, and basic earnings per share was USD 0.90 compared to USD 0.70 in prior year. Cash flow from operating activities for the total Group amounted to USD 4.6 billion and free cash flow to USD 4.0 billion.

Total Group nine months

For the total Group, net income amounted to USD 10.6 billion compared to USD 11.4 billion in prior year, and basic earnings per share was USD 4.62 compared to USD 4.92 in prior year. Cash flow from operating activities for the total Group amounted to USD 10.1 billion and free cash flow to USD 9.4 billion.

Innovative Medicines

	Q3 2019	Q3 2018	% cha	nge	9M 2019	9M 2018	% cha	nge
	USD m	USD m	USD	CC	USD m	USD m	USD	CC
Net sales	9 688	8 596	13	15	27 794	25 870	7	11
Operating income	2 404	2 184	10	13	7 077	6 571	8	14
As % of net sales	24.8	25.4			25.5	25.4		
Core operating income	3 300	2 897	14	16	9 528	8 382	14	19
As % of net sales	34.1	33.7			34.3	32.4		

Third quarter

Net sales

Net sales were USD 9.7 billion (+13%, +15% cc) in the third quarter. Pharmaceuticals BU sales grew 13% (+15% cc), driven by continuing momentum on *Cosentyx* and *Entresto* and the benefit from the first full quarter of sales from *Zolgensma* and *Xiidra*. Oncology BU grew 12% (+14% cc) driven by continuing momentum on *Promacta/Revolade, Tafinlar + Mekinist* and *Kisqali* and the benefit from launches including *Lutathera, Kymriah* and *Piqray*. Volume contributed 17 percentage points to sales growth. Generic competition had a negative impact of 1 percentage point. Net pricing had a negative impact of 1 percentage point.

Regionally, US sales (USD 3.7 billion, +24%) delivered a strong performance driven by *Zolgensma*, *Cosentyx*, *Xiidra*, *Entresto* and *Lutathera*. Europe sales (USD 3.2 billion, +6%, +10% cc) benefited from continued strong performance of *Entresto*, *Tafinlar* + *Mekinist*, *Xolair* and *Kymriah*. Japan sales were USD 0.6 billion (+8%, +4% cc). Emerging Growth Markets sales grew (+10%, +13% cc), led by strong double-digit growth in China.

Pharmaceuticals BU sales were USD 6.0 billion (+13%, +15% cc). Cosentyx (USD 937 million, +25%, +27% cc) grew double-digit across all indications. Entresto (USD 430 million, +59%, +61% cc) continued to deliver strong double-digit performance, benefiting from the PIONEER data on hospital initiation and higher demand in ambulatory settings. Zolgensma (USD 160 million) had a strong launch. Lucentis continued to grow (USD 500 million, +2%, +5% cc) while Xolair (USD 299 million, +17%, +22% cc) continued double-digit growth. Gilenya (USD 829 million, +1%, +3% cc) was broadly in line with prior year.

Oncology BU sales were USD 3.7 billion (+12%, +14% cc). Growth was mainly driven by *Promacta/Revolade* (USD 380 million, +29%, +31% cc), *Lutathera* (USD 119 million, +113%, +116% cc), *Kymriah* (USD 79 million, +295%, +295% cc), *Tafinlar + Mekinist* (USD 345 million, +19%, +22% cc), *Kisqali* (USD 123 million, +71%, +76% cc) and *Pigray* (USD 43 million) had a strong launch.

Operating income

Operating income was USD 2.4 billion (+10%, +13% cc) mainly driven by continued strong sales growth and productivity, partly offset by growth investments and lower divestment gains. Operating income margin was 24.8% of net sales decreasing 0.6 percentage points (-0.5 percentage points in cc).

Core adjustments were USD 0.9 billion, including USD 0.7 billion for amortization of intangible assets. Prior year core adjustments were USD 0.7 billion. Core adjustments increased compared to prior year mainly due to prior year divestment gains.

Core operating income was USD 3.3 billion (+14%, +16% cc) mainly driven by higher sales and productivity, partly offset by growth investments. Core operating income margin was 34.1% of net sales, increasing 0.4 percentage points (+0.4 percentage points cc). Core gross margin decreased by 0.3 percentage points (cc) as productivity improvements were more than offset by the ramp up of capacity for cell & gene therapy. Core R&D expenses as a percentage of net sales were in line with prior year. Core SG&A expenses declined by 0.7 percentage points (cc) mainly driven by productivity and sales leverage. Core Other Income and Expense did not have a material impact on margin.

Nine Months

Net sales

Net sales were USD 27.8 billion (+7%, +11% cc) in the first nine months. Pharmaceuticals BU grew 8% (+12% cc) driven by *Cosentyx* reaching USD 2.6 billion and *Entresto* USD 1.2 billion. Oncology BU grew 7% (+11% cc) driven by AAA including *Lutathera*, as well as *Promacta/Revolade*, *Tafinlar* + *Mekinist* and *Kisqali*. Volume contributed 13 percentage points to sales growth. Generic competition had a negative impact of 1 percentage point. Net pricing had a negative impact of 1 percentage point.

Regionally, US sales (USD 10.1 billion, +16%) delivered a strong performance driven by *Cosentyx, Entresto* and *Lutathera*. Europe sales (USD 9.5 billion, +3%, +10% cc) benefited from continued strong performance of *Entresto, Tafinlar + Mekinist, Jakavi, Cosentyx* and *Lucentis*. Japan sales were USD 1.8 billion (+3%, +2% cc). Emerging Growth Markets sales grew (+4%, +12% cc), led by double-digit growth in China.

Operating income

Operating income was USD 7.1 billion (+8%, +14% cc), mainly driven by continued strong sales growth and productivity, partly offset by growth investments and legal provisions. Operating income margin was 25.5% of net sales, increasing 0.1 percentage points (+0.7 percentage points cc).

Core adjustments were USD 2.5 billion, mainly due to USD 1.7 billion of amortization. Core adjustments increased compared to prior year mainly driven by higher legal provisions.

Core operating income was USD 9.5 billion (+14%, +19% cc) mainly driven by higher sales and productivity, partly offset by higher growth investments. Core operating income margin was 34.3% of net sales, increasing 1.9 percentage points (+2.2 percentage points cc). Core gross margin increased by 0.3 percentage points (cc), mainly driven by productivity. Core R&D expenses decreased by 1.0 percentage points (cc) mainly driven by sales leverage, productivity and portfolio prioritization. Core SG&A expenses declined by 0.6 percentage points (cc) mainly driven by sales leverage and productivity. Core Other Income and Expense, net increased the margin by 0.3 percentage points (cc).

ONCOLOGY BUSINESS UNIT

	Q3 2019	Q3 2018	% cha	ange	9M 2019	9M 2018	% cha	ange
	USD m	USD m	USD	CC	USD m	USD m	USD	CC
Tasigna	487	444	10	11	1 389	1 398	-1	2
Sandostatin	388	389	0	1	1 183	1 188	0	2
Afinitor/Votubia	400	374	7	8	1 174	1 157	1	4
Promacta/Revolade	380	295	29	31	1 036	844	23	26
Tafinlar + Mekinist ¹	345	291	19	22	982	842	17	22
Gleevec/Glivec	320	380	-16	-14	950	1 188	-20	-17
Jakavi	279	248	13	17	821	721	14	21
Exjade/Jadenu	253	263	-4	-2	744	813	-8	-6
Votrient	198	197	1	2	578	630	-8	-5
Lutathera	119	56	113	116	334	86	nm	nm
Kisqali	123	72	71	76	325	175	86	92
Kymriah	79	20	nm	nm	182	48	nm	nm
Piqray	43		nm	nm	49		nm	nm
Other	301	276	9	11	895	839	7	10
Total Oncology business unit	3 715	3 305	12	14	10 642	9 929	7	11

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

Tasigna (USD 487 million, +10%, +11% cc) grew in the US and EGM, partially offset by a decline in Europe.

Sandostatin (USD 388 million, 0%, +1% cc) sales were broadly in line with prior year, as growth in the US was offset by competitive pressure, mainly in EGM and Japan.

Afinitor/Votubia (USD 400 million, +7%, +8% cc) showed solid growth in the US, partially offset by first generic competition in Europe. In the US, the Abbreviated New Drug Application (ANDA) challenges to the compound patent, and the ANDA and IPR challenges to the renal cell carcinoma use patent, have been resolved and the patents upheld. Novartis has resolved patent litigation with certain generic manufacturers which may result in limited generic competition for *Afinitor* toward the end of 2019, and additional generic competition starting in mid-2020.

Promacta/Revolade (USD 380 million, +29%, +31% cc) continued to grow at a strong double-digit rate across all regions driven by increased use in chronic immune thrombocytopenia (ITP) and further uptake as first-line treatment for severe aplastic anemia (SAA) in the US and Japan.

Tafinlar + Mekinist (USD 345 million, +19%, +22% cc) continued strong double-digit growth due to demand in metastatic and adjuvant melanoma as well as NSCLC, with ongoing uptake of the adjuvant melanoma indication in Europe.

Gleevec/Glivec (USD 320 million, -16%, -14% cc) continued to decline due to generic competition in most major markets.

Jakavi (USD 279 million, +13%, +17% cc) continued double-digit growth across all regions driven by demand in the myelofibrosis and polycythemia vera indications.

Exjade/Jadenu (USD 253 million, -4%, -2% cc) declined mainly due to pressure from generic competition in the US and in other regions.

Votrient (USD 198 million, +1%, +2% cc) sales were broadly in line with prior year.

Lutathera (USD 119 million, +113%, +116% cc) continued to grow led by the US, with over 160 centers actively treating patients, and ongoing launches in Europe. Sales from all AAA brands (including *Lutathera* and radiopharmaceutical diagnostic products) were USD 177 million.

Kisqali (USD 123 million, +71%, +76% cc) showed strong growth in the US driven by use in metastatic breast cancer patients, independent of menopausal status or combination partner, with solid uptake continuing in Europe and other regions.

Kymriah (USD 79 million) strong demand continued and sales increased primarily driven by ongoing uptake in the US and Europe. There are over 160 qualified treatment centers and more than 20 countries worldwide that have coverage for at least one indication. Reimbursement for DLBCL was received in Scotland and for both pediatric ALL and DLBCL in Italy.

Piqray (USD 43 million) US launch progressed well. *Piqray* is the first and only treatment for patients with a PIK3CA mutation in HR+/HER2- advanced breast cancer.

PHARMACEUTICAL BUSINESS UNIT

OPHTHALMOLOGY

	Q3 2019	Q3 2018	% cha	ange	9M 2019	9M 2018	% cha	ange
	USD m	USD m	USD	CC	USD m	USD m	USD	CC
Lucentis	500	491	2	5	1 569	1 526	3	8
Travoprost Group	109	128	-15	-13	330	386	-15	-12
Xiidra	102		nm	nm	102		nm	nm
Other	503	475	6	7	1 548	1 519	2	5
Total Ophthalmology	1 214	1 094	11	13	3 549	3 431	3	8

nm = not meaningful

Lucentis (USD 500 million, +2%, +5% cc) grew driven by strong market growth.

Travoprost Group (USD 109 million, -15%, -13% cc) declined mainly due to increased competition in the US and generic competition in Europe.

Xiidra (USD 102 million) (lifitegrast) is a prescription eye drop solution approved to treat the signs and symptoms of dry eye disease. It is dosed twice per day, approximately 12 hours apart, in each eye. *Xiidra* is approved in multiple markets including the US, Canada and Australia. It is under regulatory review in a number of additional markets. Novartis acquired *Xiidra* from Takeda and began recording sales as of July 1, 2019. The integration is ongoing.

Luxturna is an adeno-associated virus vector-based gene therapy indicated for the treatment of patients with confirmed biallelic RPE65 mutation-associated retinal dystrophy. In January 2018, Spark Therapeutics entered into licensing and supply agreements with Novartis covering development, registration and commercialization rights to *Luxturna* in markets outside the US. In the UK, in September

2019 NICE recommended *Luxturna* for treating patients with vision loss due to RPE65 genetic mutations.

NEUROSCIENCE

	Q3 2019	Q3 2018	% cha	ange	9M 2019	9M 2018	% cha	ange
	USD m	USD m	USD	СС	USD m	USD m	USD	CC
Gilenya	829	818	1	3	2 420	2 505	-3	0
Zolgensma	160		nm	nm	175		nm	nm
Aimovig ¹	33		nm	nm	75		nm	nm
Mayzent	4		nm	nm	9		nm	nm
Other	16	20	-20	-21	46	63	-27	-24
Total Neuroscience	1 042	838	24	26	2 725	2 568	6	9

nm = not meaningful

¹Ex-US, Ex-Japan sales are reported. *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

Gilenya (USD 829 million, +1%, +3% cc) grew in the US benefitting from stock and trade movements, partly offset by increased competitive pressure worldwide. In the US, the ANDA (Abbreviated New Drug Application) proceedings challenging the compound patent and extensions expiring in 2019 have been resolved and the patent upheld.

Zolgensma (USD 160 million) was approved by the FDA on May 24, 2019 for the treatment of pediatric patients less than 2 years of age with spinal muscular atrophy (SMA) with bi-allelic mutations in the survival motor neuron 1 (*SMN1*) gene. *Zolgensma* has been used to treat patients ranging in age from less than one month to two years old including all types of SMA. Novartis has been working closely with payers and to date plans are in place covering ~90% of commercial patients and ~30% of Medicaid patients. *Zolgensma* was filed in Europe with PRIME designation and in Japan with Sakigake designation in Q4 2018 for infant SMA. *Zolgensma* is currently under regulatory review in Europe with an anticipated CHMP decision in Q1 2020 and in Japan with anticipated decision in H1 2020. Novartis is fully committed to bringing this innovative therapy to European and Japanese patients in need as early as possible.

Aimovig (USD 33 million, ex-US) is the most prescribed anti-CGRP worldwide, with more than 300,000 patients prescribed worldwide in the post-trial setting. It has now been launched in 31 countries for the preventive treatment of migraine 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 and unless a final court decision terminates the agreements.

Mayzent (USD 4 million) launch is progressing and efforts are ongoing to improve patient on-boarding which was slower due to the special needs of this population. *Mayzent* was approved by the FDA on March 26, 2019 and is indicated for the treatment of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive MS, in adults. *Mayzent* is the only FDA approved oral therapy for active SPMS based on evidence from a pivotal prospective Phase III clinical trial (EXPAND) in a typical SPMS population.

IMMUNOLOGY, HEPATOLOGY and DERMATOLOGY

Total Immunology, Hepatology and Dermatology	1 114	891	25	27	3 079	2 430	27	30
llaris	177	141	26	27	493	399	24	28
Cosentyx	937	750	25	27	2 586	2 031	27	30
	USD m	USD m	USD	CC	USD m	USD m	USD	CC
	Q3 2019	Q3 2018	% cha	ange	9M 2019	9M 2018	% cha	ange

Xolair sales for all indications are reported in the Respiratory franchise

Cosentyx (USD 937 million, +25%, +27% cc) continued momentum in the US (+31%) and in the rest of the world (+15%, +20% cc), driven by strong demand across indications and regions and strong first line access in all three indications. In September, Novartis announced positive new data from the Phase III PREVENT trial evaluating the efficacy and safety of Cosentyx in patients with non-radiographic axial spondyloarthritis (nr-axSpA). Nr-axSpA forms part of the axial spondyloarthritis (axSpA) spectrum and is characterized by chronic inflammatory back pain and symptoms such as nocturnal pain, fatigue, morning stiffness and functional disability. Novartis has submitted the data to EMA and plans to submit to the FDA. Nr-axSpA would be the fourth indication for Cosentyx.

llaris (USD 177 million, +26%, +27% cc) sales were driven by strong double-digit volume growth, mostly in Europe and the US.

Xolair continued to grow in Chronic Spontaneous Urticaria (CSU, also known as Chronic Idiopathic Urticaria, CIU), a severe skin disease. *Xolair* on a global level is managed by the Respiratory franchise which reports all *Xolair* sales.

RESPIRATORY

	Q3 2019	Q3 2018	% cha	ange	9M 2019	9M 2018	% cha	ange
	USD m	USD m	USD	CC	USD m	USD m	USD	CC
Ultibro Breezhaler	97	110	-12	-8	313	332	-6	0
Seebri Breezhaler	28	34	-18	-16	93	111	-16	-11
Onbrez Breezhaler	20	24	-17	-16	62	78	-21	-15
Subtotal COPD Portfolio	145	168	-14	-10	468	521	-10	-5
Xolair	299	255	17	22	870	771	13	20
Other	4	6	-33	-21	16	19	-16	-6
Total Respiratory	448	429	4	9	1 354	1 311	3	10

Xolair sales for all indications are reported in the Respiratory franchise

Xolair (USD 299 million, +17%, +22% cc) continued to grow in both indications Severe Allergic Asthma (SAA) and Chronic Spontaneous Urticaria (CSU). Growth was mainly driven by CSU indication and the recent approval of *Xolair* for home-use in Europe. We co-promote *Xolair* with Genentech in the US and share a portion of operating income, but we do not record any US sales.

Ultibro Breezhaler (USD 97 million, -12%, -8% cc) an inhaled LABA/LAMA, sales declined mainly due to enhanced competition in Japan and Europe.

Seebri Breezhaler (USD 28 million, -18%, -16% cc) an inhaled LAMA, and **Onbrez Breezhaler** (USD 20 million, -17%, -16% cc) an inhaled LABA, declined mainly due to competition in Europe.

CARDIOVASCULAR, RENAL AND METABOLISM

	Q3 2019	Q3 2018	% cha	ange	9M 2019	9M 2018	% cha	ange
	USD m	USD m	USD	CC	USD m	USD m	USD	CC
Entresto	430	271	59	61	1 208	710	70	75
Other	7	6	17	10	19	16	19	17
Total Cardiovascular, Renal & Metabolism	437	277	58	60	1 227	726	69	73

Entresto (USD 430 million, +59%, +61% cc) continued strong momentum fueled by increased demand in both hospital and ambulatory settings. *Entresto* further supported its benefit to patients as an essential treatment in Heart Failure with data presented at ESC from the PROVE and EVALUATE trials showing how *Entresto* works directly on the heart to reverse damage caused by Heart Failure. In the US, generic manufacturers have filed ANDAs challenging the Orange Book-listed patents.

ESTABLISHED MEDICINES

	Q3 2019	Q3 2018	% cha	ange	9M 2019	9M 2018	% cha	ange
	USD m	USD m	USD	СС	USD m	USD m	USD	CC
Galvus Group	320	307	4	5	955	957	0	5
Diovan Group	254	254	0	3	798	763	5	11
Exforge Group	249	253	-2	2	780	751	4	10
Zortress/Certican	122	120	2	5	362	344	5	10
Neoral/Sandimmun(e)	101	114	-11	-9	314	349	-10	-6
Voltaren/Cataflam	105	104	1	0	313	333	-6	-3
Other	567	610	-7	-5	1 696	1 978	-14	-10
Total Established Medicines	1 718	1 762	-2	0	5 218	5 475	-5	0

Galvus Group (USD 320 million, +4%, +5% cc) grew led by solid performance in Emerging Growth Markets, including China.

Diovan Group (USD 254 million, 0%, +3% cc) grew in Europe and Emerging Growth Markets, partially offset by declines in the US and Japan.

Exforge Group (USD 249 million, -2%, +2% cc) grew in Emerging Growth Markets, offset by decline in Europe and Japan due to generic competition.

Zortress/Certican (USD 122 million, +2%, +5% cc) continued to grow in most regions.

Neoral/Sandimmun(e) (USD 101 million, -11%, -9% cc) declined due to generic competition and mandatory price reductions.

Voltaren/Cataflam (USD 105 million, +1%, 0% cc) sales were broadly in line with prior year.

Sandoz

	Q3 2019	Q3 2018	% cha	nge	9M 2019	9M 2018	% cha	nge
	USD m	USD m	USD	CC	USD m	USD m	USD	СС
Net sales	2 484	2 420	3	5	7 248	7 400	-2	2
Operating income	191	358	-47	-42	746	1 095	-32	-25
As % of net sales	7.7	14.8			10.3	14.8		
Core operating income	615	541	14	18	1 577	1 520	4	10
As % of net sales	24.8	22.4			21.8	20.5		

Sandoz US Generics Transaction

Novartis announced on September 6, 2018 that it has agreed to sell selected portions of its Sandoz US portfolio, specifically the Sandoz US dermatology business and US oral solids portfolio, to Aurobindo Pharma USA Inc. This transaction is expected to be completed in the coming months, pending regulatory approval. The results of this business are included in continuing operations.

Third quarter

Net sales

Net sales were USD 2.5 billion (+3%, +5% cc) driven by strong volume growth of 9 percentage points (cc) partially offset by 4 percentage points (cc) of price erosion mainly in the US. Excluding the US, net sales grew (+4%, +7% cc).

Sales in Europe were USD 1.3 billion (+8%, +12% cc) mainly driven by strong biosimilar growth. Sales in the US were USD 655 million declining 1% with the continued industry-wide pricing pressure mostly offset by first-to-market launches and Medicaid gross-to-net adjustments. Sales in Asia / Africa / Australasia were USD 333 million (-9%, -8% cc) impacted by high prior year base and market optimization. Sales in Canada and Latin America were USD 199 million (+5%, +7% cc).

Global sales of Biopharmaceuticals (biosimilars, biopharmaceutical contract manufacturing and *Glatopa*) grew to USD 430 million (+23%, +27% cc), driven by continued strong double-digit growth in Europe from *Hyrimoz* (adalimumab), *Rixathon* (rituximab), and *Erelzi* (etanercept). Launch roll-outs in Asia / Africa / Australasia continue to contribute to growth.

Retail sales were USD 1.9 billion (-1%, +1% cc) as sales from first-to-market launches offset pricing pressure. Total Anti-Infectives franchise sales were USD 321 million (-1%, +2% cc), including finished dosage forms sold under the Sandoz name and Anti-Infectives sold to third parties for sale under their own name (USD 124 million, +2%, +5% cc).

Operating income

Operating income was USD 191 million (-47%, -42% cc) impacted by changes in legal settlement provisions, higher net manufacturing and Sandoz transformation restructuring expenses and lower divestment income. Operating income margin was 7.7% of net sales, declining 7.1 percentage points (-6.6 percentage points cc).

Core adjustments were USD 424 million, including USD 79 million of amortization. Prior year core adjustments were USD 183 million. The change in core adjustments compared to prior year was driven by changes in legal settlement provisions and higher net manufacturing and Sandoz transformation restructuring expenses.

Core operating income was USD 615 million (+14%, +18% cc) driven by sales growth and continued gross margin improvements, including Medicaid gross-to-net adjustments. Core operating income margin was 24.8% of net sales, increasing 2.4 percentage points (2.8 percentage points cc). Core gross margin increased by 1.4 percentage points (cc), as favorable product and geographic mix, ongoing productivity improvements and Medicaid gross-to-net adjustments were partly offset by the impact of price erosion mainly in the US. Core R&D expenses decreased by 0.2 percentage points (cc) and Core SG&A expenses decreased by 0.5 percentage points (cc). Core Other Income and Expense increased the margin by 0.7 percentage points (cc) mainly due to lower net legal settlements partly offset by lower divestment income.

Nine months

Net sales

Net sales were USD 7.2 billion (-2%, +2% cc) driven by strong volume growth of 9 percentage points (cc) partially offset by 7 percentage points (cc) of price erosion, mainly in the US. Excluding the US, net sales grew (0%, +6% cc).

Sales in Europe were USD 3.8 billion (+2%, +9% cc) mainly driven by biosimilars. Sales in the US were USD 1.9 billion (-8%), mainly due to continued industry-wide pricing pressure. Sales in Asia / Africa / Australasia were USD 984 million (-4%, -1% cc) broadly in line with prior year. Sales in Canada and Latin America were USD 570 million (-1%, +5% cc).

Global sales of Biopharmaceuticals (biosimilars, biopharmaceutical contract manufacturing and *Glatopa*) grew to USD 1.2 billion (+13%, +18% cc), driven by continued strong double-digit growth in Europe from *Hyrimoz* (adalimumab), *Rixathon* (rituximab), and *Erelzi* (etanercept). Launch roll-outs in Asia / Africa / Australasia also contributed to growth.

Retail sales were USD 5.7 billion (-4%, 0% cc), as first-to-market launches slowed the decline in the US (-4%) and the segment grew in the rest of world. Total Anti-Infectives franchise sales were USD 970 million (-5%, -1% cc), including finished dosage forms sold under the Sandoz name and Anti-Infectives sold to third parties for sale under their own name (USD 383 million, -6%, -2% cc).

Operating income

Operating income was USD 746 million (-32%, -25% cc) impacted by changes in legal settlement provisions and higher net manufacturing and Sandoz transformation restructuring expenses. Operating income margin was 10.3% of net sales, declining 4.5 percentage points (-3.9 percentage points cc).

Core adjustments were USD 831 million, including USD 239 million of amortization. Prior year core adjustments were USD 425 million. The change in core adjustments compared to prior year was driven mainly by changes in legal settlement provisions, higher net manufacturing and Sandoz transformation restructuring expenses and lower gains from divestments.

Core operating income was USD 1.6 billion (+4%, +10% cc) as sales growth and gross margin improvements were partly offset by lower divestment income and higher net legal settlements. Core operating income margin was 21.8% of net sales, increasing 1.3 percentage points (1.6 percentage points cc). Core gross margin increased by 1.9 percentage points (cc), as favorable product and geographic mix and ongoing productivity improvements, were partly offset by the impact of price erosion mainly in the US. Core R&D expenses increased by 0.1 percentage points (cc) while core SG&A expenses decreased by 0.7 percentage points (cc) mainly driven by productivity and sales leverage. Core Other Income and Expense decreased the margin by 0.9 percentage points (cc) mainly due to lower divestment income and higher net legal settlements.

GROUP CASH FLOW AND BALANCE SHEET

Cash flow

Third quarter

Net cash flows from operating activities from continuing operations amounted to USD 4.6 billion, compared to USD 3.7 billion in the prior year quarter. The increase was mainly driven by higher net income adjusted for non-cash items and other adjustments, including divestment gains, and favorable working capital.

Net cash flows used in investing activities from continuing operations amounted to USD 3.4 billion, compared to USD 0.7 billion in the prior year quarter. The current year quarter includes mainly cash outflows for the purchase of property, plant and equipment of USD 0.4 billion, for intangible assets of USD 0.2 billion, for financial assets and other non-current assets of USD 0.1 billion and for acquisitions and divestments of businesses, net of USD 3.5 billion, mainly for the acquisition of *Xiidra* from Takeda Pharmaceutical Company Limited, partly offset by cash inflows from the proceeds of the sale of financial assets of USD 0.6 billion (including USD 543 million proceeds from the sale of Alcon Inc. shares) and intangible assets of USD 0.1 billion.

In the prior year quarter, net cash flows used in investing activities from continuing operations were mainly related to cash outflows for the purchase of property, plant and equipment of USD 0.3 billion, for intangible assets of USD 0.5 billion, and for financial and other non-current assets of USD 0.1 billion. This was partly offset by cash inflows from the sale of intangible and financial assets of USD 0.4 billion. Cash outflows for acquisitions of interests in associated companies, net amounted to USD 0.1 billion.

Net cash flows used in financing activities from continuing operations amounted to USD 2.7 billion, compared to USD 1.5 billion in the prior year quarter. The current year quarter mainly includes the cash outflows for net treasury share transactions of USD 2.9 billion (mainly related to the up to USD 5 billion share buyback), net payments of lease liabilities of USD 0.1 billion, partly offset by a net increase in financial debts of USD 0.3 billion.

In the prior year quarter, net cash flows used in financing activities from continuing operations included cash outflows for net treasury share transactions of USD 1.0 billion, net repayments of financial debts of USD 0.6 billion, partly offset by other net financing cash inflows of USD 0.2 billion.

Free cash flow from continuing operations amounted to USD 4.0 billion (+26% USD) compared to USD 3.2 billion in prior year quarter, mainly driven by higher net cash flows from operating activities.

Nine months

Net cash flows from operating activities from continuing operations amounted to USD 10.0 billion, compared to USD 9.6 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 lower dividends received from associated companies due to the divestment of the GSK consumer healthcare joint venture in Q2 2018, higher provision payments and higher working capital, which included the receipt of a GSK sales milestone from the divested Vaccines business of USD 0.4 billion in the prior year period.

Net cash flows from operating activities from discontinued operations are USD 78 million, compared to USD 893 million in the prior year period. This reduction is due to the completion of the Alcon spin-off on April 9, 2019.

Net cash flows used in investing activities from continuing operations amounted to USD 1.4 billion, compared to USD 0.2 billion in the prior year period. The current year mainly includes cash outflows for the purchase of property, plant and equipment of USD 0.9 billion, for intangible assets of USD 0.7 billion, for financial assets and other non-current assets of USD 0.3 billion, and for acquisitions and divestments of businesses, net of USD 3.8 billion, mainly for the acquisition of IFM Tre, Inc. (USD 0.3 billion) and the acquisition of *Xiidra* from Takeda Pharmaceutical Company Limited (USD 3.5 billion), partly offset by net proceeds from the sales of marketable securities and commodities of USD 2.3 billion, cash inflows from the sale of property, plant and equipment of USD 0.8 billion (including the proceeds from the sale and leaseback of real estate), from the sale of financial assets of USD 0.7 billion (including USD 656 million proceeds from the sale of Alcon Inc. shares) and intangible assets of USD 0.4 billion.

In the prior year period, net cash flows used in investing activities from continuing operations were mainly related to the cash inflow of USD 13.0 billion from the divestment of our 36.5% stake in the GSK consumer healthcare joint venture. This was offset by cash outflows for the purchase of intangible assets of USD 1.2 billion and for the acquisitions and divestments of businesses, net of USD 11.9 billion, mainly Advanced Accelerator Applications S.A. of USD 3.5 billion, net (USD 3.9 billion, net of cash acquired USD 0.4 billion) and AveXis, Inc. of USD 8.3 billion, net (USD 8.7 billion, net of cash acquired USD 0.4 billion).

Net cash flows used in investing activities from discontinued operations amounted to USD 1.1 billion, compared to USD 0.5 billion in the prior year period. The current 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 equivalents following the completion of the Alcon spin-off on April 9, 2019.

Net cash flows used in financing activities from continuing operations amounted to USD 15.7 billion, compared to USD 4.2 billion in the prior year period. The current year mainly includes the cash outflows for the dividend payment of USD 6.6 billion, for net treasury share transactions of USD 5.3 billion (mainly related to the up to USD 5 billion share buyback) and net cash outflows of USD 3.1 billion for non-current financial debts (mainly driven by the repayment at maturity of a US dollar bond of USD 3.0 billion). The net repayments of current financial debts amounted to USD 0.5 billion. Payments for lease liabilities, net and other financing cash flows resulted in a net cash outflow of USD 0.1 billion.

In the prior year period, net cash flows used in financing activities from continuing operations included cash outflows for the dividend payment of USD 7.0 billion, the repayment of non-current financial debts of USD 0.4 billion and for net treasury transactions of USD 1.4 billion. This was partly offset by cash inflows from the issuance of euro bonds totaling USD 2.8 billion (notional amount EUR 2.25 billion), the net increase in current financial debts of USD 1.2 billion, and other net financing cash inflows of USD 0.4 billion.

Net cash inflows from financing activities from discontinued operations amounted to USD 3.3 billion compared to a cash outflow of USD 0.5 billion in the prior year period. The current year period includes 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 9.4 billion (+13% USD) compared to USD 8.3 billion in the prior year period. The increase is mainly driven by higher operating income adjusted for non-cash items and higher real estate divestment proceeds, partly offset by higher working capital, which in the prior year period included the receipt of a GSK sales milestone from the divested Vaccines business of USD 0.4 billion, and lower dividends received from associated companies, as the prior year period included the GSK consumer healthcare joint venture which was divested in Q2 2018.

Balance sheet

There has been a significant change in the consolidated balance sheet resulting from the spin-off of the Alcon business through the dividend in kind distribution to Novartis AG shareholders completed on April 9, 2019 (see Note 2, Note 3 and Note 11 for further details). The December 31, 2018 consolidated balance sheet includes the assets and liabilities of the Alcon business. The September 30, 2019 consolidated balance sheet excludes the assets and liabilities of the Alcon business, due to derecognition of the Alcon business at the date of the spin-off. The consolidated balance sheet discussion and analysis that follows excludes the impacts from derecognition of the Alcon business at the date of the spin-off.

Assets

Total non-current assets of USD 89.3 billion at September 30, 2019 increased by USD 3.0 billion compared to December 31, 2018, excluding the impact of the derecognition of the Alcon business non-current assets as a result of the spin-off. This increase was mainly driven by recognition of right-of-use assets resulting from the implementation of IFRS 16 – Leases on January 1, 2019 amounting to USD 1.7 billion, an increase in intangible assets other than goodwill of USD 1.7 billion, mainly from the acquisition of *Xiidra* from Takeda Pharmaceutical Company Limited, and the increase in financial assets of USD 0.8 billion, primarily from the financial investments in Alcon Inc. shares recognized by certain consolidated foundations through the Alcon spin-off. This was partially offset by the decrease in property, plant and equipment of USD 0.9 billion, mainly due to depreciation in excess of net additions and a decrease in goodwill of USD 0.1 billion, as additions were more than offset by currency translation

adjustments. Investments in associated companies, deferred tax assets and other non-current assets were broadly in line compared to December 31, 2018.

Total current assets of USD 26.7 billion at September 30, 2019 decreased by USD 5.5 billion compared to December 31. 2018, excluding the impact of the derecognition of the Alcon business current assets as a result of the spin-off. This decrease was mainly driven by the reduction in cash and cash equivalents of USD 4.7 billion and in marketable securities, commodities, time deposits and derivative financial instruments of USD 2.4 billion, mainly due to the repayment of financial debts and the dividend payment. This was partially offset by an increase in inventories by USD 0.6 billion, in trade receivables by USD 0.4 billion and in other current assets by USD 0.5 billion. Income tax receivable and assets of disposal group held for sale remained broadly in line compared to December 31, 2018.

Net assets of disposal group held for sale relate to the pending divestment of the Sandoz US dermatology business and generic US oral solids portfolio to Aurobindo Pharma USA Inc. announced on September 6, 2018, and amount to USD 0.8 billion (see Note 3). Novartis expects the divestment to be completed in the coming months, pending regulatory approval.

Liabilities

Total non-current liabilities of USD 35.2 billion increased by USD 0.4 billion compared to December 31, 2018, excluding the impact of the derecognition of the Alcon business non-current liabilities as a result of the spin-off. This increase was mainly driven by the recognition of lease liabilities resulting from the implementation of IFRS 16 – Leases on January 1, 2019 amounting to USD 1.7 billion, and the USD 1.2 billion increase in provisions and other non-current liabilities, mainly due to higher pension plan liabilities resulting from the decrease in discount rates used to calculate the actuarial defined benefit obligations. This was partially offset by the USD 2.3 billion decrease in long-term financial debts, mainly driven by the reclassification from non-current to current financial debt of USD 2.0 billion US dollar bonds due in 2020, and a USD 0.3 billion decrease in deferred tax liabilities.

Total current liabilities of USD 28.2 billion increased by USD 0.4 billion compared to December 31, 2018, excluding the impacts of the derecognition of the Alcon business current liabilities as a result of the spin-off. This was mainly driven by an increase in provisions and other current liabilities of USD 1.6 billion, primarily from higher legal and revenue deduction provisions, and increases in current income tax liabilities by USD 0.4 billion and in lease liabilities by USD 0.3 billion, resulting from the implementation of IFRS 16 – Leases on January 1, 2019. This was partially offset by a USD 1.6 billion decrease in financial debts and derivative financial instruments, mainly due to the repayment of USD 3.0 billion of bonds issued in February 2009, and a USD 0.2 billion decrease in trade payables.

Group equity

The Group's equity decreased by USD 26.1 billion to USD 52.6 billion at September 30, 2019 compared to USD 78.7 billion at December 31, 2018. This decrease was mainly due to derecognition of the dividend in kind distribution liability of USD 23.4 billion upon completion of the Alcon spin-off (see Note 2, 3 and 11 for further details), the cash-dividend payment of USD 6.6 billion, purchase of treasury shares of USD 5.5 billion, net actuarial losses of USD 1.3 billion, transaction costs of USD 0.3 billion, unfavorable currency translation differences of USD 0.5 billion and taxes on treasury shares of USD 0.2 billion. This was partially offset by net income of USD 10.6 billion, the net effect of exercise of options and employee transactions of USD 0.8 billion, and a decrease in the treasury share repurchase obligation under a share buyback trading plan of USD 0.3 billion.

Net debt and debt/equity ratio

The net debt increased to USD 19.4 billion at September 30, 2019 compared to USD 16.2 billion at December 31, 2018. The Group's liquidity amounted to USD 8.7 billion at September 30, 2019 compared to USD 16.0 billion at December 31, 2018, and the total of the non-current and current financial debt, including derivatives, amounted to USD 28.1 billion at September 30, 2019, compared to USD 32.1 billion at December 31, 2018. The debt/equity ratio increased to 0.54:1 at September 30, 2019 compared to 0.41:1 at December 31, 2018.

Innovation Review

Benefitting from our continued focus on innovation, Novartis has one of the industry's most competitive pipelines with more than 200 projects in clinical development.

Selected Innovative Medicines approvals: US, EU and Japan

Product	Active ingredient/ Descriptor	Indication	Approval date
Lucentis	ranibizumab	Retinopathy of prematurity	EU – Sep 2019
Beovu (RTH258)	brolucizumab	Neovascular (wet) AMD	US - Oct 2019

Selected Innovative Medicines projects awaiting regulatory decisions

Completed submissions

Product	Indication	US	EU	Japan	News update
Cosentyx	Non-radiographic axial spondyloarthritis		Q3 2019		 52 week data for US submission positive in Q3. On track for filing to FDA in Q4
Mayzent	Secondary Progressive Multiple Sclerosis	Approved	Q3 2018	Q1 2019	- US approved in RMS including active SPMS
BYL719 (<i>Piqray</i> in US, alpelisib)	PIK3CA mutant HR+/HER2- postmenopausal advanced or metastatic BC	Approved	Q4 2018		
Lucentis	Retinopathy of prematurity		Approved	Q1 2019	
	Diabetic retinopathy		Q4 2018		-CHMP positive opinion received – Sep 2019
RTH258	Neovascular (wet) AMD	Approved	Q1 2019	Q2 2019	
SEG101	Sickle cell disease	Q2 2019	Q2 2019		- US Priority review
QMF149	Asthma		Q2 2019	Q3 2019	 QUARTZ study meets primary and key secondary endpoints Positive results Phase III PALLADIUM study – Sep 2019
QVM149	Asthma		Q2 2019	Q3 2019	- Positive results Phase III IRIDIUM study – Sep 2019
Xiidra	Dry eye	Approved	Q4 2018		- CHMP opinion anticipated Q1 2020
Xolair	Nasal polyps	Q3 2019			
Zolgensma (AVXS-101)	Spinal Muscular Atrophy Type 1 (IV formulation)	Approved	Q4 2018	Q4 2018	

Selected Innovative Medicines pipeline projects

Project/	Potential indication/	First planned	Current	News update
Compound	Disease area	submissions	Phase	
ABL001	Chronic myeloid leukemia 3 rd line	2021	III	
	Chronic myeloid leukemia 1 st line	≥2023	III	
ACZ885	Adjuvant NSCLC	2022	III	Enrollment ongoing for Phase III
(canakinumab)	1st line NSCLC	2021	III	studies
	2 nd line NSCLC	2021	III	_
AVXS-101 IT	Spinal Muscular Atrophy Type 2/3 (IT formulation)	2020	1/11	 Interim data presented at AAN in May and updated at World Muscle Society in October Awaiting FDA feedback on IT filing approach

AVX5-201 Rett Syndrome					
Popular Popular Popular	AVXS-201	Rett Syndrome	≥2023	I	
Cancer			2020	II	
Cancer Head and neck squamous ≥2023 III			≥2023	III	
Calcarcinoma		. •	≥2023	III	
CAD106		•	≥2023	III	
CFZ533 (scallmab) Solid organ transplantation ≥2023 II Enrollment has started in the phase lib de novo and maintenance kidney transplant study Sigegren's syndrome ≥2023 II Enrollment has started in the phase lib de novo and maintenance kidney transplant study Cosent/xx Cosent/xx Non-radiographic axial spondyloarthritis 2019 US III Submitted to EMA in Q3, planned to submit to FDA in Q4 Psoriatic arthritis head-to-head vs. adalimumab 2020 III Ankylosing spondylitis head-to-head vs. adalimumab 2022 III Hidradenitis suppurativa 2022 III Giant cell arteritis ≥2023 II CSJ117 Severe asthma ≥2023 II Entresto Chronic heart failure with preserved ejection fraction 2019 III - PARAGON-HF topline results presented at ESC - Sep 2019 HDM201 Acute myeloid leukemia 2022 III - Primary analysis in the GEOMETRY mono -1 study demonstrates promising efficacy - June 2019 II - Primary analysis in the GEOMETRY mono -1 study demonstrates promising efficacy - June 2019 Breakthrough Therapy designation granted by FDA and MHLW (Japan) Orphan Dural MHLW (Japan) - Prim		Ovarian Cancer	≥2023	III	
Sjoegren's syndrome ≥2023 II	CAD106	Alzheimer's disease	NA	II / III	- Program retired in Q3
Non-radiographic axial spondyloarthritis Sondyloarthritis Posiriatic arthritis head-to-head vs. adalimumab Ankylosing spondylitis Ankyl		Solid organ transplantation	≥2023	II	Ilb de novo and maintenance
Psoriatic arthritis head-to-head vs. adalimumab		Sjoegren's syndrome	≥2023	II	
head vs. adalimumab	Cosentyx		2019	US III	· · · · · · · · · · · · · · · · · · ·
head-to-head vs.			2020	III	
Giant cell arteritis ≥2023 II		head-to-head vs.	2022	III	
CSJ117		Hidradenitis suppurativa	2022	III	
ECF843		Giant cell arteritis	≥2023	II	
ECF843	CSJ117	Severe asthma	≥2023	II	
Chronic heart failure with preserved ejection fraction					
Post-acute myocardial infarction		Chronic heart failure with	2019	III	•
NSCLC (cMET amp and mut)			2021	III	
(capmatinib) mut) mut) GEOMÉTRY mono -1 study demonstrates promising efficacy — June 2019 Breakthrough Therapy designation granted by FDA Orphan Drug designation granted by FDA and MHLW (Japan) Acute graft-versus-host disease (GvHD) Chronic graft-versus-host disease (GvHD) KAE609 KAE609 Malaria acute ≥2023 II uncomplicated Severe Malaria ≥2023 II Severe Malaria ≥2023 II Uncomplicated KKF156 (ganaplacide) uncomplicated Kisqali HR+/HER2- early BC ≥2023 III • Enrollment ongoing + endocrine (adjuvant) therapy Kymriah (tisagenlecleuce)	HDM201	Acute myeloid leukemia	≥2023	II	
Disease (GVHD)			2019	II	GEOMETRY mono -1 study demonstrates promising efficacy – June 2019 Breakthrough Therapy designation granted by FDA Orphan Drug designation granted
Chronic graft-versus-host disease (GvHD)	Jakavi		2021	III	
(cipargamin) uncomplicated Severe Malaria ≥2023 II KAF156 Malaria acute uncomplicated ≥2023 III Kisqali HR+/HER2- early BC (adjuvant) ≥2023 III • Enrollment ongoing + endocrine therapy F/r Follicular lymphoma 2021 II Kymriah (tisagenlecleucel) r/r DLBCL in 1st relapse 2021 III + pembrolizumab r/r DLBCL ≥2023 I LAM320 Multi-drug resistant tuberculosis 2021 III LJC242 (tropifexor + cenicriviroc) Non-alcoholic steatohepatitis ≥2023 II LJN452 Non-alcoholic steatohepatitis ≥2023 II • FDA Fast Track designation		Chronic graft-versus-host	2021	III	
KAF156 Malaria acute			≥2023	II	
(ganaplacide) uncomplicated Kisqali + endocrine therapy HR+/HER2- early BC (adjuvant) ≥2023 III - Enrollment ongoing Kymriah (tisagenlecleucel) r/r Follicular lymphoma r/r DLBCL in 1st relapse 2021 III + pembrolizumab r/r DLBCL tuberculosis ≥2023 I LAM320 Multi-drug resistant tuberculosis 2021 III LJC242 (tropifexor + cenicriviroc) Non-alcoholic steatohepatitis (NASH) ≥2023 II LJN452 Non-alcoholic steatohepatitis teatohepatitis ≥2023 II - FDA Fast Track designation	<u> </u>	Severe Malaria	≥2023	II	
Kisqali HR+/HER2- early BC ≥2023 III - Enrollment ongoing + endocrine therapy (adjuvant) III - Enrollment ongoing Kymriah (tisagenlecleucel) r/r Follicular lymphoma 2021 III + pembrolizumab r/r DLBCL in 1st relapse 2021 III + pembrolizumab r/r DLBCL ≥2023 I LAM320 Multi-drug resistant tuberculosis 2021 III LJC242 Non-alcoholic steatohepatitis ≥2023 II (tropifexor + (NASH) (cenicriviroc) (NASH) - FDA Fast Track designation			≥2023	II	
Kymriah r/r Follicular lymphoma 2021 II (tisagenlecleucel) r/r DLBCL in 1st relapse 2021 III + pembrolizumab r/r DLBCL ≥2023 I LAM320 Multi-drug resistant tuberculosis 2021 III LJC242 Non-alcoholic steatohepatitis (NASH) ≥2023 II (tropifexor + cenicriviroc) (NASH) FDA Fast Track designation	Kisqali + endocrine	HR+/HER2- early BC	≥2023	III	- Enrollment ongoing
(tisagenlecleucel) r/r DLBCL in 1st relapse 2021 III + pembrolizumab r/r DLBCL ≥2023 I LAM320 Multi-drug resistant tuberculosis 2021 III LJC242 Non-alcoholic steatohepatitis (NASH) ≥2023 II (tropifexor + cenicriviroc) (NASH) II - FDA Fast Track designation	· · ·	r/r Follicular lymphoma	2021	II	
+ pembrolizumab r/r DLBCL ≥2023 I LAM320 Multi-drug resistant 2021 III LJC242 Non-alcoholic steatohepatitis ≥2023 II (tropifexor + (NASH) (NASH) cenicriviroc) LJN452 Non-alcoholic steatohepatitis ≥2023 II · FDA Fast Track designation					
LAM320 Multi-drug resistant 2021 III tuberculosis LJC242 Non-alcoholic steatohepatitis ≥2023 II (tropifexor + (NASH) cenicriviroc) LJN452 Non-alcoholic steatohepatitis ≥2023 II - FDA Fast Track designation	, - ,				
LJC242 Non-alcoholic steatohepatitis ≥2023 II (tropifexor + (NASH) cenicriviroc) LJN452 Non-alcoholic steatohepatitis ≥2023 II - FDA Fast Track designation	•	Multi-drug resistant		III	
LJN452 Non-alcoholic steatohepatitis ≥2023 II - FDA Fast Track designation	(tropifexor +	Non-alcoholic steatohepatitis	≥2023	II	
	LJN452		≥2023	II	- FDA Fast Track designation

LMI070	Spinal Muscular Atrophy	≥2023	II	FDA Orphan designation, EMA Orphan status obtained Dose ranging study ongoing
LNP023	Paroxysmal nocturnal hemoglobinuria	2022	11	3 3 7 3 3
	IgA nephropathy	≥2023	II	
	Membranous nephropathy	≥2023	II	
	C3 glomerulopathy	≥2023	II	
LOU064	Chronic spontaneous urticaria	≥2023	II	- Phase IIb study start achieved
¹⁷⁷ Lu-PSMA-617	Metastatic castration- resistant prostate cancer	2020	III	
LXE408	Visceral leishmaniosis	≥2023	I	
MBG453	Myelodysplastic syndrome	2021	II	
MOR106	Atopic dermatitis	≥2023	II	
OMB157 (ofatumumab)	Relapsing multiple sclerosis	2019	III	Phase III ASCLEPIOS I & II studies met primary endpoints – Aug 2019
PDR001 + Tafinlar + Mekinist	Metastatic BRAF V600+ melanoma	2020	III	- On track for H2 2019 interim analysis data readout
PDR001 Combo	Metastatic melanoma	≥2023	II	 Enrollment ongoing
QAW039 (fevipiprant)	Asthma	2020	III	 ZEAL 1 and 2 missed primary endpoint LUSTER 1 and 2 core registration trials on track for Q1 2020 readout
QBW251	COPD	≥2023	II	
QGE031 (ligelizumab)	Chronic spontaneous urticaria / chronic idiopathic urticaria	2021	III	- Phase III trials initiated enrollment
RTH258	Diabetic macular edema	2021	III	
(brolucizumab)	Retinal vein occlusion	≥2023	III	
	Proliferative diabetic retinopathy	≥2023	III	
Rydapt (PKC412)	Acute myeloid leukemia (FLT3 wild type)	2022	III	
SAF312	Chronic ocular surface pain	≥2023	II	
TQJ230	Secondary prevention of cardiovascular events in patients with elevated levels of lipoprotein (a)	≥2023	III	Phase III planned to initiate in Q1 of 2020
UNR844	Presbyopia	≥2023	II	
VAY736	Auto-immune hepatitis	≥2023	II	
(lanalumab)	Primary Sjoegren's syndrome	≥2023	II	FDA Fast Track designation Phase II study fully recruited
VAY785 (emricasan)	Non-alcoholic steatohepatitis (NASH)	NA	II	Program retired in Q3
VPM087	1st line colorectal cancer / 1st line renal cell carcinoma	≥2023	I	
Xolair	Nasal polyps	2019	EU III	- POLYP 1 and POLYP2 positive study read out – May 2019
ZPL389 (adriforant)	Atopic dermatitis	2022	II	- Phase IIb trial enrollment initiated

Selected Sandoz approvals and pipeline projects (biosimilars)

Project/	Potential indication/	Submission	Current	News update
Compound	Disease area	status	Phase	
LA-EP2006 (pegfilgrastim)	Chemotherapy-induced neutropenia and others (same as originator)	US EU	Submitted Approved	 Resubmitted to FDA in April
GP2411 (denosumab)	Osteoporosis, skeletal-related in bone met. pts (same as originator)	EU/US	III	· First patient enrolled July 2019

CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Consolidated income statements

Third quarter (unaudited)

(USD millions unless indicated otherwise)	Note	Q3 2019	Q3 2018	Change
Net sales to third parties from continuing operations	10	12 172	11 016	1 156
Sales to discontinued operations			28	-28
Net sales from continuing operations		12 172	11 044	1 128
Other revenues	10	310	342	-32
Cost of goods sold		-3 776	-3 463	-313
Gross profit from continuing operations		8 706	7 923	783
Selling, general and administration		-3 549	-3 261	-288
Research and development		-2 199	-2 147	-52
Other income		196	596	-400
Other expense		-796	-872	76
Operating income from continuing operations		2 358	2 239	119
Income from associated companies		253	213	40
Interest expense		-216	-229	13
Other financial income and expense		12	28	-16
Income before taxes from continuing operations		2 407	2 251	156
Taxes		-366	-369	3
Net income from continuing operations		2 041	1 882	159
Net loss from discontinued operations				
before gain on distribution of Alcon Inc.			0.50	0.50
to Novartis AG shareholders	11		-258	258
Net loss from discontinued operations			-258	258
Net income		2 041	1 624	417
Attributable to:		0.040	4 000	440
Shareholders of Novartis AG		2 042	1 623	419
Non-controlling interests		-1	1	-2
Weighted average number of shares outstanding –		2 272	2 315	-43
Basic (million) Basic earnings per share from continuing operations (USD) ¹		0.90	0.81	0.09
	1	0.90		0.09
Basic earnings per share from discontinued operations (USD) Total basic earnings per share (USD) ¹		0.00	-0.11	
Weighted average number of shares outstanding –		0.90	0.70	0.20
Diluted (million)		2 297	2 338	-41
Diluted earnings per share from continuing operations (USD) ¹		0.89	0.80	0.08
Diluted earnings per share from discontinued operations (USD))) ¹	0.09	-0.11	0.00
Total diluted earnings per share (USD) ¹	'/	0.89	0.69	0.17
Total anated callings per shale (OOD)		0.03	0.00	0.13

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

Consolidated income statements

Nine months to September 30 (unaudited)

(USD millions unless indicated otherwise)	Note	9M 2019	9M 2018	Change
Net sales to third parties from continuing operations	10	35 042	33 270	1 772
Sales to discontinued operations		53	61	-8
Net sales from continuing operations		35 095	33 331	1 764
Other revenues	10	866	871	-5
Cost of goods sold		-10 433	-10 472	39
Gross profit from continuing operations		25 528	23 730	1 798
Selling, general and administration		-10 464	-10 040	-424
Research and development		-6 549	-6 255	-294
Other income		1 388	1 465	-77
Other expense		-2 640	-1 859	-781
Operating income from continuing operations		7 263	7 041	222
Income from associated companies		509	6 297	-5 788
Interest expense		-647	-684	37
Other financial income and expense		56	108	-52
Income before taxes from continuing operations		7 181	12 762	-5 581
Taxes		-1 163	-1 182	19
Net income from continuing operations		6 018	11 580	-5 562
Net loss from discontinued operations before gain on distribution of Alcon Inc.				
to Novartis AG shareholders	11	-101	-160	59
Gain on distribution of Alcon Inc.				
to Novartis AG shareholders	3, 11	4 691		4 691
Net income/loss from discontinued operations		4 590	-160	4 750
Net income		10 608	11 420	-812
Attributable to:				
Shareholders of Novartis AG		10 607	11 416	-809
Non-controlling interests		1	4	-3
Weighted average number of shares outstanding –		2 298	2 322	24
Basic (million)		2.62	4.99	-24 -2.37
Basic earnings per share from continuing operations (USD) ¹	1) 1	2.02		2.07
Basic earnings per share from discontinued operations (USD Total basic earnings per share (USD) ¹	<i>')</i> ·		-0.07 4.92	-0.30
Weighted average number of shares outstanding –		4.62	4.92	-0.30
Diluted (million)		2 323	2 345	-22
Diluted earnings per share from continuing operations (USD)	1	2.59	4.94	-2.35
Diluted earnings per share from discontinued operations (US		1.98	-0.07	2.04
Total diluted earnings per share (USD) ¹		4.57	4.87	-0.30
Total anated callings per shale (000)		7.01	7.07	-0.50

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

Consolidated statements of comprehensive income

Third quarter (unaudited)

(USD millions)	Q3 2019	Q3 2018	Change
Net income	2 041	1 624	417
Other comprehensive income to be eventually recycled			
into the consolidated income statement:			
Novartis share of other comprehensive income			
recognized by associated companies, net of taxes	-40	46	-86
Net investment hedge	81	1	80
Currency translation effects	-700	361	-1 061
Total of items to eventually recycle	-659	408	-1 067
Other comprehensive income never to be recycled into the			
consolidated income statement:			
Actuarial (losses)/gains from defined benefit plans, net of taxes	-418	350	-768
Fair value adjustments on equity securities, net of taxes	-99	52	-151
Total of items never to be recycled	-517	402	-919
Total comprehensive income	865	2 434	-1 569
Attributable to:			
Shareholders of Novartis AG	868	2 435	-1 567
Continuing operations	868	2 714	-1 846
Discontinued operations		-279	279
Non-controlling interests	-3	-1	-2

Consolidated statements of comprehensive income

Nine months to September 30 (unaudited)

(USD millions)	9M 2019	9M 2018	Change
Net income	10 608	11 420	-812
Other comprehensive income to be eventually recycled into the consolidated income statement:			
Fair value adjustments on debt securities, net of taxes	1	-2	3
Fair value adjustments on deferred cash flow hedges, net of taxes	1	9	-8
Total fair value adjustments on financial instruments, net of taxes	2	7	-5
Novartis share of other comprehensive income recognized by associated companies, net of taxes ¹	-94	-482	388
Net investment hedge	93	60	33
Currency translation effects ²	-511	594	-1 105
Total of items to eventually recycle	-510	179	-689
Other comprehensive income never to be recycled into the consolidated income statement:			
Actuarial (losses)/gains from defined benefit plans, net of taxes ³	-1 308	574	-1 882
Fair value adjustments on equity securities, net of taxes	-25	202	-227
Total of items never to be recycled	-1 333	776	-2 109
Total comprehensive income	8 765	12 375	-3 610
Attributable to:			
Shareholders of Novartis AG	8 766	12 376	-3 610
Continuing operations	4 189	12 500	-8 311
Discontinued operations	4 577	-124	4 701
Non-controlling interests	-1	-1	0

¹ In 2018, Novartis share of other comprehensive income recognized by associated companies, net of taxes of USD 511 million was recycled into the consolidated income statement as a result of the divestment of the investment in GSK Consumer Healthcare Holdings

Ltd. (see Note 3).

In 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 Note 3 and 11). In 2018, cumulative currency translation losses of USD 946 million were recycled into the consolidated income statement as a result of the divestment of the investment in GSK Consumer Healthcare Holdings Ltd.

Included in 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 enactment of the Swiss canton Basel-Stadt tax rate reduction, effective on January 1, 2019.

Consolidated balance sheets

		Sep 30, 2019	Dec 31, 2018	
(USD millions)	Note (ι	ınaudited)	(audited)	Change
Assets		-		
Non-current assets				
Property, plant and equipment	10	11 878	15 696	-3 818
Right-of-use assets	6	1 682		1 682
Goodwill	10	26 306	35 294	-8 988
Intangible assets other than goodwill	10	29 694	38 719	-9 025
Investments in associated companies		8 284	8 352	-68
Deferred tax assets		7 985	8 699	-714
Financial assets		2 778	2 345	433
Other non-current assets		689	895	-206
Total non-current assets		89 296	110 000	-20 704
Current assets				
Inventories		6 123	6 956	-833
Trade receivables		7 826	8 727	-901
Income tax receivables		244	248	-4
Marketable securities, commodities, time deposits and				
derivative financial instruments		339	2 693	-2 354
Cash and cash equivalents		8 378	13 271	-4 893
Other current assets		2 920	2 861	59
Assets of disposal group held for sale	3	845	807	38
Total current assets		26 675	35 563	-8 888
Total assets		115 971	145 563	-29 592
Equity Share capital		936	944	-8
Treasury shares		-80	-69	-11
Reserves		51 668	77 739	-26 071
Issued share capital and reserves attributable to Novartis AG shareholders		52 524	78 614	-26 090
Non-controlling interests		74	78	-4
Total equity		52 598	78 692	-26 094
Liabilities				
Non-current liabilities				
Financial debts		20 131	22 470	-2 339
Lease liabilities	6	1 702		1 702
Deferred tax liabilities		5 682	7 475	-1 793
Provisions and other non-current liabilities		7 638	7 319	319
Total non-current liabilities		35 153	37 264	-2 111
Current liabilities				
Trade payables		4 669	5 556	-887
Financial debts and derivative financial instruments		8 017	9 678	-1 661
Lease liabilities	6	266		266
Current income tax liabilities		2 325	2 038	287
Provisions and other current liabilities		12 919	12 284	635
Liabilities of disposal group held for sale	3	24	51	-27
Total current liabilities		28 220	29 607	-1 387
Total liabilities		63 373	66 871	-3 498
Total equity and liabilities		115 971	145 563	-29 592

Consolidated statements of changes in equity

Third quarter (unaudited)

					Issued share		
					capital and		
					reserves		
					attributable	Non-	
	Share	Treasury	Retained	Total value	to Novartis	controlling	Total
(USD millions)	capital	shares	earnings	adjustments	shareholders	interests	equity
Total equity at July 1, 2019	936	-67	55 645	-5 088	51 426	78	51 504
Net income			2 042		2 042	-1	2 041
Other comprehensive income			-40	-1 134	-1 174	-2	-1 176
Total comprehensive income			2 002	-1 134	868	-3	865
Purchase of treasury shares		-14	-2 521		-2 535		-2 535
Equity-based compensation		1	193		194		194
Taxes on treasury share transactions			-4		-4		-4
Decrease of treasury share repurchase							
obligation under a share buyback trading	g plan		2 573		2 573		2 573
Changes in non-controlling interests						-1	-1
Fair value adjustments on financial							
assets sold			38	-38			
Other movements ¹			2		2		2
Total of other equity movements		-13	281	-38	230	-1	229
Total equity at September 30, 2019	936	-80	57 928	-6 260	52 524	74	52 598

¹ Impact of hyperinflationary economies

					Issued share		
					capital and		
					reserves		
					attributable	Non-	
	Share	Treasury	Retained	Total value	to Novartis	controlling	Total
(USD millions)	capital	shares	earnings	adjustments	shareholders	interests	equity
Total equity at July 1, 2018	944	-63	79 793	-3 859	76 815	86	76 901
Net income			1 623		1 623	1	1 624
Other comprehensive income			46	766	812	-2	810
Total comprehensive income			1 669	766	2 435	-1	2 434
Purchase of treasury shares		-6	-985		-991		-991
Exercise of options and employee							
transactions			1		1		1
Equity-based compensation			199		199		199
Increase of treasury share repurchase							
obligation under a share buyback trading	plan		-526		-526		-526
Transaction costs 1			-28		-28		-28
Changes in non-controlling interests						-1	-1
Fair value adjustments on financial							
assets sold			-1	1			
Impact of change in ownership of							
consolidated entities			4		4	-3	1
Other movements ²			29		29		29
Total of other equity movements		-6	-1 307	1	-1 312	-4	-1 316
Total equity at September 30, 2018	944	-69	80 155	-3 092	77 938	81	78 019

¹ Transaction costs directly attributable to the distribution (spin-off) of the Alcon business to Novartis AG shareholders (see Note 2) ² Impact of hyperinflationary economies

Consolidated statements of changes in equity

Nine months to September 30, 2019 (unaudited)

					Issued share capital and reserves		
					attributable	Non-	
(1100	Share	Treasury	Retained	Total value	to Novartis	controlling	Total
(USD millions) Total equity at January 1, 2019,	capital	shares	earnings	adjustments	shareholders	interests	equity
as previously reported	944	-69	82 191	-4 452	78 614	78	78 692
Impact of change in accounting policies ¹			3		3		3
Restated equity							
at January 1, 2019	944	-69	82 194	-4 452	78 617	78	78 695
Net income			10 607		10 607	1	10 608
Other comprehensive income			-94	-1 747	-1 841	-2	-1 843
Total comprehensive income			10 513	-1 747	8 766	-1	8 765
Dividends			-6 645		-6 645		-6 645
Dividend in kind ²			-23 434		-23 434		-23 434
Purchase of treasury shares		-31	-5 476		-5 507		-5 507
Reduction of share capital	-8	12	-4				
Exercise of options and employee transactions		3	197		200		200
Equity-based compensation		5	636		641		641
Shares delivered to Alcon employees as a result of the Alcon spin-off	1		32		32		32
Taxes on treasury share transactions ³			-189		-189		-189
Decrease of treasury share repurchase							
obligation under a share buyback trading	plan		284		284		284
Transaction costs ⁴			-253		-253		-253
Changes in non-controlling interests						-1	-1
Fair value adjustments on financial assets sold			57	-57			
Fair value adjustments related to divestme	ents		4	-4			
Impact of change in ownership of consolidated entities			-3		-3	-2	-5
Other movements ⁵			15		15		15
Total of other equity movements	-8	-11	-34 779	-61	-34 859	-3	-34 862
Total equity at September 30, 2019	936	-80	57 928	-6 260	52 524	74	52 598

¹ The impact of change in accounting policy includes USD 3 million related to the implementation of IFRS 16 – Leases (see Notes 2 and 6 for further details).

⁵ Impact of hyperinflationary economies

² Fair value of the dividend-in-kind of the Alcon business distributed to Novartis AG shareholders and ADR (American Depositary Receipt) holders approved at the 2019 Annual General Meeting held on February 28, 2019. Distribution was effected on April 9, 2019, whereby each Novartis AG shareholders and ADR holder received 1 Alcon Inc. share for every 5 Novartis AG shares/ADRs they held on April 8,

^{2019,} close of business (see Note 2, 3 and 11 for further details)

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

4 Transaction costs directly attributable to the distribution (spin-off) of the Alcon business to Novartis AG shareholders (see Note 2)

Consolidated statements of changes in equity

Nine months to September 30, 2018 (unaudited)

					Issued share capital and reserves attributable	Non-	
	Share	Treasury	Retained	Total value	to Novartis	controlling	Total
(USD millions)	capital	shares	earnings	adjustments	shareholders	interests	equity
Total equity at January 1, 2018,				,			. ,
as previously reported	969	-100	77 639	-4 340	74 168	59	74 227
Impact of change in accounting policies 1			237	-177	60		60
Restated equity							
at January 1, 2018	969	-100	77 876	-4 517	74 228	59	74 287
Net income			11 416		11 416	4	11 420
Other comprehensive income			-482	1 442	960	-5	955
Total comprehensive income			10 934	1 442	12 376	-1	12 375
Dividends			-6 966		-6 966		-6 966
Purchase of treasury shares		-11	-1 780		-1 791		-1 791
Reduction of share capital	-25	34	-9				
Exercise of options and employee transactions		4	430		434		434
Equity-based compensation		4	551		555		555
Increase of treasury share repurchase obligation under a share buyback trading	plan		-889		-889		-889
Transaction costs ²	. P		-39		-39		-39
Changes in non-controlling interests						-1	-1
Fair value adjustments on financial assets sold			17	-17			
Impact of change in ownership of							
consolidated entities			1		1	24	25
Other movements ³			29		29		29
Total of other equity movements	-25	31	-8 655	-17	-8 666	23	-8 643
Total equity at September 30, 2018	944	-69	80 155	-3 092	77 938	81	78 019

¹ The impact of change in accounting policies includes USD 60 million relating to IFRS 15 implementation and USD 177 million relating to IFRS 9 implementation (see Note 1 and 29 of the 2018 Annual report).

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

³ Impact of hyperinflationary economies

Consolidated statements of cash flows

Third quarter (unaudited)

illia quarter (unaddited)				
(USD millions)	Note	Q3 2019	Q3 2018	Change
Net income from continuing operations		2 041	1 882	159
Adjustments to reconcile net income from continuing operations to net cash flows from operating activities from continuing operati	ons			
Reversal of non-cash items and other adjustments	7	2 271	1 758	513
Dividends received from associated companies and others	<u>'</u>	0	1 730	-1
		32	68	-36
Interest received				
Interest paid		-134	-173	39
Other financial receipts		51	108	-57
Other financial payments		-9	-8	-1
Taxes paid 1		-235	-219	-16
Net cash flows from operating activities from continuing ope before working capital and provision changes	rations	4 017	3 417	600
Payments out of provisions and other net cash movements in non-current liabilities		-146	-208	62
Change in net current assets and other operating cash flow items	;	691	511	180
Net cash flows from operating activities from continuing operations		4 562	3 720	842
Net cash flows from operating activities from discontinued operations ¹			330	-330
Total net cash flows from operating activities		4 562	4 050	512
Purchase of property, plant and equipment		-357	-295	-62
Proceeds from sales of property, plant and equipment		-3	4	-7
Purchase of intangible assets		-205	-546	341
Proceeds from sales of intangible assets		140	286	-146
Purchase of financial assets		-69	-77	8
Proceeds from sales of financial assets		565	74	491
Purchase of other non-current assets		-10	-13	3
Proceeds from sales of other non-current assets		1	3	-2
Acquisitions of interests in associated companies, net ¹		-1	-81	80
Acquisitions and divestments of businesses, net	7	-3 460	-20	-3 440
Purchase of marketable securities and commodities		-69	-79	10
Proceeds from sales of marketable securities and commodities		67	43	24
Net cash flows used in investing activities from continuing		07		
operations		-3 401	-701	-2 700
Net cash flows from/used in investing activities from discontinued		U 701		
operations ²		3	-185	188
Total net cash flows used in investing activities		-3 398	-886	-2 512
Acquisition of treasury shares		-2 940	-1 013	-1 927
Proceeds from exercise of options and		-2 340	-1 013	-1 321
other treasury share transactions		5	1	4
Increase in non-current financial debts		93		93
Repayments of non-current financial debts		-186	-1	-185
Change in current financial debts		423	-603	1 026
Payments of lease liabilities, net		-92		-92
Receipts from finance sublease receivables		7		7
Impact of change in ownership of consolidated entities		-1	-7	6
Dividends paid to non-controlling interests and other financing				
cash flows		-2	157	-159
Net cash flows used in financing activities from continuing operations		-2 693	-1 466	-1 227
Net cash flows used in financing activities from discontinued operations ³		-20	-155	135
Total net cash flows used in financing activities		-2 713	-1 621	-1 092
Net change in cash and cash equivalents before		4	4 =	
effect of exchange rate changes		-1 549	1 543	-3 092
Effect of exchange rate changes on cash and cash equivalents		-64	11	-75
		-1 613	1 554	-3 167
Total net change in cash and cash equivalents		-1 013		
		9 991	12 446	-2 455

¹ In Q3 2018, the total net tax payment amounted to USD 336 million, of which USD 75 million was included in the line "Acquisitions of interests in associated companies, net" and USD 42 million was included in the line "Net cash flows from operating activities from discontinued operations."

² For additional information related to Q3 2019 "Net cash flows from/used in investing activities from discontinued operations", refer to Note 11.

Including USD 20 million (Q3 2018: USD 33 million) transaction cost payments directly attributable to the distribution (spin-off) of the Alcon business to Novartis shareholders (see Note 2)

Consolidated statements of cash flows

Nine months to September 30 (unaudited)

(USD millions)	Note	9M 2019	9M 2018	Change
Net income from continuing operations		6 018	11 580	-5 562
Adjustments to reconcile net income from continuing operations				
to net cash flows from operating activities from continuing operations	3			
Reversal of non-cash items and other adjustments	7	6 372	-861	7 233
Dividends received from associated companies and others		463	719	-256
Interest received		172	154	18
Interest paid		-540	-545	5
Other financial receipts		61	146	-85
Other financial payments		-25	-22	-3
Taxes paid 1		-1 195	-1 109	-86
Net cash flows from operating activities before working				
capital and provision changes from continuing operations		11 326	10 062	1 264
Payments out of provisions and other net cash movements in		000	470	400
non-current liabilities		-662	-472	-190
Change in net current assets and other operating cash flow items		-657	23	-680
Net cash flows from operating activities from continuing operat		10 007	9 613	394
Net cash flows from operating activities from discontinued operations	S '	78	893	-815
Total net cash flows from operating activities		10 085	10 506	-421
Purchase of property, plant and equipment		-918	-810	-108
Proceeds from sales of property, plant and equipment		809	55	754
Purchase of intangible assets		-703	-1 188	485
Proceeds from sales of intangible assets		421	702	-281
Purchase of financial assets		-223	-148	-75
Proceeds from sales of financial assets		742	138	604
Purchase of other non-current assets		-34	-26	-8
Proceeds from sales of other non-current assets		4	7	-3
Acquisitions and divestments of interests in associated companies, net 1		-4	12 919	-12 923
Acquisitions and divestments of businesses, net	7	-3 842	-11 879	8 037
Purchase of marketable securities and commodities		-3 042	-302	113
Proceeds from sales of marketable securities and commodities		2 495	334	2 161
Net cash flows used in investing activities from continuing		2 495	334	2 101
operations		-1 442	-198	-1 244
Net cash flows used in investing activities from discontinued				
operations ²		-1 102	-458	-644
Total net cash flows used in investing activities		-2 544	-656	-1 888
Dividends paid to shareholders of Novartis AG		-6 645	-6 966	321
Acquisition of treasury shares		-5 530	-1 787	-3 743
Proceeds from exercise options and				
other treasury share transactions		205	434	-229
Increase in non-current financial debts		93	2 856	-2 763
Denovments of non current financial debts				0.000
Repayments of non-current financial debts		-3 194	-366	-2 828
Change in current financial debts			-366 1 199	-2 828 -1 718
		-3 194		
Change in current financial debts		-3 194 -519 -183 7		-1 718
Change in current financial debts Payments of lease liabilities, net		-3 194 -519 -183 7		-1 718 -183
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables		-3 194 -519 -183 7 -6	1 199	-1 718 -183 7
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing cash flows		-3 194 -519 -183 7	1 199	-1 718 -183 7
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing		-3 194 -519 -183 7 -6	1 199 -14	-1 718 -183 7 8
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing cash flows Net cash flows used in financing activities from continuing operations Net cash flows from/used in financing activities from		-3 194 -519 -183 7 -6 69 -15 703	1 199 -14 417 -4 227	-1 718 -183 7 8 -348 -11 476
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing cash flows Net cash flows used in financing activities from continuing operations Net cash flows from/used in financing activities from discontinued operations ³		-3 194 -519 -183 7 -6 69 -15 703	1 199 -14 417 -4 227 -470	-1 718 -183 7 8 -348 -11 476
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing cash flows Net cash flows used in financing activities from continuing operations Net cash flows from/used in financing activities from discontinued operations Total net cash flows used in financing activities		-3 194 -519 -183 7 -6 69 -15 703	1 199 -14 417 -4 227	-1 718 -183 7 8 -348 -11 476
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing cash flows Net cash flows used in financing activities from continuing operations Net cash flows from/used in financing activities from discontinued operations ³ Total net cash flows used in financing activities Net change in cash and cash equivalents before		-3 194 -519 -183 7 -6 69 -15 703 3 279 -12 424	-14 417 -4 227 -470 -4 697	-1 718 -183 7 8 -348 -11 476 3 749 -7 727
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing cash flows Net cash flows used in financing activities from continuing operations Net cash flows from/used in financing activities from discontinued operations ³ Total net cash flows used in financing activities Net change in cash and cash equivalents before effect of exchange rate changes		-3 194 -519 -183 7 -6 69 -15 703 3 279 -12 424 -4 883	-14 417 -4 227 -470 -4 697 5 153	-1 718 -183 7 8 -348 -11 476 3 749 -7 727 -10 036
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing cash flows Net cash flows used in financing activities from continuing operations Net cash flows from/used in financing activities from discontinued operations Total net cash flows used in financing activities Net change in cash and cash equivalents before effect of exchange rate changes Effect of exchange rate changes on cash and cash equivalents		-3 194 -519 -183 7 -6 69 -15 703 3 279 -12 424 -4 883 -10	-14 417 -4 227 -470 -4 697 5 153 -13	-1 718 -183 7 8 -348 -11 476 3 749 -7 727 -10 036 3
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing cash flows Net cash flows used in financing activities from continuing operations Net cash flows from/used in financing activities from discontinued operations Total net cash flows used in financing activities Net change in cash and cash equivalents before effect of exchange rate changes Effect of exchange rate changes on cash and cash equivalents Total net change in cash and cash equivalents		-3 194 -519 -183 7 -6 69 -15 703 3 279 -12 424 -4 883 -10 -4 893	-14 417 -4 227 -470 -4 697 5 153 -13 5 140	-1 718 -183 7 8 -348 -11 476 3 749 -7 727 -10 036 3 -10 033
Change in current financial debts Payments of lease liabilities, net Receipts from finance sublease receivables Impact of change in ownership of consolidated entities Dividends paid to non-controlling interests and other financing cash flows Net cash flows used in financing activities from continuing operations Net cash flows from/used in financing activities from discontinued operations ³ Total net cash flows used in financing activities Net change in cash and cash equivalents before effect of exchange rate changes Effect of exchange rate changes on cash and cash equivalents		-3 194 -519 -183 7 -6 69 -15 703 3 279 -12 424 -4 883 -10	-14 417 -4 227 -470 -4 697 5 153 -13	-1 718 -183 7 8 -348 -11 476 3 749 -7 727 -10 036 3

¹ In 2019, the total net tax payment amounted to USD 1 233 million, of which USD 38 million is included in the line "Net cash flows from operating activities from discontinued operations." In 2018, the total net tax payment amounted to USD 1 319 million, of which USD 75 million was included in the line "Acquisitions and divestments of interests in associated companies, net" and USD 135 million was included in the line "Net cash flows from operating activities from discontinued operations."

included in the line "Net cash flows from operating activities from discontinued operations."

For additional information related to 9M 2019 "Net cash flows used in investing activities from discontinued operations."

Including USD 190 million (2018: USD 41 million) transaction cost payments directly attributable to the distribution (spin-off) of the Alcon business to Novartis shareholders (see Note 2)

Notes to the Condensed Interim Consolidated Financial Statements for the three-month and nine-month period ended September 30, 2019 (unaudited)

1. Basis of preparation

These Condensed Interim Consolidated Financial Statements for the three-month and nine-month period ended September 30, 2019, were prepared in accordance with International Accounting Standard 34 *Interim Financial Reporting* and accounting policies set out in the 2018 Annual Report published on January 30, 2019.

2. Selected critical accounting policies

The Group's principal accounting policies are set out in Note 1 to the Consolidated Financial Statements in the 2018 Annual Report and conform with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

The presentation of financial statements requires management to make subjective and complex judgments that affect the reported amounts. Because of the inherent uncertainties, actual outcomes and results may differ from management's assumptions and estimates.

As disclosed in the 2018 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.

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 shareholder approval required the recognition of a distribution liability at the fair value of the Alcon business to be distributed to Novartis AG shareholders. This 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 are classified as "Level 3" in the fair value hierarchy. Note 1 and Note 10 to the Consolidated Financial Statements in the 2018 Annual Report provide additional information on key assumptions that are highly sensitive in the estimation of fair values using valuation techniques. Due to these factors and inherent uncertainties in the use of estimates, actual outcomes and results could vary significantly.

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. Refer to Note 3 and Note 11 for further details.

Transaction costs recorded in Equity

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

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 December 31, 2018, consolidated balance sheet is not restated.

Distribution liability

The distribution liability was recorded at the date of shareholder approval for the distribution of the business assets to the shareholders. The Group has elected to measure the distribution liability at the fair value of the business assets taken as a whole to be distributed to shareholders. As a result, the distribution liability was recognized based on the fair value of the Alcon business. The distribution liability was recognized through a reduction in retained earnings. It is 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 is 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 distribution settlement date, any resulting gain, which is measured as the excess amount of the distribution liability over the then carrying value of the assets of the business distributed, is recognized on the line "Gain on distribution of Alcon Inc. to Novartis AG shareholders" in the income statement of discontinued operations.

New IFRS standards effective as of January 1, 2019

IFRS 16 LEASES

IFRS 16 Leases substantially changed the financial statements as the majority of leases for which the company is the lessee became on-balance sheet liabilities with corresponding right-of-use assets also recognized on the balance sheet. The lease liability reflects the net present value of the remaining lease payments, and the right-of-use asset corresponds to the lease liability, adjusted for payments made before the commencement date, lease incentives and other items related to the lease agreement. The standard replaces IAS 17 Leases and related interpretations.

Upon adoption of the new standard, a portion of the annual operating lease costs, which was previously fully recognized as a functional expense, is recorded as interest expense. In addition, the portion of the lease payments which represents the reduction of the lease liability is recognized in the cash flow statement as an outflow from financing activities, which was previously fully recognized as an outflow from operating activities. Given the leases involved and the current low interest rate environment, these effects are not significant to the presentation of our consolidated income statement as well as consolidated cash flows from operating activities and from financing activities.

The Group implemented the new standard on January 1, 2019, and applied the modified retrospective method, with right-of-use assets measured at an amount equal to the lease liability, adjusted by the amount of the prepaid or accrued lease payments relating to those leases recognized in the balance sheet immediately before the date of initial application and will not restate prior years.

Results of our impact assessment:

The undiscounted operating lease commitments as of December 31, 2018, disclosed in Note 27 to the Consolidated Financial Statements in the Annual Report 2018, amounted to USD 3.6 billion. This includes approximately USD 0.1 billion of leases with a commencement date in 2019 and short-term leases, as well as low-value leases that are recognized from January 1, 2019, upon adoption of IFRS 16, on a straight-line basis as expense in profit and loss. This also includes USD 0.2 billion lease commitments related to the Alcon Division, which is attributable to discontinued operation in 2019. For the remaining lease commitments attributable to continuing operations of USD 3.3 billion, the Group recognized on January 1, 2019, lease liabilities of USD 1.74 billion and right-of-use assets USD 1.55 billion (after adjustments for the USD 0.18 billion prepayments and accrued lease payments recognized as at December 31, 2018). For the lease commitments attributable to discontinued operations, the Group recognized on January 1, 2019, lease liabilities and right-of-use assets of USD 0.2 billion. This does not include the discontinued operations right-of-use assets and lease liability on finance lease agreements of USD 75 million and USD 89 million, respectively. There was an insignificant impact to retained earnings upon adoption of IFRS 16 of USD 3 million that arose from subleases that were

accounted for as operating lease agreements under IAS 17 and are accounted for as finance leases under IFRS 16.

As a lessor, the Group had no significant impact upon adoption.

For further information on the impact of adoption and additional disclosures of IFRS 16 Leases, see Note 6.

The Group has updated accounting policies, effective January 1, 2019, upon adoption of IFRS 16 – Leases are as follows:

Leases

As lessee, the Group assesses whether a contract contains a lease at inception of a contract and upon a modification of a contract. The Group elected to allocate the consideration in the contract to the lease component and non-lease component on the basis of its relative stand-alone price.

The Group recognizes a right-of-use asset and a corresponding lease liability for all arrangements in which it is a lessee, except for leases with a term of twelve months or less (short-term leases) and low value leases. For these short-term and low value leases, the Group recognizes the lease payments as an operating expense on a straight-line basis over the term of the lease.

The lease liability is initially measured at the present value of the future lease component payments, as from the commencement date of the lease. The lease payments are discounted using the interest rate implicit in the lease or, if not readily determinable, the Novartis incremental borrowing rate in the respective markets.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever there is, a change to the lease terms or expected payments under the lease, or a modification that is not accounted for as a separate lease.

The right-of-use assets are initially recognized on the balance sheet at cost, which comprises the amount of the initial measurement of the corresponding lease liability, adjusted for any lease payments made at or prior to the commencement date of the lease, any lease incentive received and any initial direct costs incurred by Novartis, and expected costs for obligations to dismantle and remove right-of-use assets when they are no longer used.

Right-of-use assets are depreciated on a straight-line basis from the commencement date of the lease over the shorter of the useful life of the right-of-use asset or the end of the lease term.

Right-of-use assets are assessed for impairment whenever there is an indication that the balance sheet carrying amount may not be recoverable using cash flow projections for the useful life.

3. Significant transactions

Significant transaction 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). Through the Distribution, each Novartis AG shareholder received 1 Alcon Inc. share for every 5 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 completion of the spin-off of the Alcon business on April 9, 2019, amounted to USD 4.7 billion consisting of:

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

¹ See Note 11 for additional information.

Significant transaction closed in 2019 – Continuing operations

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 NLPR3 antagonists. The NLPR3 antagonists portfolio consists of one clinical and two pre-clinical 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 pre-clinical stage gutdirected molecule for the treatment of inflammatory bowel disease; and a pre-clinical stage central nervous system (CNS)-penetrant molecule.

The previously held interest of 9% is adjusted to its preliminary 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 preliminary 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 preliminary net present 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 preliminary purchase price allocation resulted in net identifiable assets of USD 355 million, mainly intangibles, and goodwill of USD 39 million. 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 an USD 3.4 billion upfront payment, customary purchase price adjustments of USD 0.1 billion and the potential milestone payments 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 is USD 3.7 billion. The amount consists of an initial cash payment of USD 3.5 billion and the net present value of the contingent consideration of USD 0.2 billion, which Takeda is eligible to receive upon the achievement of specified commercialization milestones.

The preliminary 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 0.1 billion. Management estimates net sales for the nine-month period ended September 30, 2019, would have amounted to USD 0.2 billion, had the business been acquired at the beginning of the 2019 reporting period. Results of operations since the date of acquisition were not material.

For significant transactions closed in 2019 for Discontinued operations, see Note 11.

Significant pending transaction

Sandoz - Divestment of US dermatology business and generic US oral solids portfolio

On September 6, 2018, Novartis announced it has agreed to sell selected portions of its Sandoz US portfolio, specifically the Sandoz US dermatology business and generic US oral solids portfolio, to Aurobindo Pharma USA Inc. (Aurobindo), for USD 0.8 billion in cash and potential earn-outs.

The Sandoz US portfolios to be sold to Aurobindo include approximately 300 products as well as additional development projects. The sale includes the Sandoz US generic and branded dermatology businesses as well as its dermatology development center. As part of the transaction, Aurobindo will acquire the manufacturing facilities in Wilson, North Carolina, and in Hicksville and Melville, New York.

The transaction is expected to be completed in the coming months, pending regulatory approval. As the fair value of the consideration (USD 0.8 billion) less costs to sell was below the carrying value of

the divested business (USD 1.0 billion, which includes an allocation of Sandoz goodwill of USD 0.2 billion), an impairment of the net assets to be divested in the amount of USD 0.2 billion was recognized as a reduction to goodwill.

In the Group's consolidated balance sheet at September 30, 2019 and at December 31, 2018, the business assets and liabilities of the Sandoz US dermatology business and generic US oral solids portfolio are separately shown as assets and liabilities of disposal group held for sale.

The disposal group, assets and liabilities classified as held for sale consist of the following:

(USD millions)	Sep 30, 2019	Dec 31, 2018
Assets of disposal group classified as held for sale		
Property, plant and equipment	163	148
Intangible assets other than goodwill	474	478
Deferred tax assets	10	8
Other non-current assets	2	1
Inventories	186	165
Other current assets	10	7
Total	845	807
Liabilities of disposal group classified as held for sale		
Deferred tax liabilities	2	2
Provisions and other non-current liabilities	4	4
Provisions and other current liabilities	18	45
Total	24	51

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

Significant transactions in 2018

Innovative Medicines - Acquisition of Advanced Accelerator Applications S.A.

On October 30, 2017, Novartis entered into a binding memorandum of understanding with Advanced Accelerator Applications S.A. (AAA), a company headquartered in Saint-Genis-Pouilly, France, under which Novartis agreed to commence a tender offer for 100% of the share capital of AAA subject to certain conditions. Novartis commenced the tender offer on December 7, 2017, to purchase all of the outstanding ordinary shares for a price of USD 41 per share and USD 82 per American Depositary Share (ADS), each representing two ordinary shares of AAA, which expired on January 19, 2018. The offer valued AAA's equity at USD 3.9 billion, on a fully diluted basis.

As of January 19, 2018, the expiration date of the tender offer, approximately 97% of the thenoutstanding fully diluted ordinary shares, including ordinary shares represented by ADSs (hereinafter collectively referred to as "the outstanding shares"), were validly tendered. On January 22, 2018, Novartis accepted and paid USD 3.9 billion for the outstanding shares tendered in the offer. On January 22, 2018, Novartis commenced a subsequent offering period that expired on January 31, 2018. As of the expiration of the subsequent offering period, an additional 1.8% of the outstanding shares were validly tendered. Novartis accepted and paid approximately USD 60 million, resulting in an increase in Novartis ownership in AAA to 98.7%.

The fair value of the total purchase consideration was USD 3.9 billion. The purchase price allocation resulted in net identifiable assets of approximately USD 1.9 billion, consisting of USD 2.5 billion intangible assets, USD 0.6 billion net deferred tax liabilities, and goodwill of approximately USD 2.0 billion. In 2018, from the date of the acquisition the business generated net sales of USD 0.4 billion. Management estimates net sales for the entire year 2018 would have amounted to USD 0.4 billion had AAA been acquired at the beginning of 2018. The 2018 results from operations since the date of the acquisition were not material.

As of December 31, 2018, Novartis held 99.1% of the then-outstanding fully diluted ordinary shares, including ordinary shares represented by ADSs.

AAA is a radiopharmaceutical company that develops, produces and commercializes molecular nuclear medicines – including Lutathera (USAN: lutetium Lu 177 dotatate/INN: lutetium (177Lu) oxodotreotide), a first-in-class radioligand therapy product for neuroendocrine tumors – and a portfolio of diagnostic products. Radiopharmaceuticals, such as Lutathera, are unique medicinal formulations containing radioisotopes, which are used clinically for both diagnosis and therapy.

Innovative Medicines - Acquisition of AveXis, Inc.

On April 6, 2018, Novartis entered into an agreement and plan of merger with AveXis, Inc., a US-based clinical stage gene therapy company, under which Novartis commenced on April 17, 2018, a tender offer to purchase all outstanding common stock of AveXis, Inc. for USD 218 per share in cash. On May 15, 2018, Novartis completed the acquisition of the common stock of AveXis, Inc. and paid a total of USD 8.7 billion.

The fair value of the total purchase consideration was USD 8.7 billion. The purchase price allocation resulted in net identifiable assets of approximately USD 7.2 billion, consisting of USD 8.5 billion intangible assets, USD 1.6 billion net deferred tax liabilities and other net assets of USD 0.3 billion, and goodwill of approximately USD 1.5 billion. The 2018 results of operations since the date of acquisition were not material.

AveXis, Inc. is focused on developing and commercializing novel treatments for patients suffering from rare and life-threatening neurological genetic diseases. AveXis, Inc.'s initial product candidate, AVXS-101, is a proprietary gene therapy currently in development for the treatment of spinal muscular atrophy (SMA) type 1 – the leading genetic cause of infant mortality – and SMA types 2 and 3. In addition, AveXis, Inc. has a pipeline of other novel treatments for rare neurological diseases, including Rett syndrome (RTT) and a genetic form of amyotrophic lateral sclerosis (ALS) caused by mutations in the superoxide dismutase 1 (SOD1) gene.

Innovative Medicines - Acquisition of Endocyte, Inc.

On October 18, 2018, Novartis entered into an agreement and plan of merger with Endocyte, a US-based bio-pharmaceutical company focused on developing targeted therapeutics for cancer treatment. The transaction was completed on December 21, 2018. Under the terms of the agreement, Novartis acquired all outstanding shares of Endocyte common stock for USD 24 per share. The total consideration amounted to USD 2.1 billion.

The fair value of the total purchase consideration was USD 2.1 billion. The preliminary purchase price allocation resulted in net identifiable assets of approximately USD 1.5 billion, consisting of USD 1.4 billion intangible assets, USD 0.2 billion net deferred tax liabilities and other net assets of USD 0.3 billion, and goodwill of approximately USD 0.6 billion. The purchase price allocation remains preliminary and will be finalized within the 12-month purchase price allocation measurement period, which started as of the acquisition date. Adjustments made to the December 31, 2018, preliminary purchase price allocation were not material and the Group currently does not expect any potential additional revisions to be material. The 2018 results from operations since the date of the acquisition were not material.

Endocyte uses drug conjugation technology to develop targeted therapies with companion imaging agents, including 177Lu-PSMA-617, a potential first-in-class investigational radioligand therapy for the treatment of metastatic castration-resistant prostate cancer (mCRPC).

Corporate – Divestment of 36.5% stake in GlaxoSmithKline Consumer Healthcare Holdings Ltd. On March 27, 2018, Novartis entered into an agreement with GlaxoSmithKline plc (GSK) to divest its 36.5% stake in GlaxoSmithKline Consumer Healthcare Holdings Ltd. to GSK for USD 13.0 billion in cash. As a result, Novartis discontinued the use of equity method accounting starting from April 1, 2018.

On June 1, 2018, the transaction closed and Novartis realized a pre-tax gain of USD 5.8 billion, recorded in income from associated companies.

4. Summary of equity attributable to Novartis AG shareholders

Issued share capital and reserves attributable to Novartis AG Number of outstanding shares shareholders (in millions) (in USD millions) 2019 2018 9M 2019 9M 2018 Change Change Balance at beginning of year 2 311.2 2 317.5 78 614 74 168 4 446 -6.3 Impact of change in accounting policy 1 3 60 -57 Restated equity at January 1 78 617 74 228 4 389 Shares acquired to be cancelled -60.3 -21.2 -39.1 -5 351 -1 684 -3 667 Other share purchases -1.7 -1.4 -0.3 -156 -107 -49 Exercise of options and employee transactions 5.5 7.8 -2.3 200 434 -234 Equity-based compensation 2.6 9.9 7.3 641 555 86 Shares delivered to Alcon employees as a result of the Alcon spin-off 32 32 Taxes on treasury share transactions² -189 -189 Decrease/(increase) of treasury share repurchase obligation under a share buyback trading plan 284 -889 1 173 Dividends to shareholders of Novartis AG -6 645 -6 966 321 Dividend in kind³ -23 434 -23 434 Net income of the period attributable to shareholders of Novartis AG 10 607 11 416 -809 Other comprehensive income attributable to shareholders of Novartis AG 960 -2 801 -1841 Transaction costs 4 -253 -39 -214 Impact of change in ownership of consolidated entities -3 1 -4 Other movements 5 15 29 -14 **Balance at September 30** 2 264.6 2 310.0 -45.4 52 524 77 938 -25 414

In 2018, the impact of change in accounting policy includes USD 60 million relating to the implementation of IFRS 15 – Revenue from Contracts with Customers implementation and USD 177 million relating to the implementation IFRS 9 – Financial instruments (see Note 1 and 29 of the 2018 Annual report)

² Included in 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.

⁴ Transaction costs directly attributable to the distribution (spin-off) of the Alcon business to Novartis AG shareholders (see Note 2)

5 Impact of hyperinflationary economies

¹ In 2019, the impact of change in accounting policy includes USD 3 million related to the implementation of IFRS 16 – Leases (see Notes 2 and 6 for further details).

³ Fair value of the dividend-in-kind of Alcon Inc. shares to Novartis AG shareholders and ADR (American Depositary Receipt) holders approved at the 2019 Annual General Meeting held on February 28, 2019. Distribution was effected on April 8, 2019, whereby each Novartis AG shareholders and ADR holder received 1 Alcon Inc. share for every 5 Novartis AG shares/ADRs they held on April 8, 2019, close of business (see Note 2, 3 and 11 for further details)

5. Financial instruments

Fair value by hierarchy

The following table illustrates the three hierarchical levels for valuing financial instruments at fair value and those measured at amortized cost as of September 30, 2019 and December 31, 2018. For additional information on the hierarchies and other matters, please refer to the Consolidated Financial Statements in the 2018 Annual Report, published on January 30, 2019.

	Leve	el 1	Leve	el 2	Level 3		Valued at amortized cost or cost		Total	
(USD millions)	Sep 30, 2019	Dec 31, 2018	Sep 30, 2019	Dec 31, 2018	Sep 30, 2019	Dec 31, 2018	Sep 30, 2019	Dec 31, 2018	Sep 30, 2019	Dec 31, 2018
Debt securities	2019	302	24	23	2019	2010	2013	2010	2019	325
Fund investments	37	35	24						37	35
	37		24	23					61	360
Total marketable securities	31	337	24	23					61	360
Time deposits and short term investments with original maturity more than 90 days							81	2 087	81	2 087
Derivative financial instruments			86	130					86	130
Accrued interest on debt securities								12		12
Total marketable securities, time deposits and derivative financial instruments	37	337	110	153			81	2 099	228	2 589
Financial investments and long-term loans										
Financial investments	1 238	698			639	488			1 877	1 186
Fund investments					223	251			223	251
Contingent consideration receivables					409	396			409	396
Long-term loans and receivables from customers and finance lease, advances, security deposits							269	512	269	512
Financial investments and long-term loans	1 238	698			1 271	1 135	269	512	2 778	2 345
Associated companies at fair value through profit or loss					174	145			174	145
Contingent consideration payables					-1 065	-907			-1 065	-907
Other financial liabilities					-36	-10			-36	-10
Derivative financial instruments			-154	-58					-154	-58
Total financial liabilities at fair value			-154	-58	-1 101	-917			-1 255	-975

There were no significant transfers from one level to the other and no significant transactions associated with level 3 financial instruments.

The fair value of straight bonds amounted to USD 23.7 billion at September 30, 2019 (USD 25.4 billion at December 31, 2018) compared to the balance sheet value of USD 21.9 billion at September 30, 2019 (USD 25.3 billion at December 31, 2018). 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 financial investments and long-term loans of USD 2.8 billion at September 30, 2019 (USD 2.3 billion at December 31, 2018) is included in line "Financial and other non-current assets" of the consolidated balance sheets.

During the third quarter of 2019, Alcon Inc. shares with a fair value of USD 543 million (USD 656 million in the nine-month period ended September 30, 2019) were sold and the USD 39 million (USD 48 million in the nine-month period ended September 30, 2019) gain on disposal was transferred from other comprehensive income to retained earnings.

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

6. Right-of-use assets and lease liabilities

Note 2 explains the changes and new accounting policy introduced on January 1, 2019, resulting from the adoption of the new accounting standards IFRS 16 – Leases.

On transition to IFRS 16, the Group elected to apply the practical expedient to not reassess whether a contract is, or contains, a lease at January 1, 2019, the implementation date of IFRS 16. As a result, at the date of implementation, the Group applied IFRS 16 only to contracts that were previously identified as leases under IAS 17 – Leases and related interpretations, and the definition of a lease under IFRS 16 was applied only to contracts entered into or changed on or after 1 January 2019.

The impact on retained earnings upon implementation of IFRS 16 was USD 3 million arising from subleases that were accounted for as operating lease agreements under IAS 17 and are accounted for as finance leases under IFRS 16.

The Group has entered into various fixed-term leases, mainly for vehicles and real estate.

The lease liabilities recorded in continuing operations on January 1, 2019, were USD 1.7 billion and the right-of-use assets were USD 1.6 billion.

Reconciliation of lease commitment disclosed on December 31, 2018, and lease liabilities recorded in continuing operations on January 1, 2019, are as follows:

(USD millions)	
Operating lease commitments December 31, 2018 ¹	3 612
Operating lease commitments December 31, 2018 related to discontinued operations	-222
Operating lease commitments December 31, 2018 related to continuing operations	3 390
Recognition exemption for short term leases	-30
Recognition exception for low value leases	-12
Lease arrangements with commencement date after December 31, 2018	-65
Undiscounted future lease payments continuing operations as of January 1, 2019	3 283
Effect of discounting	-1 547
Lease liabilities as of January 1, 2019 ²	1 736

¹ As reported in Annual Report 2018 Note 27

The right-of-use assets of continuing operations at January 1, 2019, by underlying class of asset comprise the following:

Right-of-use assets ¹	1 554
Machinery and equipment and other assets	23
Vehicles	147
Buildings	848
Land	536
(USD millions)	January 1, 2019

¹ Right-of-use assets were lower than the lease liabilities at the date of implementation of IFRS 16 by USD 182 million, due to adjustments made for prepayments and accrued lease payments recognized at December 31, 2018.

² Weighted average incremental borrowing rate of 3.5% was applied at January 1, 2019, the date of implementation of IFRS 16 – Leases.

The lease liabilities recorded in discontinued operations on January 1, 2019, were USD 286 million and the right-of-use assets were USD 276 million, including USD 89 million and USD 75 million, respectively, for the previously reported finance lease obligations.

As a result of applying the modified retrospective method at the date of implementation of IFRS 16 on January 1, 2019, whereby the right-of-use assets were measured at the amount equal to the lease liabilities, there is no impact to the reported deferred tax assets and deferred tax liabilities on the consolidated balance sheet, as the corresponding deferred tax assets and deferred tax liabilities attributable to the lease liabilities and right-of-use assets relate to income taxes levied by the same taxation authority within the same legal entity, and were therefore offset.

The following table summarizes the movements of the right-of-use assets of continuing operations:

(USD millions)

(OCD Trimono)	
Right-of-use assets at January 1, 2019	1 554
Additions ¹	428
Depreciation charge	-227
Lease contract terminations ²	-63
Currency translation effects	-10
Total right-of-use assets at September 30, 2019	1 682

No impairments were recorded in the period.

The right-of-use assets carrying value and depreciation charge of continuing operations at September 30, 2019, are shown below by underlying class of asset:

		Depreciation	on charge	
(USD millions)	September 30, 2019 Carrying value	Q3 2019	9M 2019	
Land	538	2	10	
Buildings	989	50	147	
Vehicles	133	24	65	
Machinery and equipment and other assets	22	2	5	
Total right-of-use assets	1 682	78	227	

The lease liabilities of continuing operations at September 30, 2019, amounted to USD 2.0 billion and its breakdown by maturity is as follows:

(USD millions)	September 30, 2019
Less than one year	266
Between one and two years	201
Between two and three years	163
Between three and four years	138
Between four and five years	121
After five years	1 079
Total lease liabilities	1 968

The following table provides additional disclosures related to right-of-use assets and lease liabilities of continuing operations:

¹ Additions in Q3 amounted to USD 29 million.

² Lease contract terminations represent modifications to existing leases that result in reductions to the right-of-use assets, which includes contract terminations.

(USD millions)	Q3 2019	9M 2019
Interest expense on lease liabilities 1	18	50
Expense on short-term leases ²	2	6
Expense on low-value leases ²	3	7
Total cash outflow for leases	108	219
Thereof repayment of lease liabilities ³	92	183
Gain arising from sale and leaseback transaction	0	468

¹ Weighted average interest rate is 3.2% and 3.6% for Q3 2019 and 9M 2019, respectively.

The net investment held and the income from subleasing right-of-use assets was not significant.

In the second quarter 2019, the Group completed a sale and leaseback transaction for certain property plant and equipment as part of its plans to consolidate sites. The transaction resulted in net cash flow inflows of USD 0.6 billion and the recognition of USD 86 million of lease liabilities, and USD 30 million of right-of-use assets. The right-of-use assets value reflects the proportion of the property, plant and equipment retained for a period of 1 to 5 years, with two 5 year extension periods for certain right-ofuse assets, and the liabilities reflect the net present value of future lease payments. The net gain on the sale and leaseback transaction amounted to USD 0.5 billion.

Following the completion of the Alcon Distribution (spin-off) on April 9, 2019, the right-of-use assets and lease liabilities classified as discontinued operations were derecognized (refer to Note 2, 3 and 11 for further details).

7. Details to the consolidated statements of cash flows

Reversal of non-cash items and other adjustments

(USD millions)	Q3 2019	Q3 2018	Change
Depreciation, amortization and impairments on:			
Property, plant and equipment	524	454	70
Intangible assets	878	911	-33
Financial assets ¹	-29	57	-86
Non-cash change in provisions and other non-current liabilities	382	178	204
Gains on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	-17	-368	351
Equity-settled compensation expense	216	169	47
Income from associated companies	-253	-213	-40
Taxes	366	369	-3
Net financial expense	204	201	3
Total	2 271	1 758	513

¹ Includes fair value adjustments

Cash flows from short-term and low value leases are included within total net cash flows from operating activities
 Reported as cash outflows used in financing activities net of lease incentives received of USD 33 million in 9M 2019 (Q3 2019: USD 4

There were no variable lease payments not included in the measurement of the lease liabilities.

(USD millions)	9M 2019	9M 2018	Change
Depreciation, amortization and impairments on:			
Property, plant and equipment	1 392	1 307	85
Intangible assets	2 497	2 268	229
Financial assets ¹	-49	-49	0
Non-cash change in provisions and other non-current liabilities	1 400	425	975
Gains on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	-701	-779	78
Equity-settled compensation expense	588	506	82
Income from associated companies ²	-509	-6 297	5 788
Taxes	1 163	1 182	-19
Net financial expense	591	576	15
Total	6 372	-861	7 233

Includes fair value adjustments

Cash flows arising from acquisitions and divestments of businesses, net

(USD millions)	Q3 2019	Q3 2018	9M 2019	9M 2018
Net assets recognized as a result of business combinations	-3 651		-4 124	-11 848
Fair value of previously held equity interests			33	
Receivables and payables contingent consideration, net	166		242	-5
Other payments and deferred consideration, net			-3	-37
Cash flows used for acquisitions of businesses	-3 485		-3 852	-11 890
Cash flows from/used in divestments of businesses ¹	25	-20	10	11
Cash flows used for acquisitions and divestments of businesses, net	-3 460	-20	-3 842	-11 879

¹ In 2019 the USD 10 million (Q3 2019: USD 25 million) includes USD 19 million (Q3 2019: USD 4 million) net cash outflows from previous years divestments and USD 29 million net cash inflows in the current year quarter from business divestments in 2019. The net identifiable assets of the 2019 divested businesses amounts to USD 63 million, comprised of non-current asset of USD 65 million, current assets of USD 9 million, non-current liabilities USD 7 million and current liabilities of USD 4 million. In 2018, the USD 11 million represents the net cash inflows from previous years divestments (Q3 2018: USD 20 million net cash outflows).

For net cash flows used in investing activities from discontinued operations, see Note 11.

² 2018 includes a reversal of a pre-tax gain (USD 5.8 billion) recognized from the divestment of the investment in GSK Consumer Healthcare Holdings Ltd. (see Note 3). The net cash proceed of USD 13.0 billion from the divestment was included in the consolidated statements of cash flows in line "Acquisitions and divestments of interests in associated companies, net."

8. Acquisitions of businesses

(USD millions)	9M 2019	9M 2018
Property, plant and equipment	44	135
Currently marketed products	3 550	2 230
Acquired research and development	433	8 584
Other intangible assets	0	1
Deferred tax assets	52	242
Financial and other assets	8	17
Inventories	186	17
Trade receivables and other current assets	4	81
Cash and cash equivalents		809
Deferred tax liabilities	-123	-2 656
Current and non-current financial debts	-2	-14
Trade payables and other liabilities	-167	-431
Net identifiable assets acquired	3 985	9 015
Acquired cash and cash equivalents		-809
Non-controlling interests		-27
Goodwill	139	3 669
Net assets recognized as a result of business combinations	4 124	11 848

9. 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 19 to the Consolidated Financial Statements in our 2018 Annual Report and 2018 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 October 21, 2019 of significant developments in those proceedings, as well as any new significant proceedings commenced since the date of the 2018 Annual Report and 2018 Form 20-F.

INVESTIGATIONS AND RELATED LITIGATIONS

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 for the S.D.N.Y. The complaint, as subsequently amended, asserts federal False Claims Act and common law claims with respect to speaker programs and other promotional activities for certain NPC cardiovascular medications (including *Lotrel*, *Starlix* and *Valturna*) allegedly serving as mechanisms to provide kickbacks to healthcare professionals from 2002 to 2011. It seeks damages and disgorgement of Novartis profits from the alleged unlawful conduct which, based on the government's calculation, with trebling and penalties could exceed USD 1 billion. Also in 2013, New York State filed a civil complaint in intervention asserting similar claims. Neither government complaint in intervention adopted the individual relator's claims with respect to off-label promotion of *Valturna*, which were subsequently dismissed with prejudice by the court. The individual relator continues to litigate the kickback claims on behalf of other states and municipalities. Novartis is engaged in settlement discussions to resolve the above-described claims and has recorded a provision in the amount of USD 0.7 billion in Q2 2019.

In addition to the matter described above, there have been other developments in the other legal matters described in Note 19 to the Consolidated Financial Statements contained in our 2018 Annual Report and 2018 Form 20-F.

The developments during the third quarter of 2019 do not significantly affect the assessment of management concerning the adequacy of the total provisions recorded for legal proceedings.

10. 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; Neuroscience; Immunology, Hepatology and Dermatology; 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 pharmaceuticals to third parties. Retail Generics includes the areas of cardiovascular, central nervous system, dermatology, gastrointestinal and hormonal therapies, metabolism, oncology, ophthalmics, pain and respiratory, as well as finished dosage form 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 Annual Report 2018.

Following the February 28, 2019, shareholders' approval of the spin-off of the Alcon business, the Group reported its financial results for the current and prior years as "continuing operations" and "discontinued operations" (refer to Notes 2, 3 and 11 for further details).

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

Discontinued operations include 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 Note 2, 3 and 11).

Segmentation – Consolidated income statement – Third quarter

	Innov Media		Sandoz		Corporate (including eliminations)		Gro	un
(USD millions)	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018
Net sales to third parties from continuing operations	9 688	8 596	2 484	2 420	4, 2, 1, 1		12 172	11 016
Sales to continuing and discontinued segments	190	206	42	49	-232	-227		28
Net sales from continuing operations	9 878	8 802	2 526	2 469	-232	-227	12 172	11 044
Other revenues	295	299	7	38	8	5	310	342
Cost of goods sold	-2 679	-2 341	-1 354	-1 364	257	242	-3 776	-3 463
Gross profit from continuing operations	7 494	6 760	1 179	1 143	33	20	8 706	7 923
Selling, general and administration	-2 868	-2 614	-532	-534	-149	-113	-3 549	-3 261
Research and development	-2 002	-1 951	-197	-196			-2 199	-2 147
Other income	86	354	40	186	70	56	196	596
Other expense	-306	-365	-299	-241	-191	-266	-796	-872
Operating income from continuing operations	2 404	2 184	191	358	-237	-303	2 358	2 239
as % of net sales	24.8%	25.4%	7.7%	14.8%			19.4%	20.3%
Income from associated companies			1	1	252	212	253	213
Interest expense							-216	-229
Other financial income and expense, net							12	28
Income before taxes from continuing operations							2 407	2 251
Taxes							-366	-369
Net income from continuing operations							2 041	1 882
Net loss from discontinued operations before gain on distribution of Alcon Inc. to Novartis AG shareholders								-258
Net loss from discontinued operations								-258
Net income							2 041	1 624

Segmentation - Consolidated income statement - Nine months to September 30

	Innovative				Corporate			
	Medic	ines	San	doz	(including e	iminations)	Gro	ир
(USD millions)	9M 2019	9M 2018	9M 2019	9M 2018	9M 2019	9M 2018	9M 2019	9M 2018
Net sales to third parties from continuing operations	27 794	25 870	7 248	7 400			35 042	33 270
Sales to continuing and discontinued segments	616	551	118	140	-681	-630	53	61
Net sales from continuing operations	28 410	26 421	7 366	7 540	-681	-630	35 095	33 331
Other revenues	806	807	41	48	19	16	866	871
Cost of goods sold	-7 230	-6 973	-3 945	-4 166	742	667	-10 433	-10 472
Gross profit from continuing operations	21 986	20 255	3 462	3 422	80	53	25 528	23 730
Selling, general and administration	-8 432	-7 947	-1 644	-1 729	-388	-364	-10 464	-10 040
Research and development	-5 960	-5 665	-589	-590			-6 549	-6 255
Other income	1 008	862	122	426	258	177	1 388	1 465
Other expense	-1 525	-934	-605	-434	-510	-491	-2 640	-1 859
Operating income from continuing operations	7 077	6 571	746	1 095	-560	-625	7 263	7 041
as % of net sales	25.5%	25.4%	10.3%	14.8%			20.7%	21.2%
Income from associated companies	1		2	5	506	6 292	509	6 297
Interest expense							-647	-684
Other financial income and expense, net							56	108
Income before taxes from continuing operations							7 181	12 762
Taxes							-1 163	-1 182
Net income from continuing operations							6 018	11 580
Net loss from discontinued operations before gain on distribution of Alcon Inc.								
to Novartis AG shareholders							-101	-160
Gain on distribution of Alcon Inc. to Novartis AG shareholders							4 691	
Net income/loss from discontinued operations							4 590	-160
Net income							10 608	11 420

Segmentation – Additional consolidated balance sheet disclosure¹

	Innovative				Corporate							
	Medicines		Sandoz		Alcon		(including eliminations)		Gro	up		
	Sep 30,	Dec 31,	Sep 30,	Dec 31,	Sep 30,	Dec 31,	Sep 30,	Dec 31,	Sep 30,	Dec 31,		
(USD millions)	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018		
Net operating assets	56 617	53 999	13 372	13 951		24 007			72 029	94 876		
Included in net operating assets are:												
Property, plant and equipment	9 466	10 098	1 897	2 159		2 878	515	561	11 878	15 696		
Goodwill	18 636	18 551	7 663	7 837		8 899	7	7	26 306	35 294		
Intangible assets other than goodwill	28 017	26 042	1 626	1 875		10 679	51	123	29 694	38 719		

¹ From February 28, 2019, the Alcon Division was reported as discontinued operations (see Note 2, 3 and 11). In accordance with IFRS, the December 31, 2018 consolidated balance sheet includes the assets and liabilities of the Alcon eye care devices business and certain Corporate assets and liabilities attributable to the Alcon business.

Segmentation - Net sales by region¹ - Third quarter

	Q3 2019	Q3 2018	% cha	nge	Q3 2019	Q3 2018
	USD m	USD m	USD	CC ²	% of total	% of total
Innovative Medicines						
Europe	3 195	3 027	6	10	33	35
US	3 725	3 003	24	24	38	35
Asia/Africa/Australasia	2 112	1 929	9	10	22	22
Canada and Latin America	656	637	3	9	7	8
Total	9 688	8 596	13	15	100	100
Of which in Established Markets	7 405	6 518	14	15	76	76
Of which in Emerging Growth Markets	2 283	2 078	10	13	24	24
Sandoz						
Europe	1 297	1 204	8	12	52	50
US	655	661	-1	-1	26	27
Asia/Africa/Australasia	333	366	-9	-8	13	15
Canada and Latin America	199	189	5	7	9	8
Total	2 484	2 420	3	5	100	100
Of which in Established Markets	1 823	1 749	4	7	73	72
Of which in Emerging Growth Markets	661	671	-1	0	27	28
Continuing operations						
Europe	4 492	4 231	6	11	37	38
US	4 380	3 664	20	20	36	33
Asia/Africa/Australasia	2 445	2 295	7	7	20	21
Canada and Latin America	855	826	4	9	7	8
Total	12 172	11 016	10	13	100	100
Of which in Established Markets	9 228	8 267	12	14	76	75
Of which in Emerging Growth Markets	2 944	2 749	7	10	24	25

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.
 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 56.

Segmentation – Net sales by region¹ – Nine months to September 30

	9M 2019	9M 2018	% cha	nge	9M 2019	9M 2018
	USD m	USD m	USD	CC ²	% of total	% of total
Innovative Medicines						
Europe	9 547	9 231	3	10	34	36
US	10 054	8 678	16	16	36	34
Asia/Africa/Australasia	6 235	5 978	4	7	22	23
Canada and Latin America	1 958	1 983	-1	9	8	7
Total	27 794	25 870	7	11	100	100
Of which in Established Markets	21 043	19 391	9	11	76	75
Of which in Emerging Growth Markets	6 751	6 479	4	12	24	25
Sandoz						
Europe	3 807	3 733	2	9	53	50
US	1 887	2 061	-8	-8	26	28
Asia/Africa/Australasia	984	1 030	-4	-1	14	14
Canada and Latin America	570	576	-1	5	7	8
Total	7 248	7 400	-2	2	100	100
Of which in Established Markets	5 314	5 417	-2	2	73	73
Of which in Emerging Growth Markets	1 934	1 983	-2	3	27	27
Continuing operations						
Europe	13 354	12 964	3	10	38	39
US	11 941	10 739	11	11	34	32
Asia/Africa/Australasia	7 219	7 008	3	6	21	21
Canada and Latin America	2 528	2 559	-1	8	7	8
Total	35 042	33 270	5	9	100	100
Of which in Established Markets	26 357	24 808	6	9	75	75
Of which in Emerging Growth Markets	8 685	8 462	3	10	25	25

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.
 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 56.

Segmentation – Net sales by business franchise

Innovative Medicines net sales by business franchise - Third quarter

•	Q3 2019 USD m	Q3 2018 USD m	% change USD	% change cc ³
Oncology				
Tasigna	487	444	10	11
Sandostatin	388	389	0	1
Afinitor/Votubia	400	374	7	8
Promacta/Revolade	380	295	29	31
Tafinlar + Mekinist	345	291	19	22
Gleevec/Glivec	320	380	-16	-14
Jakavi	279	248	13	17
Exjade/Jadenu	253	263	-4	-2
Votrient	198	197	1	2
Lutathera	119	56	113	116
Kisqali	123	72	71	76
Kymriah	79	20	295	295
	43	20		
Pigray Other			nm	nm
Other Table 1 Company of the Company	301	276	9	11
Total Oncology business unit	3 715	3 305	12	14
Ophthalmology				
Lucentis	500	491	2	5
Travoprost Group	109	128	-15	-13
Xiidra	102		nm	nm
Other	503	475	6	7
Total Ophthalmology	1 214	1 094	11	13
Neuroscience				
Gilenya	829	818	1	3
		010		
Zolgensma	160		nm	nm
Aimovig	33		nm	nm
Mayzent	4		nm	nm
Other	16	20	-20	-21
Total Neuroscience	1 042	838	24	26
Immunology, Hepatology and Dermatology				
Cosentyx	937	750	25	27
llaris	177	141	26	27
Total Immunology, Hepatology and Dermatology	1 114	891	25	27
Respiratory				
Ultibro Breezhaler	07	110	-12	0
	97			-8
Seebri Breezhaler	28	34	-18	-16
Onbrez Breezhaler	20	24	-17	-16
Subtotal COPD¹ portfolio	145	168	-14	-10
Xolair ²	299	255	17	22
Other	4	6	-33	-21
Total Respiratory	448	429	4	9
Cardiovascular, Renal and Metabolism				
Entresto	430	271	59	61
Other	7	6	17	10
Total Cardiovascular, Renal and Metabolism	437	277	58	60
	43/	211	30	00
Established Medicines				
Galvus Group	320	307	4	5
Diovan Group	254	254	0	5 3
Exforge Group	249	253	-2	2 5
Zortress/Certican	122	120	2	5
Neoral/Sandimmun(e)	101	114	-11	-9
Voltaren/Cataflam	105	104	······i	
Other	567	610		-5
Total Established Medicines	1 718	1 762		0
TOTAL ESTABLISHED MEDICINES	1 / 10	1 / 02	-2	U
Total Pharmaceuticals business unit	5 973	5 291	13	15
Total Division net sales	9 688	8 596	13	15
		2 22 0		.,

Chronic Obstructive Pulmonary Disease
 Xolair sales for all indications are reported in the Respiratory franchise.
 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 56.

Innovative Medicines net sales by business franchise – Nine months to September ${\bf 30}$

•	9M 2019 USD m	9M 2018 USD m	% change USD	% change cc ³
Oncology				
Tasigna	1 389	1 398	-1	2
Sandostatin	1 183	1 188	0 1	2
Afinitor/Votubia	1 174	1 157		4
Promacta/Revolade	1 036	844	23	26
Tafinlar + Mekinist	982	842	17	22
Gleevec/Glivec	950	1 188	-20	-17
Jakavi	821	721	14	21
Exjade/Jadenu	744	813	-8	-6
Votrient	578	630	-8	-5
Lutathera	334	86	288	287
Kisqali	325	175	86	92
Kymriah	182	48	279	288
Piqray	49		nm	nm
Other	895	839	7	10
Total Oncology business unit	10 642	9 929	7	11
Ophthalmology				
Lucentis	1 569	1 526	3	8
Travoprost Group	330	386	-15	-12
Xiidra	102		nm	nm
Other	1 548	1 519	2	5
Total Ophthalmology	3 549	3 431	3	8
Neuroscience				
Gilenya	2 420	2 505	-3	0
Zolgensma	175		nm	nm
Aimovig	75		nm	nm
Mayzent	9		nm	nm
Other	46	63	-27	-24
Total Neuroscience	2 725	2 568	6	9
Immunology, Hepatology and Dermatology				
Cosentyx	2 586	2 031	27	30
llaris	493	399	24	28
Total Immunology, Hepatology and Dermatology	3 079	2 430	27	30
Respiratory				
Ultibro Breezhaler	313	332	-6	0
Seebri Breezhaler	93	111	-16	-11
Onbrez Breezhaler	62	78	-21	-15
Subtotal COPD¹ portfolio	468	521	-10	-5
Xolair ²	870	771	13	20
Other	16	19	-16	-6
Total Respiratory	1 354	1 311	3	10
Cardiovascular, Renal and Metabolism				
Entresto	1 208	710	70	75
Other	19	16	19	17
Total Cardiovascular, Renal and Metabolism	1 227	726	69	73
Established Medicines				
Galvus Group	955	957	0	5
Diovan Group	798	763	5	5 11
Exforge Group	780	751	4	10
Zortress/Certican	362	344	5	10
Neoral/Sandimmun(e)	314	349	-10	-6
Voltaren/Cataflam	313	333	-6	-3
Other Other	1 696	1 978	-14	-10
	5 218	5 475	-5	0
				12
	17 102			
Total Division net sales	27 794	25 870	7	11
Total Established Medicines Total Pharmaceuticals business unit	5 218 17 152	5 475 15 941	-5 8	

Chronic Obstructive Pulmonary Disease
 Xolair sales for all indications are reported in the Respiratory franchise.
 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 56.

Net sales of the top 20 Innovative Medicines products in 2019 – Third quarter

			US		R	est of world	Total			
				%		%	%		%	%
				change		change	change		change	change
Brands	Business franchise	Key indication	USD m	USD/cc ²	USD m	USD	cc ²	USD m	USD	CC ²
	Immunology,	Psoriasis, ankylosing								
	Hepatology and	spondylitis and								
Cosentyx	Dermatology	psoriatic arthritis	601	31	336	15	20	937	25	27
Gilenya	Neuroscience	Relapsing multiple sclerosis	469	7	360	-6	-1	829	1	3
		Age-related								
Lucentis	Ophthalmology	macular degeneration			500	2 5	5	500	2	5
Tasigna	Oncology	Chronic myeloid leukemia	212	16	275	5	8	487	10	11
	Cardiovascular,									
	Renal and									
Entresto	Metabolism	Chronic heart failure	220	46	210	75	82	430	59	61
		Carcinoid tumors								
Sandostatin	Oncology	and acromegaly	222	6	166	-8	-4	388	0	1
Afinitor/Votubia	Oncology	Breast cancer/TSC	266	18	134	-9	-7	400	7	8
		Immune								
		thrombocytopenia (ITP),								
Promacta/Revolade	Oncology	severe aplastic anemia (SAA)	188	31	192	26	31	380	29	31
		BRAF V600+ metastatic								
		and adjuvant melanoma;								
		advanced non-small cell		_						
Tafinlar + Mekinist	Oncology	lung cancer (NSCLC)	126	8	219	26	31	345	19	22
Galvus Group	Established Medicines	Diabetes			320	4	5	320	4	5
		Chronic myeloid								
Gleevec/Glivec	Oncology	leukemia and GIST	81	-26	239	-11	-9	320	-16	-14
		Severe Allergic Asthma (SAA)								
V-1-1-1	Danimton	and Chronic Spontaneous			000	47	00	000	47	00
Xolair ¹	Respiratory	Urticaria (CSU)			299	17	22	299	17	22
lakavi	Oncology	Myelofibrosis (MF),			279	13	17	279	13	17
Jakavi	Oncology	polycytomia vera (PV)								17
Diovan Group	Established Medicines	Hypertension	22	-15	232	2	5	254	0	3
Exforge Group	Established Medicines	Hypertension	5	0	244	-2	2	249	-2	2 -2
Exjade/Jadenu	Oncology	Chronic iron overload	124	-3 -9	129	-4	-1	253	-4 1	-2
Votrient	Oncology	Renal cell carcinoma	86	-9	112	9	11	198	1	2
	Immunology,	Auto-inflammatory (CAPS,								
	Hepatology and	TRAPS, HIDS/MKD, FMF,								
Ilaris	Dermatology	SJIA, AOSD and gout)	80	16	97	35	37	177	26	27
Zortress/Certican	Established Medicines	Transplantation	43	10	79	-2	2	122	2	5
		GEP-NETs								
		gastroenteropancreatic				. = =				
Lutathera	Oncology	neuroendocrine tumors	96	104	23	156	199	119	113	116
Top 20 products total			2 841	16	4 445	7	11	7 286	10	13
Rest of portfolio			884	58	1 518	5	8	2 402	20	22
Total division sales			3 725	24	5 963	7	10	9 688	13	15

 ¹ Xolair sales for all indications are reported in the Respiratory franchise.
 2 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 56.

Net sales of the top 20 Innovative Medicines products in 2019 - Nine months to September 30

		-	US	3	R	est of world			Total	
				% change		% change	% change		% change	% change
Brands	Business franchise	Key indication	USD m	USD/cc ²	USD m	USD	CC ²	USD m	USD	cc ²
	Immunology,	Psoriasis, ankylosing								
Cosentyx	Hepatology and Dermatology	spondylitis and psoriatic arthritis	1 609	36	977	16	23	2 586	27	30
Gilenya	Neuroscience	Relapsing multiple sclerosis	1 302	-1	1 118	-6	<u>-</u> 3	2 420	-3	0
		Age-related								
Lucentis	Ophthalmology	macular degeneration			1 569	3	8	1 569	3	8
Tasigna	Oncology	Chronic myeloid leukemia	596	-1	793	-1	4	1 389	-1	2
	Cardiovascular, Renal and									
Entresto	Metabolism	Chronic heart failure	640	65	568	77	87	1 208	70	75
Sandostatin	Oncology	Carcinoid tumors and acromegaly	655	7	528	-8	-2	1 183	0	2
Afinitor/Votubia	Oncology	Breast cancer/TSC	759	12	415	-13	-8	1 174	1	4
Promacta/Revolade	Oncology	Immune thrombocytopenia (ITP), severe aplastic anemia (SAA)	506	22	530	23	30	1 036	23	26
Tafinlar + Mekinist	Oncology	BRAF V600+ metastatic and adjuvant melanoma; advanced non-small cell lung cancer (NSCLC)	356	6	626	23	32	982	17	22
Galvus Group	Established Medicines	Diabetes			955	0	5	955	0	5
Gleevec/Glivec	Oncology	Chronic myeloid leukemia and GIST	256	-22	694	-19	-15	950	-20	-17
Xolair¹	Respiratory	Severe Allergic Asthma (SAA) and Chronic Spontaneous Urticaria (CSU)			870	13	20	870	13	20
Jakavi	Oncology	Myelofibrosis (MF), polycytomia vera (PV)			821	14	21	821	14	21
Diovan Group	Established Medicines	Hypertension	67	0	731	5	12	798	5	11
Exforge Group	Established Medicines	Hypertension	12	-14	768	4	10	780	4	10
Exjade/Jadenu	Oncology	Chronic iron overload	355	-7	389	-10	-5	744	-8	-6
Votrient	Oncology	Renal cell carcinoma	258	-16	320	-1	5	578	-8	-5
	Immunology, Hepatology and	Auto-inflammatory (CAPS, TRAPS, HIDS/MKD, FMF,								
llaris	Dermatology	SJIA, AOSD and gout)	222	19	271	27	36	493	24	28
Zortress/Certican	Established Medicines	Transplantation	125	19	237	-1	6	362	5	10
		GEP-NETs gastroenteropancreatic	225				400			
Lutathera	Oncology	neuroendocrine tumors	282	nm	52	174	182	334	288	287
Top 20 products total			8 000	14	13 232	5	11	21 232	8	12
Rest of portfolio			2 054	22	4 508	-1	4	6 562	5	9
Total division sales			10 054	16	17 740	3	9	27 794	7	11

 ¹ Xolair sales for all indications are reported in the Respiratory franchise.
 2 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 56.

Sandoz net sales by business franchise - Third quarter

	Q3 2019	Q3 2018	% change	% change
	USD m	USD m	USD	cc ²
Retail Generics ¹	1 930	1 949	-1	1
Biopharmaceuticals	430	349	23	27
Anti-Infectives	124	122	2	5
Total Division net sales	2 484	2 420	3	5

¹ Of which USD 197 million (2018: USD 201 million) represents Anti-Infectives sold under Sandoz name

Sandoz net sales by business franchise - Nine months to September 30

	9M 2019		_	% change
	USD m	USD m	USD	CC [∠]
Retail Generics ¹	5 683	5 947	-4	0
Biopharmaceuticals	1 182	1 046	13	18
Anti-Infectives	383	407	-6	-2
Total Division net sales	7 248	7 400	-2	2

The product portfolio of Sandoz is widely spread in 2019 and 2018.

² Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 56.

Of which USD 587 million (2018: USD 618 million) represents Anti-Infectives sold under Sandoz name
 Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 56.

Segmentation – Other revenue – Third quarter

	Innov Medi	Innovative Medicines Sandoz				orate	Group	
(USD millions)	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018
Profit sharing income	192	234	1	1			193	235
Royalty income	30	36	6	4	6	5	42	45
Milestone income	60	29		33			60	62
Other ¹	13				2		15	
Total other revenues	295	299	7	38	8	5	310	342

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

Segmentation – Other revenue – Nine months to September 30

		rative cines	Sar	ıdoz	Corp	orate	Gro	oup
(USD millions)	9M 2019	9M 2018	9M 2019	9M 2018	9M 2019	9M 2018	9M 2019	9M 2018
Profit sharing income	542	564	2	2			544	566
Royalty income	79	121	13	7	19	16	111	144
Milestone income	158	107	23	36			181	143
Other ¹	27	15	3	3			30	18
Total other revenues	806	807	41	48	19	16	866	871

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

11. Discontinued operations

Consolidated income statement - Discontinued operations

(USD millions)	Q3 2019 ¹	Q3 2018	9M 2019	9M 2018
Net sales to third parties of discontinued operations		1 763	1 777	5 361
Sales to continuing segments			32	3
Net sales of discontinued operations		1 763	1 809	5 364
Cost of goods sold		-1 214	-860	-3 073
Gross profit of discontinued operations		549	949	2 291
Selling, general and administration		-690	-638	-2 027
Research and development		-132	-142	-420
Other income		-7	15	74
Other expense		-20	-113	-89
Operating income of discontinued operations		-300	71	-171
as % of net sales		-17.0%	4.0%	-3.2%
Interest expense		-6	-10	-19
Other financial income and expense		-2	-3	-1
Income before taxes of discontinued operations		-308	58	-191
Taxes ²		50	-159	31
Net loss from discontinued operations before gain on distribution of Alcon Inc.		250	404	460
to Novartis AG shareholders		-258	-101	-160
Gain on distribution of Alcon Inc. to Novartis AG shareholders ³			4 691	
Net loss/income of discontinued operations		-258	4 590	-160

3 See Note 3 for further details on the gain on distribution of Alcon Inc. to Novartis AG shareholders.

The following are included in net income from discontinued operations:

(USD millions)	Q3 2019 ¹	Q3 2018	9M 2019	9M 2018
Interest income				1
Depreciation of property, plant and equipment		-61	-42	-177
Amortization of intangible assets		-264	-174	-794
Impairment charges on intangible assets		-350		-389
Additions to restructuring provisions				-4
Equity-based compensation of Novartis equity plans		-11	-9	-34

¹ As the Alcon spin-off was completed on April 9, 2019, there were no results of operations from the Alcon business recorded in Q3 2019.

¹ As the Alcon spin-off was completed on April 9, 2019, there were no results of operations from the Alcon business recorded in Q3 2019. ² The tax rate on the net loss from discontinued operations before gain on distribution of Alcon Inc. to Novartis AG shareholders of 274% was impacted by prior period items, which the Group has concluded is not material to the current period or the prior periods to which they related, and changes in uncertain tax positions. Excluding these items, the tax rate would have been 15.5%.

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

Net assets derecognized

(USD millions) Property, plant and equipment	2 858
Right-of-use assets	269
Goodwill	8 906
Intangible assets other than goodwill	11 121
Deferred tax assets	732
Financial and other non-current assets	526
Inventories	1 469
Trade receivables and other current assets	1 787
Cash and cash equivalents	628
Deferred tax liabilities	-1 713
Current and non-current lease liabilities	-269
Current and non-current financial debts	-3 538
Trade payables, provisions and other liabilities	-2 751
Net assets derecognized	20 025

Net cash flows used in investing activities from discontinued operations

(USD millions)	Q3 2019	9M 2019
Payments out of provisions for transaction costs attributable to the spin-off of the		
Alcon business	-12	-26
Divested cash and cash equivalents		-628
Cash flows attributable to the spin-off of		
the Alcon business	-12	-654
Other cash flows from/used in		
investing activities, net	15	-448
Net cash flows from/used in investing activities		
from discontinued operations	3	-1 102

Significant transaction closed in 2019 - Discontinued operations

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 preliminary 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 are 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 9, 2019, refer to Note 2 and 3.

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 – Third quarter

	Innovative M	Medicines	Sandoz		Corporate		Grou	ıb
(USD millions unless indicated otherwise)	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018
IFRS operating income from continuing operations	2 404	2 184	191	358	-237	-303	2 358	2 239
Amortization of intangible assets	732	644	79	91			811	735
Impairments								
Intangible assets	13	50	32	110			45	160
Property, plant and equipment related to the Group-wide								
rationalization of manufacturing sites	44	1	62	5			106	6
Other property, plant and equipment		33						33
Total impairment charges	57	84	94	115			151	199
Acquisition or divestment of businesses and related items								
- Income	-2				-40	-3	-42	-3
- Expense	31	13			44	5	75	18
Total acquisition or divestment of businesses and related items, net	29	13			4	2	33	15
Other items								
Divestment gains	-6	-213				-10	-6	-223
Financial assets – fair value adjustments	-45	-44			16	41	-29	-3
Restructuring and related items								
- Income	-15	-3	-2		-3		-20	-3
- Expense	110	229	91	30	50	65	251	324
Legal-related items								
- Income		-1						-1
- Expense	31	11	72	60			103	71
Additional income		-8		-142	-83		-83	-150
Additional expense	3	1	90	29	86	25	179	55
Total other items	78	-28	251	-23	66	121	395	70
Total adjustments	896	713	424	183	70	123	1 390	1 019
Core operating income from continuing operations	3 300	2 897	615	541	-167	-180	3 748	3 258
as % of net sales	34.1%	33.7%	24.8%	22.4%			30.8%	29.6%
Income from associated companies			1	1	252	212	253	213
Core adjustments to income from associated companies, net of tax					60	80	60	80
Interest expense							-216	-229
Other financial income and expense							12	28
Core adjustments to other financial income and expense							-15	
Taxes, adjusted for above items (core taxes)							-630	-530
Core net income from continuing operations							3 212	2 820
Core net income from discontinued operations ¹								244
Core net income							3 212	3 064
Core net income attributable to shareholders of Novartis AG							3 213	3 063
Core basic EPS from continuing operations (USD) ²							1.41	1.22
Core basic EPS from discontinued operations (USD) ²								0.10
- <u></u> -								

 ¹ For details on discontinued operations reconciliaton from IFRS to core net income, please refer to page 68.
 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 – Nine months to September 30

	Innovative	Medicines	Sandoz		Corporate		Gro	ир
(USD millions unless indicated otherwise)	9M 2019	9M 2018	9M 2019	9M 2018	9M 2019	9M 2018	9M 2019	9M 2018
IFRS operating income from continuing operations	7 077	6 571	746	1 095	-560	-625	7 263	7 041
Amortization of intangible assets	1 710	1 680	239	283			1 949	1 963
Impairments								
Intangible assets	442	112	44	144			486	256
Property, plant and equipment related to the Group-wide rationalization of manufacturing sites	78	99	70	44			148	143
Other property, plant and equipment	1	42	6				7	42
Total impairment charges	521	253	120	188			641	441
Acquisition or divestment of businesses and related items								
- Income	-7				-79	-19	-86	-19
- Expense	57	99			83	27	140	126
Total acquisition or divestment of businesses and related items, net	50	99			4	8	54	107
Other items								
Divestment gains	-630	-490		-78	2	-55	-628	-623
Financial assets – fair value adjustments	-53	-122			4	73	-49	-49
Restructuring and related items								
- Income	-38	-11	-3	-2	-5	-2	-46	-15
- Expense	338	328	270	99	82	90	690	517
Legal-related items								
- Income		-1	-31	-63			-31	-64
- Expense	719	30	144	90			863	120
Additional income	-253	-38	-4	-142	-89		-346	-180
Additional expense	87	83	96	50	107	54	290	187
Total other items	170	-221	472	-46	101	160	743	-107
Total adjustments	2 451	1 811	831	425	105	168	3 387	2 404
Core operating income from continuing operations	9 528	8 382	1 577	1 520	-455	-457	10 650	9 445
as % of net sales	34.3%	32.4%	21.8%	20.5%			30.4%	28.4%
Income from associated companies	1		2	5	506	6 292	509	6 297
Core adjustments to income from associated companies, net of tax					335	-5 398	335	-5 398
Interest expense							-647	-684
Other financial income and expense							56	108
Core adjustments to other financial income and expense							5	
Taxes, adjusted for above items (core taxes)							-1 789	-1 529
Core net income from continuing operations							9 119	8 239
Core net income from discontinued operations ¹							278	818
Core net income							9 397	9 057
Core net income attributable to shareholders of Novartis AG							9 396	9 053
Core basic EPS from continuing operations (USD) ²							3.97	3.55
Core basic EPS from discontinued operations (USD) ²							0.12	0.35
Core basic EPS (USD) ²							4.09	3.90

For details on discontinued operations reconciliaton from IFRS to core net income, please refer to page 69.
 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 – Third quarter

				Acquisition or			
		Amortization		divestment of			
	Q3 2019	of intangible		businesses and		Q3 2019	Q3 2018
(USD millions unless indicated otherwise)	IFRS results	assets ¹	Impairments ²	related items ³	Other items ⁴	Core results	Core results
Gross profit from continuing operations	8 706	798	32	25	103	9 664	8 657
Operating income from continuing operations	2 358	811	151	33	395	3 748	3 258
Income before taxes from continuing operations	2 407	871	151	33	380	3 842	3 350
Taxes from continuing operations ⁵	-366					-630	-530
Net income from continuing operations	2 041					3 212	2 820
Net income from discontinued operations ⁶							244
Net income	2 041					3 212	3 064
Basic EPS from continuing operations (USD)7	0.90					1.41	1.22
Basic EPS from discontined operations (USD) ⁷							0.10
Basic EPS (USD)7	0.90					1.41	1.32
The following are adjustments to arrive at core cost of goods sold	gross profit -3 776	798	32	25	103	-2 818	-2 729
The following are adjustments to arrive at core	operating incom	ie					
Selling, general and administration	-3 549			2	-15	-3 562	-3 246
Research and development	-2 199	13	13	-3	1	-2 175	-1 938
Other income	196			-42	-142	12	144
Other expense	-796		106	51	448	-191	-359
The following are adjustments to arrive at core	income before to	axes					
Income from associated companies	253	60				313	293
Other financial income and expense	12				-15	-3	28

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; income from associated companies includes USD 60 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 net impairment charges related to property, plant and equipment

⁶ For details on discontinued operations reconcilation from IFRS to core net income please refer to page 68.

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, and other items related to the portfolio transformation and the Alcon spin-off

⁴ Other items: cost of goods sold and other expense include net restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, research and development, other income and other expense include other restructuring income and charges and related items; other income and other expense include fair value adjustments and divestment gains and losses on financial assets and environmental provisions; selling, general and administration also includes other provisions; other income also includes net gains from the divestment of products; other expense also 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 264 million. The average tax rate on the adjustments is 18.4%, since the estimated quarterly core tax charge of 16.4% has been applied to the pre-tax income of the period.

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 – Nine months to September 30

	9M 2019	Amortization of intangible		Acquisition or divestment of businesses and		9M 2019	9M 2018
(USD millions unless indicated otherwise)	IFRS results	assets1	Impairments ²	related items ³	Other items ⁴	Core results	Core results
Gross profit from continuing operations	25 528	1 914	44	25	202	27 713	25 887
Operating income from continuing operations	7 263	1 949	641	54	743	10 650	9 445
Income before taxes from continuing operations	7 181	2 284	641	54	748	10 908	9 768
Taxes from continuing operations ⁵	-1 163					-1 789	-1 529
Net income from continuing operations	6 018					9 119	8 239
Net income from discontinued operations 6	4 590					278	818
Net income	10 608					9 397	9 057
Basic EPS from continuing operations (USD) ⁷	2.62					3.97	3.55
Basic EPS from discontined operations (USD) ⁷	2.00					0.12	0.35
Basic EPS (USD) ⁷	4.62					4.09	3.90
The following are adjustments to arrive at core of Other revenues	gross profit 866				-66	800	871
Cost of goods sold	-10 433	1 914	44	25	268	-8 182	-8 315
The following are adjustments to arrive at core	operating incom	e		40	F-7	-10 397	-10 016
Selling, general and administration				10	5/		
Research and development	-6 549	35	442	10	-131	-6 193	-5 978
Other income	1 388		-2	-86	-954	346	404
Other expense	-2 640		157	95	1 569	-819	-852
The following are adjustments to arrive at core	income before ta	axes					
Income from associated companies	509	335				844	899
Other financial income and expense	56				5	61	108

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; income from associated companies includes USD 335 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; research and development also includes the reversal of an impairment charge; other income and other expense include net impairment charges related to property, plant and equipment

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

⁴ Other items: other revenues includes a net income from an outlicensing agreement and an income related to an amendment of a collaboration agreement; cost of goods sold, other income and other expense include net restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, other income and other expense include other restructuring income and charges and related items; selling, general and administration also includes a receivable expected credit loss provision and other provisions; research and development also includes fair value adjustments of contingent consideration liabilities; other income also includes net gains from the divestment of products and property, plant & equipment and a provision release; other income and other expense also include fair value adjustments and divestment gains and losses on financial assets and legal-related items as well as environmental provisions; other expense also includes a provision for onerous contracts; other financial income and expense includes a revaluation impact of a financial liability incurred through the Alcon distribution

Taxes on the adjustments between IFRS and core results take into account, for each individual item included in the adjustment, the tax rate that will finally be applicable to the item based on the jurisdiction where the adjustment will finally have a tax impact. Generally, this results in amortization and impairment of intangible assets and acquisition-related restructuring and integration items having a full tax impact. There is usually a tax impact on other items, although this is not always the case for items arising from legal settlements in certain jurisdictions. Adjustments related to income from associated companies are recorded net of any related tax effect. Due to these factors and the differing effective tax rates in the various jurisdictions, the tax on the total adjustments for continuing operations of USD 3.7 billion to arrive at the core results before tax amounts to USD 626 million. The average tax rate on the adjustments is 16.8%, since the estimated full year core tax charge of 16.4% has been applied to the pre-tax income of the period.

⁶ For details on discontinued operations reconcilaition from IFRS to core net income please refer to page 69.

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 - Third quarter

(USD millions)	Q3 2019 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items ³	Other items ⁴	Q3 2019 Core results	Q3 2018 Core results
Gross profit	7 494	719		25	55	8 293	7 358
Operating income	2 404	732	57	29	78	3 300	2 897
Cost of goods sold The following are adjustments to arr	-2 679	719 g income		25	55	-1 880	-1 743
Selling, general and administration	-2 868			2	-20	-2 886	-2 606
Research and development	-2 002	13	13	-3	1	-1 978	-1 742
Other income	86			-2	-67	17	64
Other expense	-306		44	7	109	-146	-177

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 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 charges related to acquisitions; other income and other expense include transitional service-fee income and expenses related to the portfolio transformation and 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; 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 - Innovative Medicines - Nine months to September 30

(USD millions)	9M 2019 IFRS results	Amortization of intangible assets ¹	Impairments ²	Acquisition or divestment of businesses and related items ³	Other items ⁴	9M 2019 Core results	9M 2018 Core results
Gross profit	21 986	1 675	-	25	78	23 764	21 981
Operating income	7 077	1 710	521	50	170	9 528	8 382
Other revenues Cost of goods sold	806 -7 230	1 675		25	-66 144	740 -5 386	807 -5 247
						0 000	0211
The following are adjustments to arrive Selling, general and administration	-8 432	gincome		10	42	-8 380	-7 930
Research and development	-5 960	35	442	10	-131	-5 604	-5 388
Other income	1 008		-1	-7	-784	216	191
Other expense	-1 525		80	12	965	-468	-472

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

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

⁴ Other items: other revenues includes a net income from an outlicensing agreement and an income related to an amendment of a collaboration agreement; 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; research and development also includes fair value adjustments of contingent consideration liabilities; other income and other expense include fair value adjustments on financial assets; other income also includes net gains from the divestment of property, plant and equipment, products and financial assets and provision releases; other expense includes legal-related items

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

				Acquisition or			
		Amortization		divestment of			
	Q3 2019	of intangible		businesses	Other	Q3 2019	Q3 2018
(USD millions)	IFRS results	assets ¹	Impairments ²	and related items	items ³	Core results	Core results
Gross profit	1 179	79	32		48	1 338	1 279
Operating income	191	79	94		251	615	541
The following are adjustments to arr Cost of goods sold	-1 354	79	32		48	-1 195	-1 228
The following are adjustments to arr	ive at core operating	a income					
Selling, general and administration	-532	9			5	-527	-527
Other income	40				-2	38	44
Other expense	-299		62		200	-37	-59

¹ Amortization of intangible assets: cost of goods sold includes 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 Other items: cost of goods sold and other expense include net restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, other income and other expense include restructuring income and charges and related items; selling, general and administration also includes other provisions; other expense includes legal-related items, an environmental provision and a provision for onerous contracts

CORE RESULTS - Reconciliation from IFRS results to core results - Sandoz - Nine months to September 30

				Acquisition or			
		Amortization		divestment of			
	9M 2019	of intangible		businesses	Other	9M 2019	9M 2018
(USD millions)	IFRS results	assets ¹	Impairments ²	and related items	items ³	Core results	Core results
Gross profit	3 462	239	44		124	3 869	3 853
Operating income	746	239	120		472	1 577	1 520
The following are adjustments to arr Cost of goods sold	-3 945	239	44		124	-3 538	-3 735
Cost of goods sold	-3 945	239	44		124	-3 538	-3 / 35
The following are adjustments to arr	ive at core operating	g income					
Selling, general and administration	-1 644				15	-1 629	-1 722
Other income	122		-1		-34	87	141
Other expense	-605		77		367	-161	-162

¹ Amortization of intangible assets: cost of goods sold includes 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 income and other expense include net impairment charges related to property, plant and equipment

³ Other items: cost of goods sold and other expense include net restructuring and other charges related to the Group-wide rationalization of manufacturing sites; cost of goods sold, selling, general and administration, other income and other expense include restructuring income and charges and related items; selling, general and administration also includes a receivable expected credit loss provision and other provisions; other income and other expense include legal-related items; other expense also includes an environmental provision and a provision for onerous contracts

CORE RESULTS – Reconciliation from IFRS results to core results – Corporate continuing – Third quarter

(USD millions)	Q3 2019 IFRS results	Amortization of intangible assets ¹	Impairments	Acquisition or divestment of businesses and related items ²	Other items ³	Q3 2019 Core results	Q3 2018 Core results
Gross profit	33			<u>.</u>		33	20
Operating loss	-237			4	66	-167	-180
The following are adjustments to arrive	ve at core operating	n income					
The following are adjustments to arrivother income	ve at core operating 70	g income		-40	-73	-43	36
	ve at core operating 70 -191	g income		-40 44	-73 139	-43 -8	36 -123
Other income Other expense	70 -191				-13	-43	
Other income	70 -191				-13	-43	

¹ Amortization of intangible assets: income from associated companies includes USD 60 million for the Novartis share of the estimated Roche core items ² 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, and other items related to the portfolio transformation and the Alcon spin-off

³ Other items: other income and other expense include fair value adjustments and divestment gains and losses on financial assets, restructuring charges and related items as well as environmental provisions; other financial income and expense includes a revaluation impact of a financial liability incurred through the Alcon distribution

CORE RESULTS – Reconciliation from IFRS results to core results – Corporate continuing – Nine months to September 30

(USD millions)	9M 2019 IFRS results	Amortization of intangible assets ¹	Impairments	Acquisition or divestment of businesses and related items ²	Other items ³	9M 2019 Core results	9M 2018 Core results
Gross profit	80					80	53
Operating loss	-560			4	101	-455	-457
The following are adjustments to arrivo	258	у пісопіе		-79	-136	43	72
Other expense	-510						1 2
·				83	237	-190	-218
The following are adjustments to arriv	ve at core income l	pefore taxes		83	237	-190	-218
The following are adjustments to arrivincome from associated companies	ve at core income to	pefore taxes		83	237	-190 841	-218 894

¹ Amortization of intangible assets: income from associated companies includes USD 335 million for the Novartis share of the estimated Roche core items

² 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, and other items related to the portfolio transformation and the Alcon spin-off

³ Other items: other income and other expense include fair value adjustments and divestment gains and losses on financial assets, restructuring income and charges and related items as well as environmental provisions; other financial income and expense includes a revaluation impact of a financial liability incurred through the Alcon distribution

CORE RESULTS – Reconciliation from IFRS results to core results – Discontinued operations – Third quarter

(USD millions)	Q3 2019 IFRS results	Amortization of intangible assets	Impairments	Acquisition or divestment of businesses and related items	Other items	Q3 2019 Core results	Q3 2018 Core results
Gross profit							1 124
Operating income of discontinued op	erations						297
Income before taxes of discontinued	operations						289
Taxes							-45
Net income from discontinued operated before gain on distribution of Alcon I to Novartis AG shareholders	tions nc.						244
Net income from discontinued operate	tions						244
Basic EPS (USD) ¹							0.10

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

CORE RESULTS – Reconciliation from IFRS results to core results – Discontinued operations – Nine months to September 30

(9M 2019 FRS results	Amortization of intangible assets ¹	Impairments	Acquisition or divestment of businesses and related items ²	Other items ³	9M 2019 Core results	9M 2018 Core results
Gross profit	949	165			9	1 123	3 408
Operating income of discontinued operation	ons /1	167			112	350	991
Income before taxes of discontinued opera	itions 58					337	971
Taxes 4	-159					-59	-153
Net loss/income from discontinued operati before gain on distribution of Alcon Inc. to Novartis AG shareholders	ons -101					278	818
Gain on distribution of Alcon Inc. to Novartis AG shareholders	4 691			-4 691			
Net income from discontinued operations	4 590					278	818
Basic EPS (USD) ⁵	2.00					0.12	0.35
The following are adjustments to arrive at	core gross pr	ofit					
Cost of goods sold	-860	165			9	-686	-1 956
The following are adjustments to arrive at	core operating	g income					
Selling, general and administration	-638				14	-624	-2 027
Research and development	-142	2			4	-136	-384
Other income	15				-3	12	28
Other expense	-113				88	-25	-34

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 represents the non-taxable non-cash gain adjustment related to the distribution of Alcon Inc. (spin-off) to Novartis AG shareholders

⁵ Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

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 a 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%.

Income from associated companies

(USD millions)	Q3 2019	Q3 2018	9M 2019	9M 2018
Share of estimated Roche reported results	283	250	695	621
Prior-year adjustment			-129	-125
Amortization of additional intangible assets recognized				
by Novartis on initial accounting for the equity interest	-30	-37	-99	-112
Partial release of deferred tax liability recognized			43	
Net income effect from Roche Holding AG	253	213	510	384
Share of estimated GSK Consumer Healthcare				
Holdings Ltd. reported results				119
Prior-year adjustment				4
Amortization of additional intangible assets recognized by Novartis on initial accounting for the equity interest				-3
Gain on divestment of GSK Consumer				
Healthcare Holdings Ltd., pre-tax 1				5 791
Net income effect from GlaxoSmithKline Consumer				
Healthcare Holdings Ltd. ¹				5 911
Others			-1	2
Income from associated companies	253	213	509	6 297

¹ On March 27, 2018, Novartis entered into the agreement to divest its 36.5% investment in GSK Consumer Healthcare Holdings Ltd. to GSK. As a result, equity accounting was discontinued starting from April 1, 2018. The transaction closed on June 1, 2018, see Note 3.

Core income from associated companies

(USD millions)	Q3 2019	Q3 2018	9M 2019	9M 2018
Income from associated companies	253	213	509	6 297
Share of estimated Roche core adjustments	60	80	174	239
Roche prior year adjustment			161	133
Share of estimated GSK Consumer Healthcare Holdings Ltd. core adjustments ¹				20
GSK Consumer Healthcare Holdings Ltd. prior year adjustment				1
Gain on divestment of GSK Consumer Healthcare Holdings Ltd., pre-tax ¹				-5 791
Core income from associated companies	313	293	844	899

¹ On March 27, 2018, Novartis entered into the agreement to divest its 36.5% investment in GSK Consumer Healthcare Holdings Ltd. to GSK. As a result, equity accounting was discontinued starting from April 1, 2018. The transaction closed on June 1, 2018, see Note 3.

Condensed consolidated changes in net debt

Third quarter

(USD millions)	Q3 2019	Q3 2018
Change in cash and cash equivalents	-1 613	1 554
Change in marketable securities, commodities,		
financial debts and financial derivatives	68	584
Increase/reduction in net debt	-1 545	2 138
Net debt at July 1	-17 886	-19 210
Net debt at September 30	-19 431	-17 072

Nine months to September 30

Net debt at September 30	-19 431	-17 072
Net debt at January 1	-16 184	-19 047
Increase/reduction in net debt	-3 247	1 975
financial debts and financial derivatives	1 646	-3 165
Change in marketable securities, commodities,		
Change in cash and cash equivalents	-4 893	5 140
(USD millions)	9M 2019	9M 2018

Components of net debt

(USD millions)	Sep 30, 2019	Sep 30, 2018
Non-current financial debts	-20 131	-22 605
Current financial debts and derivative financial instruments	-8 017	-9 177
Total financial debt	-28 148	-31 782
Less liquidity:		
Cash and cash equivalents	8 378	14 000
Marketable securities, commodities, time deposits and derivative financial instruments	339	710
Total liquidity	8 717	14 710
Net debt at September 30	-19 431	-17 072

Share information

	Sep 30, 2019	Sep 30, 2018
Number of shares outstanding	2 264 608 111	2 309 972 655
Registered share price (CHF)	86.54	84.40
ADR price (USD)	86.90	86.16
Market capitalization (USD billions) ¹	197.5	199.6
Market capitalization (CHF billions) ¹	196.0	195.0

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

Third quarter

(USD millions)	Q3 2019	Q3 2018	Change
Operating income from continuing operations	2 358	2 239	119
Adjustments for non-cash items			
Depreciation, amortization and impairments	1 373	1 422	-49
Change in provisions and other non-current liabilities	382	178	204
Other	199	-199	398
Operating income adjusted for non-cash items	4 312	3 640	672
Dividends received from associated companies and others	0	1	-1
Interest and other financial receipts	83	176	-93
Interest and other financial payments	-143	-181	38
Taxes paid	-235	-219	-16
Payments out of provisions and other			
net cash movements in non-current liabilities	-146	-208	62
Change in inventory and trade			
receivables less trade payables	17	-199	216
Change in other net current assets and	074	740	00
other operating cash flow items	674	710	-36
Net cash flows from operating activities from	4 562	3 720	842
Continuing operations Durchage of property plant and equipment	-357	-295	-62
Purchase of property, plant and equipment			
Proceeds from sales of property, plant and equipment	-3	4	-7
Purchase of intangible assets	-205	-546	341
Proceeds from sales of intangible assets	140	286	-146
Purchase of financial assets	-69	-77	8
Proceeds from sales of financial assets, net ¹	-91	74	-165
Purchase of other non-current assets	-10	-13	3
Proceeds from sales of other non-current assets	1	3	-2
Free cash flow from continuing operations	3 968	3 156	812
Free cash flow from discontinued operations		145	-145
Total free cash flow	3 968	3 301	667

¹ For the 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 656 million. (see Note 3)

Free cash flow

Nine months to September 30

(USD millions)	9M 2019	9M 2018	Change
Operating income from continuing operations	7 263	7 041	222
Adjustments for non-cash items			
Depreciation, amortization and impairments	3 840	3 526	314
Change in provisions and other non-current liabilities	1 400	425	975
Other	-113	-273	160
Operating income adjusted for non-cash items	12 390	10 719	1 671
Dividends received from associated companies and others	463	719	-256
Interest and other financial receipts	233	300	-67
Interest and other financial payments	-565	-567	2
Taxes paid	-1 195	-1 109	-86
Payments out of provisions and other			
net cash movements in non-current liabilities	-662	-472	-190
Change in inventory and trade			
receivables less trade payables	-1 289	-950	-339
Change in other net current assets and	000	070	0.44
other operating cash flow items	632	973	-341
Net cash flows from operating activities from	40.007	0.040	20.4
continuing operations	10 007	9 613	394
Purchase of property, plant and equipment	-918	-810	-108
Proceeds from sales of property, plant and equipment	809	55	754
Purchase of intangible assets	-703	-1 188	485
Proceeds from sales of intangible assets	421	702	-281
Purchase of financial assets	-223	-148	-75
Proceeds from sales of financial assets ¹	86	138	-52
Purchase of other non-current assets	-34	-26	-8
Proceeds from sales of other non-current assets	4	7	-3
Free cash flow from continuing operations	9 449	8 343	1 106
Free cash flow from discontinued operations	-62	435	-497
Total free cash flow	9 387	8 778	609

¹ For the 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 656 million. (see Note 3)

Principal currency translation rates

Third quarter

(USD per unit)	Average rates Q3 2019	Average rates Q3 2018	Period-end rates Sep 30, 2019	Period-end rates Sep 30, 2018
1 CHF	1.014	1.017	1.008	1.024
1 CNY	0.143	0.147	0.140	0.145
1 EUR	1.112	1.163	1.094	1.163
1 GBP	1.232	1.303	1.229	1.307
100 JPY	0.932	0.897	0.927	0.882
100 RUB	1.548	1.525	1.546	1.523

Nine months to September 30

			Period-end	Period-end
	Average	Average	rates	rates
	rates	rates	Sep 30,	Sep 30,
(USD per unit)	9M 2019	9M 2018	2019	2018
1 CHF	1.005	1.029	1.008	1.024
1 CNY	0.146	0.154	0.140	0.145
1 EUR	1.124	1.195	1.094	1.163
1 GBP	1.273	1.352	1.229	1.307
100 JPY	0.917	0.912	0.927	0.882
100 RUB	1.538	1.632	1.546	1.523

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 "guidance," "launched," "launching," "strong start," "momentum," "growth investments," "compelling," "submissions," "starting," "submitted," "submission," "planned," "focused," "expected," "to grow," "continued," "continuing," "continue," "potential," "growing," "launches," "continues," "expect," "to be completed," "pending," "closing conditions," "committed," "growth drivers," "launch," "to date," "ongoing," "filings," "Breakthrough Therapy Designation," "delivering," "will," "plans," "to submit," "suggests," "may," "would," "proposed," "commitment," "pipeline," "priority," "outlook," "unforeseen," "forecast," "enter," "to deliver," "priority review," "enrollment," "filed," "transformative," "Orphan Drug designation," "upcoming," "on track," "future," "strategy," "Fast Track designation," "Orphan designation," "Orphan status," "resubmitted," "potentially," "anticipated," "as early as possible," "PRIME designation," "Sakigake designation," "underway," "increasing," "in the coming months," 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 the potential outcome, or financial or other impact on Novartis, of the proposed divestiture of certain portions of our Sandoz Division business in the US; or regarding the potential impact of the completion of the up to USD 5 billion share buyback; or regarding potential future sales or earnings of the Group or any of its divisions or potential shareholder returns; or by discussions of strategy, plans, expectations or intentions. 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: global trends toward healthcare cost containment, including ongoing government, payor and general public pricing and reimbursement pressures and requirements for increased pricing transparency; regulatory actions or delays or government regulation generally, including potential regulatory actions or delays with respect to the proposed transactions or the development of the products described in this press release; the potential that the proposed divestiture of certain portions of our Sandoz Division business in the US may not be completed in the expected time frame, or at all; the potential that the strategic benefits, synergies or opportunities expected from the proposed divestiture of certain portions of our Sandoz Division business in the US, and other transactions described, may not be realized or may be more difficult or take longer to realize than expected; the inherent uncertainties involved in predicting shareholder returns; the uncertainties inherent 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 will continue this year; safety, quality or manufacturing issues; uncertainties involved in the development or adoption of potentially transformational technologies and business models; uncertainties regarding actual or potential legal proceedings, including, among others, product liability litigation, disputes and litigation with business partners or business collaborators, government investigations generally, litigation and investigations regarding sales and marketing practices, and intellectual property disputes; our performance on environmental, social and governance measures; general political, economic and trade conditions, including uncertainties regarding the effects of ongoing instability in various parts of the world; uncertainties regarding future global exchange rates; uncertainties regarding future demand for our products; uncertainties regarding potential significant breaches of data security or data privacy, or disruptions of our information technology systems; and other risks and factors referred to in Novartis AG's current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements as a result of new information, future events or otherwise.

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About Novartis

Novartis is reimagining medicine to improve and extend people's lives. As a leading global medicines company, we use innovative science and digital technologies to create transformative treatments in areas of great medical need. In our quest to find new medicines, we consistently rank among the world's top companies investing in research and development. Novartis products reach more than 750 million people globally and we are finding innovative ways to expand access to our latest treatments. About 109,000 people of more than 140 nationalities work at Novartis around the world. Find out more at. 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

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

December 5, 2019 R&D update 2019 – London

January 29, 2020 Fourth quarter and Full Year results 2019

April 28, 2020 First quarter results 2020
July 21, 2020 Second quarter results 2020
October 27, 2020 Third quarter results 2020