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Novartis Q1 2019 Condensed Interim Financial Report – Supplementary Data

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Key figures [1]	Q1 2019	Q1 2018	% change	
	USD m	USD m	USD	cc [2]
Net sales to third parties from continuing operations	**11 106**	**10 915**	**2**	**7**
Divisional operating income from continuing operations	2 382	2 544	- 6	2
Corporate income and expense, net from continuing operations	- 140	- 173	19	15
Operating income from continuing operations	**2 242**	**2 371**	**- 5**	**4**
As % of net sales	*20.2*	*21.7*		
Income from associated companies	80	152	- 47	- 47
Interest expense	- 226	- 218	- 4	- 5
Other financial income and expense	44	35	26	29
Taxes	- 272	- 370	26	19
Net income from continuing operations	**1 868**	**1 970**	**- 5**	**4**
Net loss / income from discontinued operations	-101	58	nm	nm
Net income	**1 767**	**2 028**	**-13**	**-3**
Basic earnings per share from continuing operations (USD)	**0.81**	**0.85**	**- 5**	**5**
Basic loss / earnings per share from discontinued operations (USD)	-0.04	0.02	nm	nm
Basic earnings per share (USD)	**0.77**	**0.87**	**-11**	**-3**
Cash flows from operating activities from continuing operations	**2 334**	**2 381**	**-2**	
Free cash flow from continuing operations [2]	**1 869**	**1 919**	**- 3**	
Core[2]				
Core operating income from continuing operations	**3 254**	**2 980**	**9**	**18**
As % of net sales	*29.3*	*27.3*		
Core net income from continuing operations	**2 811**	**2 684**	**5**	**13**
Core net income from discontinued operations	278	298	- 7	4
Core net income	**3 089**	**2 982**	**4**	**12**
Core basic earnings per share from continuing operations (USD)	**1.21**	**1.15**	**5**	**13**
Core basic earnings per share from discontinued operations (USD)	0.12	0.13	-8	4
Core basic earnings per share (USD)	**1.33**	**1.28**	**4**	**12**

nm = not meaningful
[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 32 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 41. Unless otherwise noted, all growth rates in this release refer to same period in prior year.

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 32 for a full explanation.

Novartis continues to expect the previously-announced divestment of the Sandoz US oral solids and dermatology portfolio to be completed during 2019, pending closing conditions including regulatory approvals. Novartis remains fully committed to this business until it is divested to Aurobindo. The results of this business are included in continuing operations until the time of the divestment.

First quarter financials

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.

Continuing operations

Net sales

Net sales were USD 11.1 billion (+2%, +7% cc) in the first quarter driven by volume growth of 11 percentage points (cc), mainly from *Cosentyx, Entresto, Lutathera*, *Promacta* and *Kisqali*. Strong volume growth was partly offset by the negative impacts of pricing (-3 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 management and central services, amounted to an expense of USD 140 million in the first quarter compared to an expense of USD 173 million in prior year mainly driven by favorable contributions from the Novartis Venture Fund and lower restructuring costs.

Operating income
Operating income was USD 2.2 billion (-5%, +4% cc) driven by higher Innovative Medicines sales and improved gross margin, partly offset by growth investments, a net impairment charge and lower divestment gains. Operating income margin in constant currencies decreased 0.7 percentage points; currency had a negative impact of 0.8 percentage points, resulting in a net decrease of 1.5 percentage points to 20.2% of net sales. Core adjustments amounted to USD 1.0 billion (2018: USD 0.6 billion).

Core operating income was USD 3.3 billion (+9%, +18% cc) mainly driven by higher Innovative Medicines sales and improved gross margin, partly offset by growth and launch investments, including for *Zolgensma*. Core operating income margin in constant currencies increased by 2.6 percentage points; currency had a negative impact of 0.6 percentage points, resulting in a net increase of 2.0 percentage points to 29.3% of net sales.

Income from associated companies
Income from associated companies decreased from USD 152 million in prior year to USD 80 million in the first quarter of 2019. The decrease was mainly due to the discontinuation of income from the GSK consumer healthcare joint venture which was divested by Novartis in 2018.

The share of income from Roche Holding AG increased from USD 25 million to USD 80 million. The estimated first quarter income for Roche Holding AG, net of amortization, was USD 166 million compared to USD 150 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 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 decreased to USD 278 million from USD 375 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 278 million from USD 237 million in prior year, 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 higher estimated core income contribution from Roche for the current period.

Interest expense and other financial income/expense
Interest expense increased to USD 226 million from USD 218 million in prior year, mainly due to the additional interest expense on lease liabilities of USD 16 million, following the implementation of IFRS 16 Leases as of January 1, 2019, partly offset by lower interest expense on outstanding debt.

Taxes
The tax rate for continuing operations in the first quarter was 12.7% compared to 15.8% in prior year. In February 2019, the Swiss canton Basel-Stadt enacted a tax rate reduction, effective January 1, 2019. This required a revaluation of the deferred tax assets and liabilities to the newly enacted tax rate at the date of enactment, which resulted in a net tax benefit of USD 59 million.

Excluding the impact of this rate change, the first quarter tax rate would have been 15.4% compared to 15.8% in the 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 16.1% compared to 15.4% in prior year.

Net income and EPS
Net income was USD 1.9 billion, (-5%, +4% cc) broadly in line with operating income. EPS was USD 0.81 (-5%, +5% cc) in line with net income.

Core net income was USD 2.8 billion (+5%, +13% cc) as growth in core operating income was partly offset by the discontinuation of core income from the GSK consumer healthcare joint venture. Core EPS was USD 1.21 (+5%, +13% cc) in line with core net income.

Free cash flow amounted to USD 1.9 billion broadly in line with the prior year, which included the receipt of a sales milestone related to the Vaccines divestment to GSK.

Continuing operations

Innovative Medicines

	Q1 2019 USD m	Q1 2018 USD m	% change USD	cc
Net sales	**8 780**	**8 398**	**5**	**10**
Operating income	**2 109**	**2 135**	**-1**	**8**
As % of net sales	24.0	25.4		
Core operating income	**2 922**	**2 631**	**11**	**19**
As % of net sales	33.3	31.3		

First quarter

Net sales
Net sales were USD 8.8 billion (+5%, +10% cc) in the first quarter, as Pharmaceuticals grew 5% (11% cc) and Oncology grew 4% (9% cc). Volume contributed 12 (cc) percentage points to sales growth, mainly driven by *Cosentyx*, *Entresto* and *Lutathera*. Generic competition had a negative impact of 1 (cc) percentage point. Pricing had a negative impact of 1 (cc) percentage point.

Regionally, US sales (USD 3.0 billion, +13%) delivered a strong performance driven by *Cosentyx* and *Entresto*. Europe sales (USD 3.1 billion, +1%, +11% cc) benefited from continued strong performance of *Cosentyx, Entresto*, *Lucentis* and *Tafinlar + Mekinist*. Japan sales were USD 0.6 billion (-1%, 1% cc). Emerging Growth Markets sales were USD 2.2 billion (+1%, +12% cc), led by double-digit cc growth in China.

Pharmaceuticals BU sales were USD 5.5 billion (+5%, +11% cc). *Cosentyx* (USD 791 million, +36%, +41% cc) grew double-digit across all indications. *Entresto* (USD 357 million, +79%, +85% cc) continued to deliver strong double-digit performance, benefiting from the PIONEER data on hospital initiation. *Xolair* (USD 281 million, +10%, +20% cc) continued double-digit growth. *Lucentis* continued to grow (USD 533 million, +2%, +10% cc) and *Gilenya* (USD 766 million, -7%, -3% cc) declined.

Oncology BU sales were USD 3.3 billion (+4%, +9% cc). Growth was mainly driven by *Lutathera* (USD 106 million), *Promacta/Revolade* (USD 307 million, +19%, +24% cc), *Kisqali* (USD 91 million), *Tafinlar + Mekinist* (USD 297 million, +11%, +18% cc), *Jakavi* (USD 258 million, +10%, +20% cc) and *Kymriah* (USD 45 million).

Operating income
Operating income was USD 2.1 billion (-1%, +8% cc), mainly driven by continued strong sales growth partly offset by a net impairment charge and higher growth investments, including for *Zolgensma*. Operating income margin in constant currencies decreased by 0.6 percentage points; currency had a negative impact of 0.8 percentage points, resulting in a net decrease of 1.4 percentage points to 24.0% of net sales.

Core adjustments were USD 813 million, including USD 457 million for amortization. Prior year core adjustments were USD 496 million. Core adjustments increased compared to prior year mainly due to a net impairment charge. Core operating income was USD 2.9 billion (+11%, +19% cc). Core operating income margin in constant currencies increased by 2.6 percentage points; currency had a negative impact of 0.6 percentage points. This results in a core margin of 33.3% of net sales, 2.0 percentage points above prior year.

Core gross margin as a percentage of net sales increased by 1.0 percentage points (cc), mainly driven by productivity. Core R&D expenses decreased by 1.6 percentage points (cc) mainly driven by sales leverage, productivity and portfolio prioritization. Core SG&A expenses declined by 0.5 percentage points (cc) mainly driven by productivity and sales leverage. Core Other Income and Expense, net decreased the margin by 0.5 percentage points (cc) mainly due to *Zolgensma* prelaunch inventory provisions and lower out-licensing income.

ONCOLOGY BUSINESS UNIT

	Q1 2019 USD m	Q1 2018 USD m	% change USD	cc
Tasigna	434	466	-7	-3
Sandostatin	392	400	-2	2
Afinitor/Votubia	373	375	-1	3
Promacta/Revolade	307	257	19	24
Gleevec/Glivec	307	392	-22	-18
Tafinlar + Mekinist[1]	297	267	11	18
Jakavi	258	234	10	20
Exjade/Jadenu	238	261	-9	-5
Votrient	187	214	-13	-8
Lutathera	106	6	nm	nm
Kisqali	91	44	107	115
Kymriah	45	12	275	282
Other	286	263	9	14
Total Oncology business unit	**3 321**	**3 191**	**4**	**9**

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

Tasigna (USD 434 million, -7%, -3% cc) declined in the US, partially offset by growth in Europe.

Sandostatin (USD 392 million, -2%, +2% cc) grew mainly driven by the US, partly offset by competitive pressure in other regions.

Afinitor/Votubia (USD 373 million, -1%, +3% cc) grew solidly mainly driven by US growth in the TSC (tuberous sclerosis complex) indication, partly offset by generic competition in Europe.

Promacta/Revolade (USD 307 million, +19%, +24% cc) grew at a strong double-digit rate across all regions driven by increased use in chronic immune thrombocytopenia.

Gleevec/Glivec (USD 307 million, -22%, -18% cc) declined due to generic competition in most major markets.

Tafinlar + Mekinist (USD 297 million, +11%, +18% cc) continued double-digit growth due to continued demand in metastatic melanoma and NSCLC, and strong uptake of the adjuvant melanoma indication in the US and Europe.

Jakavi (USD 258 million, +10%, +20% cc) continued double-digit growth across all regions driven by the myelofibrosis and polycythemia vera indications.

Exjade/Jadenu (USD 238 million, -9%, -5% cc) declined mainly due to pressures from the anticipation of generics in the US and generic competition in other regions.

Votrient (USD 187 million, -13%, -8% cc) sales declined mainly driven by competitive pressure in the US.

Lutathera (USD 106 million) continued to accelerate led by the US with over 120 centers actively treating and the European launch progressing well. Sales from all AAA brands (including *Lutathera* and radiopharmaceutical diagnostic products) were USD 163 million.

Kisqali (USD 91 million, +107%, +115% cc) grew driven by use in first line metastatic breast cancer patients, independent of menopausal status or combination partner.

Kymriah (USD 45 million) strong demand continued and sales increased driven by new treatment sites in the EU, additional progress with reimbursement, providing coverage for at least one indication in 14 countries, increased manufacturing capacity and widened commercial specifications in the EU. We continue to engage with the FDA, aiming to change the specifications in the US. Japan approved *Kymriah* for PedALL and DLBCL patients, making it the only CAR-T approved in Asia. Additionally, we completed the acquisition of the CellforCure manufacturing facility.

PHARMACEUTICAL BUSINESS UNIT

OPHTHALMOLOGY

	Q1 2019 USD m	Q1 2018 USD m	% change USD	cc
Lucentis	533	520	2	10
Travoprost Group	115	124	-7	-3
Other	513	513	0	5
Total Ophthalmology	**1 161**	**1 157**	**0**	**7**

Lucentis (USD 533 million, +2%, +10% cc) delivered double-digit growth mainly driven by strong market growth.

Travoprost Group (USD 115 million, -7%, -3% cc) declined mainly due to generic competition in Europe and increased competition in the US.

NEUROSCIENCE

	Q1 2019 USD m	Q1 2018 USD m	% change USD	cc
Gilenya	766	821	-7	-3
Aimovig[1]	18		nm	nm
Other	13	20	-35	-33
Total Neuroscience	**797**	**841**	**-5**	**-1**

[1] *Excluding the US and Japan*
nm = not meaningful

Gilenya (USD 766 million, -7%, -3% cc) declined as volume growth in EU was offset by a decline in US due to competitive pressures and stock in trade movements. In the US, the ANDA proceedings challenging the compound patent (which including extensions expires in 2019) have been finally resolved and the patent upheld.

Aimovig (USD 18 million) with more than 200,000 patients treated worldwide in the post-trial setting, has now been launched in 27 countries for the preventative treatment of migraine in adults. *Aimovig* was successfully launched in the US in May 2018, and ex-US launches are now underway, including additional regulatory filings and local reimbursement procedures. *Aimovig* is co-commercialized with Amgen in the US, where Amgen records sales, and Novartis has exclusive commercialization rights for all territories excluding US and Japan. A termination notice issued by Amgen on April 2, 2019 based on an alleged material breach of the collaboration agreements is the subject matter of legal proceedings between Novartis and Amgen. Novartis disputes the allegations vigorously. The collaboration agreements will remain in force pending a final court decision. The dispute does not affect the Novartis vision and commitment to help people suffering from migraine worldwide.

IMMUNOLOGY, HEPATOLOGY and DERMATOLOGY

	Q1 2019 USD m	Q1 2018 USD m	% change USD	cc
Cosentyx	791	580	36	41
Ilaris	151	126	20	28
Total Immunology, Hepatology and Dermatology	**942**	**706**	**33**	**39**

Xolair sales for all indications are reported in the Respiratory franchise

Cosentyx (USD 791 million, +36%, +41% cc) delivered strong demand driven growth across all indications in the US and ex-US. In the US, *Cosentyx* (USD 474 million) sales grew 49% and in the rest of the world sales grew (21%, 32% cc). In March, Novartis presented new head-to-head data of *Cosentyx* showing superior improvements in psoriasis patients' quality of life versus ustekinumab. In ERASURE / FIXTURE, one of the largest clinical programs to date, *Cosentyx* provided sustained benefit of skin improvement over 5 years, adding to 5 year data across the continuum of psoriatic disease and ankylosing spondylitis. In March, *Cosentyx* was approved in China, based on data which confirmed rapid response and high efficacy of *Cosentyx* in psoriasis patients. These data reinforce *Cosentyx*'s unique position as a comprehensive treatment across PsO, PsA and AS, with sustained efficacy.

Ilaris (USD 151 million, +20%, +28% 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

	Q1 2019	Q1 2018	% change	
	USD m	USD m	USD	cc
Ultibro Breezhaler	104	106	-2	7
Seebri Breezhaler	31	38	-18	-10
Onbrez Breezhaler	22	27	-19	-12
Subtotal COPD Portfolio	**157**	**171**	**-8**	**0**
Xolair[1]	281	255	10	20
Other	7	7	0	2
Total Respiratory	**445**	**433**	**3**	**12**

Xolair sales for all indications are reported in the Respiratory franchise

Ultibro Breezhaler (USD 104 million, -2%, +7% cc) an inhaled LABA/LAMA, showed continued growth, supported by FLAME and SUNSET study results as well as the GOLD Strategy 2019 Report.

Seebri Breezhaler (USD 31 million, -18%, -10% cc) an inhaled LAMA, declined due to competition in Europe and a focus of resources on *Ultibro Breezhaler*.

Onbrez Breezhaler (USD 22 million, -19%, -12% cc) an inhaled LABA, declined due to a focus of resources on *Ultibro Breezhaler*.

Xolair (USD 281 million, +10%, +20% cc) continued to grow in both indications, Severe Allergic Asthma (SAA) and Chronic Spontaneous Urticaria (CSU). Growth in SAA was mainly driven by strong performance in Emerging Growth Markets and the recent approval of *Xolair* for home-use in Europe. Growth in CSU was observed for all regions.

CARDIO-METABOLIC

	Q1 2019	Q1 2018	% change	
	USD m	USD m	USD	cc
Entresto	357	200	79	85
Other	6	4	50	29
Total Cardio-Metabolic	**363**	**204**	**78**	**84**

Entresto (USD 357 million, +79%, +85% cc) continued strong sales growth across all regions, benefiting from the broad implementation and adoption of PIONEER-HF data presented in Q4 2018. The trial showed that initiating *Entresto* in HFrEF patients in the hospital setting soon after an acute decompensated heart failure event is safe and provides better outcomes than enalapril. Additional follow up data from PIONEER was presented at the American College of Cardiology in March which reinforces the safety and benefit of *Entresto* as the new standard of care in HFrEF.

ESTABLISHED MEDICINES

	Q1 2019	Q1 2018	% change	
	USD m	USD m	USD	cc
Galvus Group	315	318	-1	7
Exforge Group	267	248	8	16
Diovan Group	261	265	-2	6
Zortress/Certican	116	109	6	14
Voltaren/Cataflam	113	115	-2	5
Neoral/Sandimmun(e)	103	115	-10	-5
Other	576	696	-17	-12
Total Established Medicines	**1 751**	**1 866**	**-6**	**1**

***Galvus* Group** (USD 315 million, -1%, +7% cc) continues to grow in constant currency driven by solid performance in Emerging Growth Markets including China.

***Exforge* Group** (USD 267 million, +8%, +16% cc) grew in Emerging Growth Markets and Europe mainly due to the recall of competitive generic products.

***Diovan* Group** (USD 261 million, -2%, +6% cc) grew in Europe and Emerging Growth Markets mainly due to the recall of competitive generic products.

Zortress/Certican (USD 116 million, +6%, +14% cc) continued to show growth across all regions.

Voltaren/Cataflam (USD 113 million, -2%, +5% cc) grew mainly driven by Emerging Growth Markets.

Neoral/Sandimmun(e) (USD 103 million, -10%, -5% cc) declined due to generic competition and mandatory price reductions.

Sandoz

	Q1 2019 USD m	Q1 2018 USD m	% change USD	cc
Net sales	**2 326**	**2 517**	**-8**	**-2**
Operating income	**273**	**409**	**-33**	**-25**
As % of net sales	11.7	16.2		
Core operating income	**461**	**499**	**-8**	**1**
As % of net sales	19.8	19.8		

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 during 2019.

First quarter

Net sales

Sandoz net sales were USD 2.3 billion (-8%, -2% cc) in the first quarter with 9 percentage points (cc) of price erosion mainly in the US, partially offset by volume growth of 7 percentage points (cc). Excluding the US, net sales grew (-4%, +4% cc).

Sales in the US were USD 590 million (-17%), mainly due to continued industry-wide pricing pressure. Sales in Europe were USD 1.2 billion (-4%, +5% cc). Sales in Asia / Africa / Australasia were USD 318 million (-2%, +3% cc). Sales in Canada and Latin America were USD 177 million (-9%, -1% cc).

Global sales of Biopharmaceuticals (biosimilars, biopharmaceutical contract manufacturing and *Glatopa*) grew to USD 351 million (+5%, +11% cc), driven by Europe with continued strong double-digit growth from *Rixathon* (rituximab), *Hyrimoz* (adalimumab) and *Erelzi* (etanercept). Launch roll-outs in Asia / Africa / Australasia also contributed to growth.

Retail sales were USD 1.9 billion (-9%, -3% cc), due to the decline in the US (-16%). Total Anti-Infectives franchise sales were USD 329 million (-11%, -5% cc), including finished dosage forms sold under the Sandoz name and Anti-Infectives sold to third parties for sale under their own name (USD 125 million, -11%, -6% cc).

Operating income

Operating income was USD 273 million (-33%, -25% cc) mainly due to lower divestment income, higher net changes in legal provisions, higher net restructuring expenses, and lower sales, partly offset by continued gross margin improvement. Operating income margin declined by 3.9 percentage points in constant currencies, currency had a negative impact of 0.6 percentage points, resulting in a net decrease of 4.5 percentage points to 11.7% of net sales.

Core adjustments were USD 188 million, including USD 79 million of amortization. Prior year core adjustments were USD 90 million. The change in core adjustments compared to prior year was driven by lower divestment gains, changes in legal provisions, and higher net restructuring expenses. Core operating income was USD 461 million (-8%, +1% cc) as gross margin improvements were offset by the sales decline from price erosion. Core operating income margin improved by 0.5 percentage points in constant currencies, currency had a negative impact of 0.5 percentage points, resulting in an unchanged margin at 19.8% of net sales.

Core gross margin as a percentage of net sales increased by 1.8 percentage points (cc), as favorable product and geographic mix and ongoing productivity improvements, were partly offset by the impact of price erosion in the US. Core R&D expenses increased by 0.4 percentage points (cc). Core SG&A expenses increased by 0.4 percentage points (cc). Core Other Income and Expense increased by 0.5 percentage points (cc) mainly due to higher net legal settlement expenses.

Discontinued Operations[1]

Discontinued operations	Q1 2019 USD m	Q1 2018 USD m	% change USD	cc
Net sales	**1 777**	**1 779**	**0**	**4**
Operating income	**71**	**76**	**nm**	**nm**
As a % of sales	4.0	4.3		
Core operating income	**350**	**360**	**-3**	**7**
As a % of sales	19.7	20.2		
Net loss / income from discontinued operations	**-101**	**58**	**nm**	**nm**

nm = not meaningful

First quarter

Results for discontinued operations in the first quarter of 2019 include a full quarter of results from the Alcon Division and certain Corporate costs directly attributable to Alcon.

Net sales
Discontinued operations net sales in the first quarter amounted to USD 1.8 billion (0%, +4% cc), mainly driven by the Surgical business franchise.

Operating income
Operating income was USD 71 million compared to USD 76 million in prior year, mainly as higher sales, as well as the discontinuation of amortization and depreciation as of March 1 (USD 118 million), were offset by higher one-time costs relating to the spin-off, higher legal costs and growth investments.

Core operating income amounted to USD 350 million for discontinued operations (-3%, +7% cc) as higher sales and gross margin, as well as discontinuation of depreciation and software amortization from March 1 (USD 30 million) were partly offset by growth investments.

Net loss / income
Net loss from discontinued operations amounted to a loss of USD 101 million compared to a net income of USD 58 million in prior year mainly due to higher one-time tax expenses.

In connection with the Alcon spin-off on April 9, the Group will report as part of its Q2 discontinued operations results a one-time non-cash IFRS gain of approximately USD 4.7 billion (refer to Note 2 and 3).

Total Group

For the total Group, net income amounted to USD 1.8 billion compared to USD 2.0 billion in the prior year, and basic earnings per share decreased to USD 0.77 from USD 0.87. Free cash flow for the total Group amounted to USD 1.8 billion.

[1] Discontinued operations are described on page 32.

GROUP CASH FLOW AND BALANCE SHEET

Cash flow

First quarter

Net cash flows from operating activities from continuing operations amounted to USD 2.3 billion, compared to USD 2.4 billion in the prior year period. Higher net income adjusted for non-cash items and other adjustments, including divestment gains, was more than offset by unfavorable 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.

Net cash inflows from investing activities from continuing operations amounted to USD 1.8 billion, compared to a cash outflow of USD 4.0 billion in in the prior year period. The current year includes USD 2.3 billion net proceeds from the sales of marketable securities and commodities and cash inflows from the sale of property, plant and equipment, intangible and financial assets of USD 0.3 billion, partly offset by cash outflows for the purchase of property, plant and equipment of USD 0.3 billion, for intangible assets of USD 0.3 billion, for financial assets and other non-current assets of USD 0.1 billion, and for acquisitions and divestments of businesses, net of USD 0.1 billion.

In prior year period, net cash flows used in investing activities from continuing operations were mainly related to the acquisition of Advanced Accelerator Applications S.A. for USD 3.5 billion (USD 3.9 billion, net of cash acquired USD 0.4 billion), the purchase of property, plant and equipment of USD 0.3 billion and for intangible assets of USD 0.4 billion. This was partly offset by cash inflows from the sale of property, plant and equipment and intangible assets of USD 0.2 billion.

Net cash flows used in investing activities from discontinued operations amounted to USD 0.4 billion, compared to USD 0.1 billion in 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.

Net cash flows used in financing activities from continuing operations amounted to USD 10.3 billion, compared to USD 1.5 billion in the prior year period. The current year mainly includes the cash outflows for the dividend payment of USD 6.6 billion, the repayment at maturity of a US dollar bond of USD 3.0 billion and for the net decrease of current financial debts of USD 0.1 billion. Other financing net cash outflows amounted to USD 0.5 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 and 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 2.5 billion, and from net treasury share transactions of USD 0.3 billion.

Free cash flow from continuing operations amounted to USD 1.9 billion broadly in line with the prior year period, which included the receipt of a sales milestone related to the Vaccines divestment to GSK.

Balance sheet

There has been a significant change on the balance sheet as a result of the classification of the Alcon business to discontinued operations following the approval of the spin-off of Alcon at the Annual General Meeting on February 28, 2019 (see Note 2 and 3 for further details).

Assets

Total non-current assets of USD 85.5 billion at March 31, 2019 decreased by USD 24.5 billion compared to prior year-end, mainly as a result of USD 24.4 billion of the Alcon business non-current assets reclassified to current assets related to discontinued operations. Excluding the effect of the reclassifications, total non-current assets decreased by USD 0.8 billion. The reduction of USD 1.0 billion in intangible assets other than goodwill was mainly due to unfavorable currency translation adjustments and amortization. Goodwill of USD 26.3 billion remained stable compared to December 31, 2018. Property, plant and equipment decreased by USD 0.4 billion to USD 12.4 billion mainly due to unfavorable currency translation adjustments and depreciation. Right-of-use assets of USD 1.7 billion were recognized resulting from the implementation of IFRS 16 – Leases on January 1, 2019[1].

[1] For further detail on the implementation of IFRS 16 – Leases, refer to Note 2 and 6

Investments in associated companies amounting to USD 7.9 billion decreased by USD 0.5 billion, mainly due to the dividend income from the investment in Roche.

Total current assets of USD 52.4 billion at March 31, 2019 increased by USD 16.9 billion, mainly due to the reclassification of the non-current assets of the Alcon business mentioned above. Excluding the effect of the reclassifications, cash and cash equivalents, and marketable securities, commodities, time deposits and derivative financial instruments, decreased by USD 6.2 billion and USD 2.4 billion respectively. Inventory and trade receivables remained stable at USD 5.7 billion and USD 7.6 billion respectively, while other current assets increased by USD 0.3 billion.

Liabilities

Total non-current liabilities of USD 34.5 billion decreased by USD 2.8 billion compared to December 31, 2018, mainly due to the reclassification of the USD 3.0 billion of Alcon business non-current liabilities to current liabilities related to discontinued operations. Excluding the effect of the reclassifications, total non-current liabilities remained broadly in line with prior year end. The recognition of the USD 1.7 billion lease liability, resulting from the implementation of IFRS 16 – Leases on January 1, 2019[1], was offset by the reduction of the financial debt and the deferred tax liabilities by USD 1.2 billion and USD 0.5 respectively. Provisions and other non-current liabilities were broadly in line with prior year at USD 6.2 billion.

Total current liabilities of USD 56.1 billion at March 31, 2019 increased by USD 26.5 billion, mainly due to recognition of the dividend in kind distribution liability to effect the spin-off of the Alcon business of USD 26.4 billion (see Note 2 and 3 for further details). Excluding the effect of the reclassifications of non-current liabilities related to discontinued operations, mentioned above, and the dividend in kind distribution liability, total current liabilities decreased by USD 3.1 billion at March 31, 2019. Financial debts and derivatives decreased by USD 2.2 billion due to repayment of USD 3.0 billion bond issued in February 2009. Lease liabilities of USD 0.3 billion were recognized resulting from the implementation of IFRS 16 – Leases on January 1, 2019[1]. Provisions and other current liabilities decreased by USD 0.9 billion whereas trade payable remained stable at USD 4.6 billion.

Net assets of disposal group held for sale of USD 0.8 billion are related to the pending divestment of the Sandoz US dermatology business and generic US oral solids portfolio to Aurobindo Pharma USA Inc., as announced on September 6, 2018 (see Note 3).

Group equity

The Group's equity decreased by USD 31.4 billion to USD 47.3 billion at March 31, 2019 compared to USD 78.7 billion at December 31, 2018. This decrease was mainly due to the dividend in kind distribution liability of USD 26.4 billion (see Note 2 and 3 for further details), the cash-dividend payment of USD 6.6 billion, unfavorable currency translation differences of USD 0.3 billion and net actuarial losses of USD 0.5 billion. This was partially offset by net income of USD 1.8 billion, decrease of treasury share repurchase obligation under a share buyback trading plan of USD 0.3 billion and the net effect of exercise of options and employee transactions of USD 0.3 billion.

On a pro forma basis, adjusting for the impacts of the completion of the spin-off of Alcon on April 9, 2019, the Group's equity would have been USD 54.9 billion at March 31, 2019.

Net debt and debt/equity ratio

The net debt increased to USD 21.5 billion at March 31, 2019 compared to USD 16.2 billion at December 31, 2018. The Group's liquidity amounted to USD 7.1 billion at March 31, 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 28.7 billion at March 31, 2019, compared to USD 32.1 billion at December 31, 2018. The debt/equity ratio, excluding the dividend in kind distribution liability equity reduction, decreased to 0.39:1 at March 31, 2019.

On a pro forma basis, adjusting for the impacts of the completion of the spin-off of Alcon on April 9, 2019, the Group's debt/equity ratio would have been 0.52:1 at March 31, 2019 compared to 0.41:1 at December 31, 2018.

[1] For further detail on the implementation of IFRS 16 – Leases, refer to Note 2 and 6

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
Kymriah	tisagenlecleucel	Pediatric/young adult acute lymphoblastic leukemia	JP – March
Kymriah	tisagenlecleucel	r/r Diffuse Large B-Cell Lymphoma	JP – March
Mayzent (BAF312)	siponimod	Relapsing forms of multiple sclerosis, including Relapsing Remitting Multiple Sclerosis (RRMS) clinically isolated syndrome (CIS) and active secondary progressive multiple sclerosis (SPMS)	US – March

Selected Innovative Medicines projects awaiting regulatory decisions

		Completed submissions			
Product	**Indication**	**US**	**EU**	**Japan**	**News update**
AVXS-101	Spinal Muscular Atrophy Type 1 (IV Formulation)	Q3 2018	Q4 2018	Q4 2018	- Priority review granted by FDA Dec 2018 (PDUFA date May '19) - PRIME designation in EU. - Sakigake designation in Japan
Mayzent (BAF312)	Secondary Progressive Multiple Sclerosis	Approved	Q3 2018	Q1 2019	
BYL719 (alpelisib) + fulvestrant	PIK3CA mutant HR+/HER2- postmenopausal advanced or metastatic BC	Q4 2018	Q4 2018		
LCI699	Cushing's disease	Q1 2019	Q4 2018		
Lucentis	Retinopathy of prematurity		Q4 2018	Q1 2019	
	Diabetic retinopathy		Q4 2018		
Promacta/ Revolade	Severe aplastic anemia, 1st line	Approved	Q2 2018	Approved	
RTH258	nAMD	Q1 2019	Q1 2019		File accepted for review, PRV used

Selected Innovative Medicines pipeline projects

Project/ Compound	Potential indication/ Disease area	First planned submissions	Current Phase	News update
ABL001	Chronic myeloid leukemia 3rd line	2021	III	
	Chronic myeloid leukemia 1st line	≥2023	I	
ACZ885 (canakinumab)	Adjuvant NSCLC	2022	III	- Phase III study enrollment started
	1st line NSCLC	2021	III	- Phase III study enrollment started
	2nd line NSCLC	2021	III	- Phase III study enrollment started
AVXS-101	Spinal Muscular Atrophy Type 2/3 (IT formulation)	2020	I	- Data expected at AAN in May 19
AVXS-201	Rett Syndrome	2022	I	
CAD106	Alzheimer's disease	≥2023	II / III	
BYL719	HR- HER- adv. breast cancer	≥2023	III	
	Triple negative breast cancer	≥2023	III	

CFZ533 (iscalimab)	Solid organ transplantation	≥2023	II	- Enrollment has started in the phase IIb de novo and maintenance kidney transplant study
	Sjoegren's syndrome	≥2023	II	
CNP520	Alzheimer's disease	≥2023	II / III	
Cosentyx	Non-radiographic axial spondyloarthritis	2019	III	- On track for readout in H2 2019
	Psoriatic arthritis head-to-head vs. adalimumab	2020	III	
	Ankylosing spondylitis head-to-head vs. adalimumab	2022	III	
	Hidradenitis suppurativa	2022	III	
CSJ117	Severe asthma	≥2023	II	
ECF843	Dry eye	2022	II	
Entresto	Chronic heart failure with preserved ejection fraction	2019	III	- PARAGON-HF continues as planned following IA, topline results expected mid-2019
	Post-acute myocardial infarction	2020	III	
HDM201	Acute myeloid leukemia	≥2023	II	
INC280 (capmatinib)	NSCLC (cMET amp and mut)	2019	II	
Jakavi	Acute graft-versus-host disease (GvHD)	2020	III	
	Chronic graft-versus-host disease (GvHD)	2020	III	
KAE609 (cipargamin)	Malaria	≥2023	II	
KAF156 (ganaplacide)	Malaria	≥2023	II	
Kisqali (LEE011) + endocrine therapy	HR+/HER2- EBC (adjuvant)	≥2023	III	- Translational Research In Oncology (TRIO) is collaborating with Novartis on an upcoming phase III clinical trial (called NATALEE)
Kymriah (tisagenlecleucel)	r/r Follicular lymphoma	2021	II	
	Chronic lymphocytic leukemia	2022	II	
	r/r DLBCL in 1st relapse	2021	III	
+ pembrolizumab	r/r DLBCL	≥2023	I	
LAM320	Multi-drug resistant tuberculosis	2021	III	- Submission for WHO pre-qualification planned in Q1 2019
LJC242	Non-alcoholic steatohepatitis (NASH)	≥2023	II	
LJN452 (tropifexor)	Non-alcoholic steatohepatitis (NASH)	≥2023	II	- FDA Fast Track designation
LMI070	Spinal muscular atrophy	2022	II	- FDA Orphan designation, EMA Orphan status obtained - Dose ranging study ongoing
LNP023	IgA nephropathy	≥2023	II	
	Membranous nephropathy	≥2023	II	
	C3 glomerulopathy	≥2023	II	
LOU064	Chronic spontaneous urticaria	≥2023	II	
^{177}Lu-PSMA-617	Metastatic castration-resistant prostate cancer	2020	III	
MOR106	Atopic dermatitis	≥2023	II	
OMB157 (ofatumumab)	Relapsing multiple sclerosis	2019	III	- Phase III ASCLEPIOS studies fully recruited and on track for 2019 readout
PDR001 + *Tafinlar* + *Mekinist*	Metastatic BRAF V600+ melanoma	2019	III	- On track for 2019 H2 readout

PDR001 Combo	Metastatic melanoma	≥2023	II	- CPDR001J2201 enrollment started
QAW039 (fevipiprant)	Asthma	2020	III	- Phase III LUSTER (1 and 2) and Zeal (1 and 2) studies enrollment completed. On track for H2 2019 readout
QBW251	COPD	≥2023	II	
QGE031 (ligelizumab)	Chronic spontaneous urticaria / chronic idiopathic urticaria	2021	III	- Phase III trials initiated enrollment
QMF149	Asthma	2019	III	
QVM149	Asthma	2019	III	- Phase III IRIDIUM, PALLADIUM and QUARTZ studies enrollment completed
RTH258 (brolucizumab)	Diabetic macular edema	2021	III	- DME trial started
	Retinal vein occlusion	≥2023	III	
Rydapt (PKC412)	Acute myeloid leukemia (FLT3 wild type)	2022	III	
SAF312	Chronic ocular surface pain	≥2023	II	
SEG101	Sickle cell pain crises	2019	II	
TQJ230A	Secondary prevention of cardiovascular events in patients with elevated levels of lipoprotein (a)	≥2023	III	- Novartis announced February 25th that we were exercising our option to license the rights to develop and commercialize TQJ230 from Akcea Therapeutics, an affiliate of Ionis Pharmaceuticals, for targeted cardiovascular therapy. Phase III scheduled to initiate in Q1 of 2020.
UNR844	Presbyopia	2022	II	
VAY736 (lanalumab)	Auto-immune hepatitis	≥2023	II	
	Primary Sjoegren's syndrome	≥2023	II	- FDA Fast Track designation - PhII DRF study fully recruited
VAY785 (emricasan)	Non-alcoholic steatohepatitis (NASH)	≥2023	II	- Conatus issued a press release on Mar 21st regarding results of the ENCORE-NF phase 2b clinical trial in NASH fibrosis
VPM087	1st line colorectal cancer / 1st line renal cell carcinoma	≥2023	I	
Xolair	Nasal polyps	2019	III	
ZPL389 (adriforant)	Atopic dermatitis	2022	II	- Phase IIb trial enrollment initiated

Selected Sandoz approvals and pipeline projects (biosimilars)

Project/ Compound	Potential indication/ Disease area	Submission status	Current Phase	News update
LA-EP2006 (pegfilgrastim)	Chemotherapy-induced neutropenia and others (same as originator)	US EU	Submitted Approved	- Resubmitted to FDA in April

CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Consolidated income statements

First quarter (unaudited)

(USD millions unless indicated otherwise)	Note	**Q1 2019**	Q1 2018	Change
Net sales to third parties from continuing operations	9	**11 106**	**10 915**	**191**
Sales to discontinued operations		53	13	40
Net sales from continuing operations		**11 159**	**10 928**	**231**
Other revenues	9	296	235	61
Cost of goods sold		-3 251	-3 451	200
Gross profit from continuing operations		**8 204**	**7 712**	**492**
Selling, general and administration		-3 330	-3 284	-46
Research and development		-2 299	-1 982	-317
Other income		203	388	-185
Other expense		-536	-463	-73
Operating income from continuing operations		**2 242**	**2 371**	**-129**
Income from associated companies		80	152	-72
Interest expense		-226	-218	-8
Other financial income and expense		44	35	9
Income before taxes from continuing operations		**2 140**	**2 340**	**-200**
Taxes		-272	-370	98
Net income from continuing operations		**1 868**	**1 970**	**-102**
Net loss/income from discontinued operations		-101	58	-159
Net income		**1 767**	**2 028**	**-261**
Attributable to:				
Shareholders of Novartis AG		*1 766*	*2 025*	*-259*
Non-controlling interests		*1*	*3*	*-2*
Weighted average number of shares outstanding – Basic (million)		2 318	2 326	-8
Basic earnings per share from continuing operations (USD) [1]		*0.81*	*0.85*	*-0.04*
Basic earnings per share from discontinued operations (USD)		*-0.04*	*0.02*	*-0.06*
Total basic earnings per share (USD)		**0.77**	**0.87**	**-0.10**
Weighted average number of shares outstanding – Diluted (million)		2 339	2 347	-8
Diluted earnings per share from continuing operations (USD) [1]		*0.80*	*0.84*	*-0.04*
Diluted earnings per share from discontinued operations (USD)		*-0.04*	*0.02*	*-0.06*
Total diluted earnings per share (USD)		**0.76**	**0.86**	**-0.10**

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

Consolidated statements of comprehensive income

First quarter (unaudited)

(USD millions)	**Q1 2019**	Q1 2018	Change
Net income	**1 767**	**2 028**	**-261**
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	3	-2
Total fair value adjustments on financial instruments, net of taxes	2	1	1
Novartis share of other comprehensive income recognized by associated companies, net of taxes	-54	35	-89
Net investment hedge	39	-65	104
Currency translation effects	-336	1 042	-1 378
Total of items to eventually recycle	-349	1 013	-1 362
Other comprehensive income never to be recycled into the consolidated income statement:			
Actuarial (losses)/gains from defined benefit plans, net of taxes [1]	-503	182	-685
Fair value adjustments on equity securities, net of taxes	95	87	8
Total of items never to be recycled	-408	269	-677
Total comprehensive income	**1 010**	**3 310**	**-2 300**
Attributable to:			
Shareholders of Novartis AG	*1 010*	*3 308*	*-2 298*
Continuing operations	*1 023*	*3 233*	*-2 210*
Discontinued operations	*-13*	*75*	*-88*
Non-controlling interests	*0*	*2*	*-2*

[1] Included in Q1 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

(USD millions)	Note	**Mar 31, 2019 (unaudited)**	Dec 31, 2018 (audited)	Change
Assets				
Non-current assets				
Property, plant and equipment	9	12 415	15 696	-3 281
Right-of-use assets	6	1 721		1 721
Goodwill	9	26 295	35 294	-8 999
Intangible assets other than goodwill	9	27 021	38 719	-11 698
Investments in associated companies		7 855	8 352	-497
Deferred tax assets		7 298	8 699	-1 401
Financial assets		2 267	2 345	-78
Other non-current assets		626	895	-269
Total non-current assets		**85 498**	**110 000**	**-24 502**
Current assets				
Inventories		5 728	6 956	-1 228
Trade receivables		7 612	8 727	-1 115
Income tax receivables		233	248	-15
Marketable securities, commodities, time deposits and derivative financial instruments		305	2 693	-2 388
Cash and cash equivalents		6 807	13 271	-6 464
Other current assets		2 759	2 861	-102
Assets of disposal group held for sale	3	837	807	30
Assets related to discontinued operations	10	28 167		28 167
Total current assets		**52 448**	**35 563**	**16 885**
Total assets		**137 946**	**145 563**	**-7 617**
Equity and liabilities				
Equity				
Share capital		944	944	0
Treasury shares		-63	-69	6
Reserves		46 348	77 739	-31 391
Issued share capital and reserves attributable to Novartis AG shareholders		**47 229**	**78 614**	**-31 385**
Non-controlling interests		78	78	
Total equity		**47 307**	**78 692**	**-31 385**
Liabilities				
Non-current liabilities				
Financial debts		21 225	22 470	-1 245
Lease liabilities	6	1 664		1 664
Deferred tax liabilities		5 422	7 475	-2 053
Provisions and other non-current liabilities		6 201	7 319	-1 118
Total non-current liabilities		**34 512**	**37 264**	**-2 752**
Current liabilities				
Dividend in kind distribution liability		26 361		26 361
Trade payables		4 638	5 556	-918
Financial debts and derivative financial instruments		7 428	9 678	-2 250
Lease liabilities	6	273		273
Current income tax liabilities		1 844	2 038	-194
Provisions and other current liabilities		10 479	12 284	-1 805
Liabilities of disposal group held for sale	3	41	51	-10
Liabilities related to discontinued operations	10	5 063		5 063
Total current liabilities		**56 127**	**29 607**	**26 520**
Total liabilities		**90 639**	**66 871**	**23 768**
Total equity and liabilities		**137 946**	**145 563**	**-7 617**

Consolidated statements of changes in equity

First quarter (unaudited)

(USD millions)	Share capital	Treasury shares	Retained earnings	Total value adjustments	Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
Total equity at January 1, 2019	**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			1 766		1 766	1	1 767
Other comprehensive income			-54	-702	-756	-1	-757
Total comprehensive income			**1 712**	**-702**	**1 010**		**1 010**
Dividends			-6 645		-6 645		-6 645
Dividend in kind [2]			-26 361		-26 361		-26 361
Purchase of treasury shares		-1	-201		-202		-202
Exercise of options and employee transactions		3	197		200		200
Equity-based compensation		4	268		272		272
Decrease of treasury share repurchase obligation under a share buyback trading plan			284		284		284
Transaction costs [3]			48		48		48
Fair value adjustments on financial assets sold			16	-16			
Other movements [4]			6		6		6
Total of other equity movements		**6**	**-32 388**	**-16**	**-32 398**		**-32 398**
Total equity at March 31, 2019	**944**	**-63**	**51 518**	**-5 170**	**47 229**	**78**	**47 307**

[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).
[2] 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 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 (Refer to Note 2 and 3 for further details)
[3] Transaction costs directly attributable to the distribution (spin-off) of Alcon to Novartis shareholders (see Note 2)
[4] Impact of hyperinflationary economies

(USD millions)	Share capital	Treasury shares	Retained earnings	Total value adjustments	Issued share capital and reserves attributable to Novartis shareholders	Non-controlling interests	Total equity
Total equity at January 1, 2018	**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			2 025		2 025	3	2 028
Other comprehensive income			35	1 248	1 283	-1	1 282
Total comprehensive income			**2 060**	**1 248**	**3 308**	**2**	**3 310**
Dividends			-6 966		-6 966		-6 966
Purchase of treasury shares		-1	-90		-91		-91
Exercise of options and employee transactions		4	429		433		433
Equity-based compensation		4	183		187		187
Fair value adjustments on financial assets sold			7	-7			
Impact of change in ownership of consolidated entities			-1		-1	52	51
Total of other equity movements		**7**	**-6 438**	**-7**	**-6 438**	**52**	**-6 386**
Total equity at March 31, 2018	**969**	**-93**	**73 498**	**-3 276**	**71 098**	**113**	**71 211**

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

Consolidated statements of cash flows

First quarter (unaudited)

(USD millions)	Note	**Q1 2019**	Q1 2018	Change
Net income from continuing operations		**1 868**	**1 970**	**-102**
Adjustments to reconcile net income from continuing operations to net cash flows from operating activities from continuing operations				
Reversal of non-cash items and other adjustments	7	2 016	1 465	551
Dividends received from associated companies and others		460	464	-4
Interest received		85	50	35
Interest paid		-167	-144	-23
Other financial payments		-44	-63	19
Taxes paid [1]		-400	-389	-11
Net cash flows from operating activities from continuing operations before working capital and provision changes		**3 818**	**3 353**	**465**
Payments out of provisions and other net cash movements in non-current liabilities		-193	-143	-50
Change in net current assets and other operating cash flow items		-1 291	-829	-462
Net cash flows from operating activities from continuing operations		**2 334**	**2 381**	**-47**
Net cash flows from operating activities from discontinued operations [1]		78	133	-55
Total net cash flows from operating activities		**2 412**	**2 514**	**-102**
Purchase of property, plant and equipment		-282	-258	-24
Proceeds from sales of property, plant and equipment		164	45	119
Purchase of intangible assets		-337	-416	79
Proceeds from sales of intangible assets		71	194	-123
Purchase of financial assets		-109	-32	-77
Proceeds from sales of financial assets		35	9	26
Purchase of other non-current assets		-10	-4	-6
Proceeds from sales of other non-current assets		3	0	3
Acquisitions of interests in associated companies		-2	-1	-1
Acquisitions and divestments of businesses, net		-96	-3 507	3 411
Purchase of marketable securities and commodities		-45	-140	95
Proceeds from sales of marketable securities and commodities		2 359	152	2 207
Net cash flows from/used in investing activities from continuing operations		**1 751**	**-3 958**	**5 709**
Net cash flows used in investing activities from discontinued operations		-423	-137	-286
Total net cash flows from/used in investing activities		**1 328**	**-4 095**	**5 423**
Dividends paid to shareholders of Novartis AG		-6 645	-6 966	321
Acquisition of treasury shares		-222	-175	-47
Proceeds from exercise of options and other treasury share transactions		200	433	-233
Increase in non-current financial debts			2 765	-2 765
Repayments of non-current financial debts		-3 001	0	-3 001
Change in current financial debts		-149	2 451	-2 600
Payments of lease liabilities		-22		-22
Impact of change in ownership of consolidated entities			-5	5
Dividends paid to non-controlling interests and other financing cash flows		-461	4	-465
Net cash flows used in financing activities from continuing operations		**-10 300**	**-1 493**	**-8 807**
Net cash flows from/used in financing activities from discontinued operations [2]		617	-53	670
Total net cash flows used in financing activities		**-9 683**	**-1 546**	**-8 137**
Net change in cash and cash equivalents		-5 943	-3 127	-2 816
Less cash and cash equivalents of discontinued operations at March 31, 2019		-499		-499
Effect of exchange rate changes on cash and cash equivalents		-22	80	-102
Total net change in cash and cash equivalents		**-6 464**	**-3 047**	**-3 417**
Cash and cash equivalents at January 1		13 271	8 860	4 411
Cash and cash equivalents at March 31		**6 807**	**5 813**	**994**

[1] In Q1 2019, the total net tax payment amounted to USD 438 million (Q1 2018: USD 467 million), of which USD 38 million (Q1 2018: USD 78 million) is included in the "Net cash flows from operating activities from discontinued operations."

[2] Including USD 51 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 period ended March 31, 2019 (unaudited)

1. Basis of preparation

These Condensed Interim Consolidated Financial Statements for the three-month period ended March 31, 2019, were prepared in accordance with International Accounting Standard 34 *Interim Financial Reporting* and accounting policies set out in the Annual Report 2018 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 Annual Report 2018 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, Alcon brand name 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 Annual Report 2018 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 shareholder approval for the spin-off on February 28, 2019, required the Alcon Division and select portions of Corporate activities attributable to Alcon's business (the "Alcon business") to be reported as discontinued operations. Refer to Note 3 and Note 10 for further details.

Transaction costs recorded in Equity

Transaction costs that are directly attributable to the distribution (spin-off) of Alcon 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.

Distribution liability

The distribution liability is 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 is recognized based on the fair value of the Alcon business. The distribution liability is 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 a separate line 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.

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 1.56 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 to 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. 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 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 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 closed in April 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”.

At March 31, 2019, the dividend in kind distribution liability to effect the spin-off of the Alcon business (the distribution liability) amounted to USD 26.4 billion and is in excess of the carrying value of the Alcon business net assets as at March 31, 2019 of USD 23.1 billion. The distribution liability remained unchanged from its initial valuation date of February 28, 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 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 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, 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 will be 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-cash gain recognized at the completion of the spin-off of the Alcon business on April 9, 2019, amounts to approximately USD 4.7 billion and will be recognized in the second quarter 2019.

Significant pending transactions

Innovative Medicines – Acquisition of IFM Tre, Inc.
On March 27, 2019, Novartis entered into an agreement to acquire IFM Tre, Inc., a privately held, US based biopharmaceutical company focused on developing anti-inflammatory medicines targeting the NLRP3 inflammasome. The acquisition will give 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 gut-directed molecule for the treatment of inflammatory bowel disease; and a pre-clinical stage central nervous system (CNS)-penetrant molecule.

Under the terms of the agreement, Novartis will acquire all of the outstanding capital stock of IFM Tre Inc. The consideration consists of an upfront payment of USD 310 million and contingent consideration, which the shareholder is eligible to receive upon the achievement of specified development and commercialization milestones. The acquisition is expected to close during the second quarter of 2019. Closing of the transaction is subject to customary closing conditions, including clearance under the Hart-Scott-Rodino Antitrust Improvements Act.

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 close in the course of 2019 following the completion of customary closing conditions. As the fair value of the consideration (USD 0.8 billion) less costs to sell is 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 March 31, 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)	Mar 31, 2019	Dec 31, 2018
Assets of disposal group classified as held for sale		
Property, plant and equipment	153	148
Intangible assets other than goodwill	478	478
Deferred tax assets	6	8
Other non-current assets	1	1
Inventories	188	165
Other current assets	11	7
Total	**837**	**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	35	45
Total	**41**	**51**

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

Significant transaction closed in first quarter 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.

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 then-outstanding 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. 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 1.5 billion intangible assets, USD 0.3 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 is preliminary as the transaction closed on December 21, 2018, which is close to the Group's year-end and therefore not providing sufficient time to complete the valuation of the intangible assets, deferred taxes, assumed liabilities and goodwill. If new information is obtained within 12 months from December 21, 2018, about facts and circumstances that existed at the date of the acquisition identifies adjustments to the above amounts, or any additional provisions that existed at the date of acquisition, then the accounting for the acquisition will be revised. The Group currently does not expect such potential 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

	Number of outstanding shares (in millions)			Issued share capital and reserves attributable to Novartis AG shareholders (in USD millions)		
	2019	2018	Change	**Q1 2019**	Q1 2018	Change
Balance at beginning of year	**2 311.2**	**2 317.5**	**-6.3**	**78 614**	**74 168**	**4 446**
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	-0.8		-0.8	-71		-71
Other share purchases	-1.4	-1.3	-0.1	-131	-91	-40
Exercise of options and employee transactions	5.5	7.7	-2.2	200	433	-233
Equity-based compensation	8.3	6.9	1.4	272	187	85
Decrease of treasury share repurchase obligation under a share buyback trading plan				284		284
Dividends to shareholders of Novartis AG				-6 645	-6 966	321
Dividend in kind [2]				-26 361		-26 361
Net income of the period attributable to shareholders of Novartis AG				1 766	2 025	-259
Other comprehensive income attributable to shareholders of Novartis AG				-756	1 283	-2 039
Transaction costs [3]				48		48
Impact of change in ownership of consolidated entities					-1	1
Other movements [4]				6		6
Balance at March 31	**2 322.8**	**2 330.8**	**-8.0**	**47 229**	**71 098**	**-23 869**

[1] In Q1 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).
In Q1 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] 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 (Refer to Note 2 and 3 for further details)
[3] Transaction costs directly attributable to the distribution (spin-off) of Alcon to Novartis AG shareholders (see Note 2)
[4] Impact of hyperinflationary economies

5. Financial instruments

Fair value by hierarchy

The following table illustrates the three hierarchical levels for valuing financial instruments at fair value and those measured at amortized cost as of March 31, 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.

	Level 1		Level 2		Level 3		Valued at amortized cost or cost		Total	
(USD millions)	**Mar 31, 2019**	Dec 31, 2018	**Mar 31, 2019**	Dec 31, 2018	**Mar 31, 2019**	Dec 31, 2018	**Mar 31, 2019**	Dec 31, 2018	**Mar 31, 2019**	Dec 31, 2018
Debt securities		302	23	23					23	325
Fund investments	35	35							35	35
Total marketable securities	**35**	**337**	**23**	**23**					**58**	**360**
Time deposits and short term investments with original maturity more than 90 days							76	2 087	76	2 087
Derivative financial instruments			66	130					66	130
Accrued interest on debt securities								12		12
Total marketable securities, time deposits and derivative financial instruments	**35**	**337**	**89**	**153**			**76**	**2 099**	**200**	**2 589**
Financial investments and long-term loans										
Financial investments	766	698			549	488			1 315	1 186
Fund investments					214	251			214	251
Contingent consideration receivables					407	396			407	396
Long-term loans and receivables from customers and finance lease, advances, security deposits							329	512	329	512
Financial investments and long-term loans	**766**	**698**			**1 170**	**1 135**	**329**	**512**	**2 265**	**2 345**
Associated companies at fair value through profit or loss					**163**	**145**			**163**	**145**
Contingent consideration payables					-630	-907			-630	-907
Other financial liabilities					-30	-10			-30	-10
Derivative financial instruments			-30	-58					-30	-58
Dividend in kind distribution liability					-26 361				-26 361	
Total financial liabilities at fair value			**-30**	**-58**	**-27 021**	**-917**			**-27 051**	**-975**

During the first quarter of 2019, 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 22.9 billion at March 31, 2019 (USD 25.4 billion at December 31, 2018) compared to the balance sheet value of USD 22.1 billion at March 31, 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 2.3 billion at March 31, 2019 (USD 2.3 billion at December 31, 2018) is included in line “Financial and other non-current assets” of the consolidated balance sheets.

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. Lease liability and Right-of-use assets

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.

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

The lease liability recorded in continuing operations on January 1, 2019, was USD 1 736 million and the right of use assets was USD 1 554 million.

Reconciliation of lease commitment disclosed on December 31, 2018, and lease liability recorded in continuing operations on January 1, 2019 is 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 liability as of January 1, 2019 [2]	**1 736**

[1] As reported in Annual Report 2018 Note 27
[2] Weighted average incremental borrowing rate of 3.5% was applied at January 1, 2019, the date of implementation of IFRS 16 – Leases.

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

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

[1] Right-of-use assets were lower than the lease liability 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.

The lease liability recorded in discontinued operations on January 1, 2019 was USD 286 million and the right of use asset was 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

liability, 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 liability and right of use asset relate to income taxes levied by the same taxation authority within the same legal entity, and were therefore offset.

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 lease liability at March 31, 2019, for continuing operations was USD 1 937 million. The corresponding interest expense for three months ended March 31, 2019, amounts to USD 16 million. The portion of the lease payments recognized as a reduction of the lease liabilities and as a cash outflow from financing activities for the three months end March 31, 2019 amounted to USD 22 million. This amount is net of lease incentives of USD 29 million received during the period.

The maturity analysis of the lease liability at March 31, 2019, is as follows:

(USD millions)	March 31, 2019
Less than one year	273
Between one and two years	194
Between two and three years	163
Between three and four years	142
Between four and five years	123
After five years	1 042
Total lease liability	**1 937**

The right-of-use assets of continuing operations at March 31, 2019, amounted to USD 1 721 million and the depreciation charge amounted to USD 75 million and is shown below by underlying class of asset:

(USD millions)	March 31, 2019 Carrying value	Depreciation charge Q1 2019
Land	544	5
Buildings	1 024	47
Vehicles	131	21
Machinery & equipment and other assets	22	2
Total	**1 721**	**75**

The additions to right-of-use assets for the three months ended March 31, 2019, amounted to USD 256 million.

The Group accounts for the expense of short-term leases of twelve months or less and underlying assets of low value leases on a straight line basis over the lease term. The expense for the three months ended March 31, 2019, related to these leases amounted USD 2 million and USD 1 million, respectively.

The income from subleasing right-of-use assets for the three months ended March 31, 2019, is not significant.

For the three months ended March 31, 2019, there was no significant gains or losses from sales leaseback and no significant leases entered into that are not yet commenced.

The lease liabilities and the right-of-use assets of discontinued operations amounted to USD 269 million and USD 269 million, respectively, at March 31, 2019.

7. Details to the consolidated statements of cash flows

Reversal of non-cash items and other adjustments

(USD millions)	**Q1 2019**	Q1 2018	Change
Depreciation, amortization and impairments on:			
Property, plant and equipment	423	361	62
Intangible assets	1 018	644	374
Financial assets [1]	12	-75	87
Non-cash change in provisions and other non-current liabilities	60	138	-78
Gains on disposal and other adjustments on property, plant and equipment; intangible assets; financial assets; and other non-current assets, net	-69	-186	117
Equity-settled compensation expense	198	182	16
Income from associated companies	-80	-152	72
Taxes	272	370	-98
Net financial expense	182	183	-1
Total	**2 016**	**1 465**	**551**

[1] Includes fair value adjustments

8. Legal proceedings update

A number of Novartis companies are, and will likely continue to be, subject to various legal proceedings, including litigations, arbitrations and governmental investigations, that arise from time to time. Legal proceedings are inherently unpredictable. As a result, the Group may become subject to substantial liabilities that may not be covered by insurance and may in the future incur judgments or enter into settlements of claims that could have a material adverse effect on its results of operations or cash flow. Note 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 April 23, 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. 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. A trial in the S.D.N.Y. matter is currently scheduled in 2019. The claims are being vigorously contested.

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 first quarter of 2019 do not significantly affect the assessment of management concerning the adequacy of the total provisions recorded for legal proceedings.

9. Segmentation of key figures

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

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

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

The reporting segments are as follows:

Innovative Medicines researches, develops, manufactures, distributes and sells patented prescription medicines. The Innovative Medicines Division is organized into two global business units: Novartis Oncology and Novartis Pharmaceuticals. Novartis Oncology consists of the global business franchise Oncology, and Novartis Pharmaceuticals consists of the global business franchises Ophthalmology; Neuroscience; Immunology, Hepatology and Dermatology; Respiratory; Cardio-Metabolic; 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 activities include Group headquarter functions 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 (refer to Notes 2 and 3 for further details), the Group reported its consolidated financial statements for the current and prior years as "continuing operations" and "discontinued operations."

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, and certain other expenses related to the Distribution.

Alcon: researches, discovers, develops, manufactures, distributes and sells a broad range of eye care products. Alcon is the leading eye care devices company globally. Alcon is organized into two global business franchises: Surgical and Vision Care. Surgical researches, develops, manufactures, distributes and sells ophthalmic products for cataract surgery, vitreoretinal surgery, refractive laser surgery and glaucoma surgery. The Surgical portfolio also includes implantables, consumables and surgical equipment required for these procedures and supports the end-to-end procedure needs of the ophthalmic surgeon. Vision Care researches, develops, manufactures, distributes and sells daily disposable, reusable, and color-enhancing contact lenses and a comprehensive portfolio of ocular health products, including products for dry eye, contact lens care and ocular allergies, as well as ocular vitamins and redness relievers. Alcon also provides services, training, education and technical support for both the Surgical and Vision Care businesses.

Segmentation – Consolidated income statement – First quarter

(USD millions)	Innovative Medicines		Sandoz		Corporate (including eliminations)		Group	
	Q1 2019	Q1 2018	**Q1 2019**	Q1 2018	**Q1 2019**	Q1 2018	**Q1 2019**	Q1 2018
Net sales to third parties from continuing operations	**8 780**	**8 398**	**2 326**	**2 517**			**11 106**	**10 915**
Sales to continuing and discontinued segments	249	168	39	57	-235	-212	53	13
Net sales from continuing operations	**9 029**	**8 566**	**2 365**	**2 574**	**-235**	**-212**	**11 159**	**10 928**
Other revenues	261	223	28	4	7	8	296	235
Cost of goods sold	-2 224	-2 273	-1 276	-1 398	249	220	-3 251	-3 451
Gross profit from continuing operations	**7 066**	**6 516**	**1 117**	**1 180**	**21**	**16**	**8 204**	**7 712**
Selling, general and administration	-2 653	-2 555	-562	-602	-115	-127	-3 330	-3 284
Research and development	-2 105	-1 783	-194	-199			-2 299	-1 982
Other income	75	211	37	113	91	64	203	388
Other expense	-274	-254	-125	-83	-137	-126	-536	-463
Operating income from continuing operations	**2 109**	**2 135**	**273**	**409**	**-140**	**-173**	**2 242**	**2 371**
as % of net sales	*24.0%*	*25.4%*	*11.7%*	*16.2%*			*20.2%*	*21.7%*
Income from associated companies					80	152	80	152
Interest expense							-226	-218
Other financial income and expense, net							44	35
Income before taxes from continuing operations							**2 140**	**2 340**
Taxes							-272	-370
Net income from continuing operations							**1 868**	**1 970**
Net loss/income from discontinued operations							-101	58
Net income							**1 767**	**2 028**

Segmentation – Additional balance sheet disclosure

(USD millions)	Innovative Medicines		Sandoz		Corporate (including eliminations)		Group	
	Mar 31, 2019	Dec 31, 2018	**Mar 31, 2019**	Dec 31, 2018	**Mar 31, 2019**	Dec 31, 2018	**Mar 31, 2019**	Dec 31, 2018[1]
Net operating assets	**56 026**	**53 999**	**13 984**	**13 951**			**68 848**	**94 876**
Included in net operating assets are:								
Property, plant and equipment	9 803	10 098	2 081	2 159	531	561	12 415	15 696
Goodwill	18 525	18 551	7 763	7 837	7	7	26 295	35 294
Intangible assets other than goodwill	25 200	26 042	1 779	1 875	42	123	27 021	38 719

[1] Group December 31, 2018 balances include the net operating assets of the Alcon segment amounting to USD 24.0 billion, including property, plant and equipment of USD 2.9 billion, Goodwill of USD 8.9 billion and intangible assets other than goodwill of USD 10.7 billion, that are reported as discontinued operations at March 31, 2019 (refer to Note 2, 3 and 10).

Segmentation – Net sales by region[1] – First quarter

	Q1 2019	Q1 2018	% change		**Q1 2019**	Q1 2018
	USD m	USD m	USD	cc[2]	**% of total**	% of total
Innovative Medicines						
Europe	3 134	3 092	1	11	36	37
US	2 993	2 652	13	13	34	32
Asia/Africa/Australasia	2 017	1 989	1	6	23	24
Canada and Latin America	636	665	-4	9	7	7
Total	**8 780**	**8 398**	**5**	**10**	**100**	**100**
Of which in Established Markets	6 567	6 210	6	10	75	74
Of which in Emerging Growth Markets	2 213	2 188	1	12	25	26
Sandoz						
Europe	1 241	1 292	-4	5	53	51
US	590	708	-17	-16	25	28
Asia/Africa/Australasia	318	323	-2	3	14	13
Canada and Latin America	177	194	-9	-1	8	8
Total	**2 326**	**2 517**	**-8**	**-2**	**100**	**100**
Of which in Established Markets	1 695	1 856	-9	-4	73	74
Of which in Emerging Growth Markets	631	661	-5	5	27	26
Continuing operations						
Europe	4 375	4 384	0	9	39	40
US	3 583	3 360	7	7	32	31
Asia/Africa/Australasia	2 335	2 312	1	6	21	21
Canada and Latin America	813	859	-5	7	8	8
Total	**11 106**	**10 915**	**2**	**7**	**100**	**100**
Of which in Established Markets	8 262	8 066	2	7	74	74
Of which in Emerging Growth Markets	2 844	2 849	0	10	26	26

[1] Net sales from operations by location of third-party customer. Emerging Growth Markets comprise all markets other than the Established Markets of the US, Canada, Western Europe, Japan, Australia and New Zealand.
[2] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 41.

Segmentation – Net sales by business franchise

Innovative Medicines net sales by business franchise – First quarter

	Q1 2019 USD m	Q1 2018 USD m	% change USD	% change cc[3]
Oncology				
Tasigna	434	466	-7	-3
Sandostatin	392	400	-2	2
Afinitor/Votubia	373	375	-1	3
Promacta/Revolade	307	257	19	24
Gleevec/Glivec	307	392	-22	-18
Tafinlar + Mekinist	297	267	11	18
Jakavi	258	234	10	20
Exjade/Jadenu	238	261	-9	-5
Votrient	187	214	-13	-8
Lutathera	106	6	nm	nm
Kisqali	91	44	107	115
Kymriah	45	12	275	282
Other	286	263	9	14
Total Oncology business unit	**3 321**	**3 191**	**4**	**9**
Ophthalmology				
Lucentis	533	520	2	10
Travoprost Group	115	124	-7	-3
Other	513	513	0	5
Total Ophthalmology	**1 161**	**1 157**	**0**	**7**
Neuroscience				
Gilenya	766	821	-7	-3
Aimovig	18	0	nm	nm
Other	13	20	-35	-33
Total Neuroscience	**797**	**841**	**-5**	**-1**
Immunology, Hepatology and Dermatology				
Cosentyx	791	580	36	41
Ilaris	151	126	20	28
Total Immunology, Hepatology and Dermatology	**942**	**706**	**33**	**39**
Respiratory				
Ultibro Breezhaler	104	106	-2	7
Seebri Breezhaler	31	38	-18	-10
Onbrez Breezhaler	22	27	-19	-12
Subtotal COPD[1] portfolio	**157**	**171**	**-8**	**0**
Xolair[2]	281	255	10	20
Other	7	7	0	2
Total Respiratory	**445**	**433**	**3**	**12**
Cardio-Metabolic				
Entresto	357	200	79	85
Other	6	4	50	29
Total Cardio-Metabolic	**363**	**204**	**78**	**84**
Established Medicines				
Galvus Group	315	318	-1	7
Exforge Group	267	248	8	16
Diovan Group	261	265	-2	6
Zortress/Certican	116	109	6	14
Voltaren/Cataflam	113	115	-2	5
Neoral/Sandimmun(e)	103	115	-10	-5
Other	576	696	-17	-12
Total Established Medicines	**1 751**	**1 866**	**-6**	**1**
Total Pharmaceuticals business unit	**5 459**	**5 207**	**5**	**11**
Total Division net sales	**8 780**	**8 398**	**5**	**10**

[1] Chronic Obstructive Pulmonary Disease
[2] *Xolair* sales for all indications are reported in the Respiratory franchise.
[3] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 41.

nm = not meaningful

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

			US		Rest of world			Total		
Brands	**Business franchise**	**Indication**	USD m	% change USD/cc[2]	USD m	% change USD	% change cc[2]	USD m	% change USD	% change cc[2]
Cosentyx	Immunology, Hepatology and Dermatology	Psoriasis, ankylosing spondylitis and psoriatic arthritis	474	49	317	21	32	**791**	**36**	**41**
Gilenya	Neuroscience	Relapsing multiple sclerosis	392	-6	374	-8	1	**766**	**-7**	**-3**
Lucentis	Ophthalmology	Age-related macular degeneration			533	2	10	**533**	**2**	**10**
Tasigna	Oncology	Chronic myeloid leukemia	180	-9	254	-5	2	**434**	**-7**	**-3**
Sandostatin	Oncology	Carcinoid tumors and acromegaly	215	10	177	-13	-5	**392**	**-2**	**2**
Afinitor/Votubia	Oncology	Breast cancer/TSC	234	10	139	-15	-7	**373**	**-1**	**3**
Entresto	Cardio-Metabolic	Chronic heart failure	199	83	158	74	89	**357**	**79**	**85**
Galvus Group	Established Medicines	Diabetes			315	-1	7	**315**	**-1**	**7**
Promacta/Revolade	Oncology	Immune thrombocytopenic purpura	148	19	159	20	29	**307**	**19**	**24**
Gleevec/Glivec	Oncology	Chronic myeloid leukemia and GIST	79	-28	228	-19	-13	**307**	**-22**	**-18**
Tafinlar + Mekinist	Oncology	Melanoma	107	4	190	16	27	**297**	**11**	**18**
Xolair[1]	Respiratory	Asthma			281	10	20	**281**	**10**	**20**
Exforge Group	Established Medicines	Hypertension	3	-25	264	8	16	**267**	**8**	**16**
Diovan Group	Established Medicines	Hypertension	17	-19	244	0	8	**261**	**-2**	**6**
Jakavi	Oncology	Myelofibrosis			258	10	20	**258**	**10**	**20**
Exjade/Jadenu	Oncology	Chronic iron overload	113	-3	125	-14	-8	**238**	**-9**	**-5**
Votrient	Oncology	Renal cell carcinoma	85	-18	102	-7	0	**187**	**-13**	**-8**
Ilaris	Immunology, Hepatology and Dermatology	Auto-inflammatory (CAPS, TRAPS, HIDS/MKD, FMF, SJIA, AOSD and gout)	65	16	86	23	37	**151**	**20**	**28**
Zortress/Certican	Established Medicines	Transplantation	38	19	78	1	12	**116**	**6**	**14**
Travoprost Group	Ophthalmology	Reduction of elevated intraocular pressure	47	-2	68	-11	-4	**115**	**-7**	**-3**
Top 20 products total			**2 396**	**11**	**4 350**	**2**	**11**	**6 746**	**5**	**11**
Rest of portfolio			597	23	1 437	-3	4	**2 034**	**3**	**9**
Total division sales			**2 993**	**13**	**5 787**	**1**	**9**	**8 780**	**5**	**10**

[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 41.

Sandoz net sales by business franchise – First quarter

	Q1 2019 USD m	Q1 2018 USD m	**% change USD**	**% change cc[2]**
Retail Generics [1]	1 850	2 042	-9	-3
Biopharmaceuticals	351	335	5	11
Anti-Infectives	125	140	-11	-6
Total Division net sales	**2 326**	**2 517**	**-8**	**-2**

[1] Of which USD 204 million (2018: USD 230 million) represents Anti-Infectives sold under Sandoz name
[2] Constant currencies (cc) is a non-IFRS measure. A definition of non-IFRS measures used by Novartis can be found starting on page 41.

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

Segmentation – Other revenue – First quarter

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions)	**Q1 2019**	Q1 2018	**Q1 2019**	Q1 2018	**Q1 2019**	Q1 2018	**Q1 2019**	Q1 2018
Profit sharing income	169	160					169	160
Royalty income	34	43	3	1	7	8	44	52
Milestone income	51	8	23	1			74	9
Other [1]	7	12	2	2			9	14
Total other revenues	**261**	**223**	**28**	**4**	**7**	**8**	**296**	**235**

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

10. Discontinued operations

Consolidated income statement – Discontinued operations

(USD millions)	**Q1 2019**	Q1 2018
Net sales to third parties of discontinued operations	**1 777**	**1 779**
Sales to continuing segments	32	3
Net sales of discontinued operations	**1 809**	**1 782**
Other revenues		
Cost of goods sold	-860	-920
Gross profit of discontinued operations	**949**	**862**
Selling, general and administration	-638	-639
Research and development	-142	-138
Other income	15	19
Other expense	-113	-28
Operating income of discontinued operations	**71**	**76**
as % of net sales	*4.0%*	*4.3%*
Interest expense	-10	-6
Other financial income and expense	-3	-1
Income before taxes of discontinued operations	**58**	**69**
Taxes [1]	-159	-11
Net loss / income of discontinued operations	**-101**	**58**

[1] The discontinued operations tax rate 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 first quarter tax rate would have been 15.5%.

Consolidated balance sheet – Discontinued operations

(USD millions)	Mar 31, 2019
Assets classified as discontinued operations	
Non-current assets	
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 assets	369
Other non-current assets	157
Total non-current assets	**24 412**
Current assets	
Inventories	1 469
Trade receivables	1 315
Income tax receivables	36
Marketable securities, commodities, time deposits and derivative financial instruments	1
Cash and cash equivalents	499
Other current assets	435
Total current assets	**3 755**
Total assets	**28 167**
Liabilities classified as discontinued operations	
Non-current liabilities	
Lease liabilities	219
Deferred tax liabilities	1 705
Provisions and other non-current liabilities	1 082
Total non-current liabilities	**3 006**
Current liabilities	
Trade payables	735
Financial debts	338
Lease liabilities	50
Current income tax liabilities	160
Provisions and other current liabilities	774
Total current liabilities	**2 057**
Total liabilities	**5 063**
Net assets [1]	**23 104**

[1] Prior to the spin-off, Alcon entered into financing arrangements with a syndicate of banks under which it borrowed an amount of USD 3.2 billion, resulting in a total financial debt of 3.5 billion. 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 shareholders on April 8, 2019 (see Note 3 for further explanations).

For additional information related to the 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 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 – First quarter

	Innovative Medicines		Sandoz		Corporate		Group	
(USD millions unless indicated otherwise)	**Q1 2019**	Q1 2018	**Q1 2019**	Q1 2018	**Q1 2019**	Q1 2018	**Q1 2019**	Q1 2018
IFRS operating income from continuing operations	**2 109**	**2 135**	**273**	**409**	**-140**	**-173**	**2 242**	**2 371**
Amortization of intangible assets	**457**	**516**	**79**	**97**			**536**	**613**
Impairments								
Intangible assets	446	1	10	14			456	15
Property, plant and equipment related to the Group-wide rationalization of manufacturing sites	4	1	3	1			7	2
Other property, plant and equipment	1	2					1	2
Total impairment charges	**451**	**4**	**13**	**15**			**464**	**19**
Acquisition or divestment of businesses and related items								
- Income	-1				-1	-8	-2	-8
- Expense	16	23			2	13	18	36
Total acquisition or divestment of businesses and related items, net	**15**	**23**			**1**	**5**	**16**	**28**
Other items								
Divestment gains	-26	-76		-78	-3	-31	-29	-185
Financial assets – fair value adjustments	14	-83			-2	18	12	-65
Restructuring and related items								
- Income	-8	-3			-1		-9	-3
- Expense	77	48	52	26	13	17	142	91
Legal-related items								
- Income								
- Expense	6	10	45	30			51	40
Additional income	-196	-22	-1		-1	1	-198	-21
Additional expense	23	79			4	13	27	92
Total other items	**-110**	**-47**	**96**	**-22**	**10**	**18**	**-4**	**-51**
Total adjustments	**813**	**496**	**188**	**90**	**11**	**23**	**1 012**	**609**
Core operating income from continuing operations	**2 922**	**2 631**	**461**	**499**	**-129**	**-150**	**3 254**	**2 980**
as % of net sales	*33.3%*	*31.3%*	*19.8%*	*19.8%*			*29.3%*	*27.3%*
Income from associated companies					80	152	80	152
Core adjustments to income from associated companies, net of tax					198	223	198	223
Interest expense							-226	-218
Other financial income and expense							44	35
Taxes, adjusted for above items (core taxes)							-539	-488
Core net income from continuing operations							**2 811**	**2 684**
Core net income from discontinued operations [1]							**278**	**298**
Core net income							**3 089**	**2 982**
Core net income attributable to shareholders of Novartis AG							**3 088**	**2 979**
Core basic EPS from continuing operations (USD) [2]							**1.21**	**1.15**
Core basic EPS from discontinued operations (USD) [2]							0.12	0.13
Core basic EPS (USD) [2]							**1.33**	**1.28**

[1] For details on discontinued operations reconciliaton from IFRS to core net income, please refer to page 48.
[2] Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

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

(USD millions unless indicated otherwise)	Q1 2019 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items[3]	Other items[4]	Q1 2019 Core results	Q1 2018 Core results
Gross profit from continuing operations	**8 204**	524	10		34	**8 772**	**8 410**
Operating income from continuing operations	**2 242**	536	464	16	-4	**3 254**	**2 980**
Income before taxes from continuing operations	**2 140**	734	464	16	-4	**3 350**	**3 172**
Taxes from continuing operations[5]	-272					-539	-488
Net income from continuing operations	**1 868**					**2 811**	**2 684**
Net loss/income from discontinued operations[6]	-101					278	298
Net income	**1 767**					**3 089**	**2 982**
Basic EPS from continuing operations (USD)[7]	**0.81**					**1.21**	**1.15**
Basic EPS from discontined operations (USD)[7]	-0.04					0.12	0.13
Basic EPS (USD)[7]	**0.77**					**1.33**	**1.28**
The following are adjustments to arrive at core gross profit							
Other revenues	296				-42	254	235
Cost of goods sold	-3 251	524	10		76	-2 641	-2 753
The following are adjustments to arrive at core operating income							
Selling, general and administration	-3 330			7	3	-3 320	-3 278
Research and development	-2 299	12	446	9	-132	-1 964	-1 989
Other income	203			-2	-81	120	89
Other expense	-536		8	2	172	-354	-252
The following are adjustments to arrive at core income before taxes							
Income from associated companies	80	198				278	375

[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 technology platforms; income from associated companies includes USD 198 million for the Novartis share of the estimated Roche core items

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

[3] Acquisition or divestment of businesses and related items, including restructuring and integration charges: selling, general and administration, research and development and other income 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

[4] Other items: other revenues includes a net income from an outlicensing 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, research and development, other income and other expense include other restructuring income and charges and related items; research and development includes fair value adjustments of contingent consideration liabilities; other income and other expense include fair value adjustments and divestment gains and losses on financial assets as well as restructuring income and expenses and related items; other income also includes a product divestment gain; other expense includes legal-related items

[5] Taxes on the adjustments between IFRS and core results take into account, for each individual item included in the adjustment, the tax rate that will finally be applicable to the item based on the jurisdiction where the adjustment will finally have a tax impact. Generally, this results in amortization and impairment of intangible assets and acquisition-related restructuring and integration items having a full tax impact. There is usually a tax impact on other items, although this is not always the case for items arising from legal settlements in certain jurisdictions. Adjustments related to income from associated companies are recorded net of any related tax effect. Due to these factors and the differing effective tax rates in the various jurisdictions, the tax on the total adjustments for continuing operations of USD 1.2 billion to arrive at the core results before tax amounts to USD 267 million. The average tax rate on the adjustments is 22.1%, since the estimated full year core tax charge of 16.1% has been applied to the pre-tax income of the period.

[6] For details on discontinued operations reconciliation from IFRS to core net income please refer to page 48.

[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 – First quarter

(USD millions)	Q1 2019 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items[3]	Other items[4]	Q1 2019 Core results	Q1 2018 Core results
Gross profit	**7 066**	**445**			**-2**	**7 509**	**7 078**
Operating income	**2 109**	**457**	**451**	**15**	**-110**	**2 922**	**2 631**
The following are adjustments to arrive at core gross profit							
Other revenues	261				-42	219	223
Cost of goods sold	-2 224	445			40	-1 739	-1 711
The following are adjustments to arrive at core operating income							
Selling, general and administration	-2 653			7		-2 646	-2 549
Research and development	-2 105	12	446	9	-132	-1 770	-1 790
Other income	75			-1	-38	36	45
Other expense	-274		5		62	-207	-153

[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 technology platforms

[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: selling, general and administration, research and development and other income include net charges related to acquisitions

[4] Other items: other revenues includes a net income from an outlicensing 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, 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 a product divestment gain; other expense also includes legal-related items

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

(USD millions)	Q1 2019 IFRS results	Amortization of intangible assets[1]	Impairments[2]	Acquisition or divestment of businesses and related items	Other items[3]	Q1 2019 Core results	Q1 2018 Core results
Gross profit	**1 117**	**79**	**10**		**36**	**1 242**	**1 316**
Operating income	**273**	**79**	**13**		**96**	**461**	**499**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-1 276	79	10		36	-1 151	-1 262
The following are adjustments to arrive at core operating income							
Selling, general and administration	-562				3	-559	-602
Other expense	-125		3		57	-65	-51

[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 and other expense include other restructuring income and charges and related items; other expense also includes legal-related items

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

(USD millions)	Q1 2019 IFRS results	Amortization of intangible assets	Impairments	Acquisition or divestment of businesses and related items[1]	Other items[2]	Q1 2019 Core results	Q1 2018 Core results
Gross profit	**21**					**21**	**16**
Operating income	**-140**			**1**	**10**	**-129**	**-150**
The following are adjustments to arrive at core operating income							
Other income	91			-1	-43	47	9
Other expense	-137			2	53	-82	-48

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

[2] Other items: other income and other expense include fair value adjustments and divestment gains and losses on financial assets, as well as restructuring income and charges and related items

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

(USD millions)	Q1 2019 IFRS results	Amortization of intangible assets[1]	Impairments	Acquisition or divestment of businesses and related items	Other items[2]	Q1 2019 Core results	Q1 2018 Core results
Gross profit	**949**	**165**			**9**	**1 123**	**1 115**
Operating income	**71**	**167**			**112**	**350**	**360**
The following are adjustments to arrive at core gross profit							
Cost of goods sold	-860	165			9	-686	-667
The following are adjustments to arrive at core operating income							
Selling, general and administration	-638				14	-624	-639
Research and development	-142	2			4	-136	-122
Other income	15				-3	12	9
Other expense	-113				88	-25	-3
Income before taxes	**58**					**337**	**353**
Taxes[3]	-159					-59	-55
Net loss/income	**-101**					**278**	**298**
Basic EPS (USD)[4]	**-0.04**					**0.12**	**0.13**

[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 technology platforms

[2] Other items: cost of goods sold, selling, general and administration, research and development and other expense also include other restructuring charges and related items; research and development also includes amortization of option rights and the fair value adjustment of a contingent consideration liability; other income includes fair value adjustments on a financial asset; other expense includes legal-related items

[3] 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 of USD 279 million to arrive at the core results before tax amounts to USD 100 million. The average tax rate on the adjustments is 35.8%. The Q1 2019 core tax rate is 17.5%.

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

Income from associated companies

(USD millions)	**Q1 2019**	Q1 2018
Share of estimated Roche reported results	*206*	*188*
Prior-year adjustment	*-129*	*-125*
Amortization of additional intangible assets recognized by Novartis on initial accounting for the equity interest	*-40*	*-38*
Partial release of deferred tax liability recognized	*43*	
Net income effect from Roche Holding AG	80	25
Share of estimated GSK Consumer Healthcare Holdings Ltd. reported results		*127*
Prior-year adjustment		*4*
Amortization of additional intangible assets recognized by Novartis on initial accounting for the equity interest		*-3*
Net income effect from GlaxoSmithKline Consumer Healthcare Holdings Ltd. [1]		128
Others		-1
Income from associated companies	**80**	**152**

[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)	**Q1 2019**	Q1 2018
Income from associated companies	**80**	**152**
Share of estimated Roche core adjustments	37	79
Roche prior year adjustment	161	133
Share of estimated GSK Consumer Healthcare Holdings Ltd. core adjustments [1]		10
GSK Consumer Healthcare Holdings Ltd. prior year adjustment		1
Core income from associated companies	**278**	**375**

[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

First quarter

(USD millions)	**Q1 2019**	Q1 2018
Change in cash and cash equivalents	**-6 464**	**-3 047**
Change in marketable securities, commodities, financial debts and financial derivatives	1 107	-5 594
Increase in net debt	**-5 357**	**-8 641**
Net debt at January 1	-16 184	-19 047
Net debt at March 31	**-21 541**	**-27 688**

Components of net debt

(USD millions)	**Mar 31, 2019**	Mar 31, 2018
Non-current financial debts	-21 225	-23 199
Current financial debts and derivative financial instruments	-7 428	-10 911
Total financial debt	**-28 653**	**-34 110**
Less liquidity:		
Cash and cash equivalents	6 807	5 813
Marketable securities, commodities, time deposits and derivative financial instruments	305	609
Total liquidity	**7 112**	**6 422**
Net debt at March 31	**-21 541**	**-27 688**

Share information

	Mar 31, 2019	Mar 31, 2018
Number of shares outstanding	**2 322 827 946**	2 330 803 377
Registered share price (CHF)	**95.78**	77.26
ADR price (USD)	**96.14**	80.85
Market capitalization (USD billions)[1]	**223.4**	188.2
Market capitalization (CHF billions)[1]	**222.5**	180.1

[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

First quarter

(USD millions)	Q1 2019	Q1 2018	Change
Operating income from continuing operations	**2 242**	**2 371**	**-129**
Adjustments for non-cash items			
Depreciation, amortization and impairments	1 453	930	523
Change in provisions and other non-current liabilities	60	138	-78
Other	129	-4	133
Operating income adjusted for non-cash items	**3 884**	**3 435**	**449**
Dividends received from associated companies and others	460	464	-4
Interest received	85	50	35
Interest and other financial payments	-211	-207	-4
Taxes paid	-400	-389	-11
Payments out of provisions and other net cash movements in non-current liabilities	-193	-143	-50
Change in inventory and trade receivables less trade payables	-697	-652	-45
Change in other net current assets and other operating cash flow items	-594	-177	-417
Net cash flows from operating activities from continuing operations	**2 334**	**2 381**	**-47**
Purchase of property, plant and equipment	-282	-258	-24
Proceeds from sales of property, plant and equipment	164	45	119
Purchase of intangible assets	-337	-416	79
Proceeds from sales of intangible assets	71	194	-123
Purchase of financial assets	-109	-32	-77
Proceeds from sales of financial assets	35	9	26
Purchase of other non-current assets	-10	-4	-6
Proceeds from sales of other non-current assets	3	0	3
Free cash flow from continuing operations	**1 869**	**1 919**	**-50**
Free cash flow from discontinued operations	-62	-4	-58
Total free cash flow	**1 807**	**1 915**	**-108**

Principal currency translation rates

First quarter

(USD per unit)	**Average rates Q1 2019**	Average rates Q1 2018	**Period-end rates Mar 31, 2019**	Period-end rates Mar 31, 2018
1 CHF	**1.003**	1.055	**1.004**	1.045
1 CNY	**0.148**	0.157	**0.149**	0.159
1 EUR	**1.136**	1.229	**1.123**	1.231
1 GBP	**1.302**	1.392	**1.303**	1.405
100 JPY	**0.908**	0.924	**0.903**	0.938
100 RUB	**1.517**	1.758	**1.543**	1.731

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,” “transformation,” “continued,” “potential”, “launches,” “on track” “launched,” “filed,” “launch,” “expected,” “to grow,” “will,” “enter,” “pipeline,” “commitment,” “well positioned,” “future,” “strategy,” “priorities,” “embrace,” “deliver,” “go big,” “build,” “allows,” “expect,” “to be completed,” “closing conditions,” “committed,” “continued,” “growth drivers,” “Priority Review Voucher,” “submissions,” “filings,” “to be presented,” “potentially,” “if approved,” “aims,” “outlook,” “unforeseen,” “forecast,” “may,” “would,” “continues,” “aiming,” “vision,” “priority review,” “PRIME designation,” “Sakigake designation,” “enrollment,” “planned,” “upcoming,” “Fast Track designation,” “Orphan designation,” “scheduled,” or similar expressions, or by express or implied discussions regarding potential new products, potential new indications for existing products, or regarding potential future revenues from any such products; or regarding the potential outcome, or financial or other impact on Novartis, of the spinoff of our Alcon Division, or of the proposed divestiture of certain portions of our Sandoz Division business in the US; or regarding the potential impact of the share buyback plan; 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, payer 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 release; the potential that the strategic benefits, synergies or opportunities expected from the Alcon and Sandoz transactions 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 regarding actual or potential legal proceedings, including, among others, actual or potential litigation with respect to the proposed transactions, product liability litigation, litigation and investigations regarding sales and marketing practices, intellectual property disputes and government investigations generally; uncertainties involved in the development or adoption of potentially transformational technologies and business models; 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.

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 105,000 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

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

Important dates

May 8, 2019	American Academy of Neurology (AAN) investor conference call
May 22-23, 2019	Meet Novartis Management investor event in Boston
June 2, 2019	American Society of Clinical Oncology (ASCO) investor event
July 18, 2019	Second quarter results 2019
October 22, 2019	Third quarter results 2019