

Sanofi delivers 2018 business EPS growth of 5.1% at CER

	Q4 2018	Change	Change at CER	2018	Change	Change at CER
IFRS net sales reported	€8,997m	+3.5%	+3.9%	€34,463m	-1.7%	+2.5%
IFRS net income reported	€254m	+101.6%	-	€4,306m	-48.8% ⁽²⁾	-
IFRS EPS reported	€0.20	+100.0%	-	€3.45	-48.5% ⁽²⁾	-
Business net income ⁽¹⁾	€1,364m	+2.9%	+4.3%	€6,819m	-1.8%	+4.2%
Business EPS ⁽¹⁾	€1.10	+3.8%	+4.7%	€5.47	-0.9%	+5.1%

Fourth-quarter sales⁽³⁾ growth driven by Specialty Care and Vaccines

- Net sales were €8,997 million, an increase of 3.5% on a reported basis, 3.9%⁽³⁾ at CER and 2.6% at CER/CS ⁽⁴⁾.
- Sanofi Genzyme sales were up 37.4% (16.1% at CER/CS⁽⁴⁾), led by Immunology and Rare Blood Disorder franchises.
- Vaccines sales increased 9.7%, driven by successful influenza differentiation strategy and Menactra®.
- CHC sales increased 1.9%, supported by Emerging Markets.
- DCV⁽⁵⁾ GBU sales were down 11.3%; Global Diabetes franchise sales declined 10.5% in line with 2015-2018 guidance.
- Emerging Markets sales⁽⁶⁾ were up 6.0%, reflecting strong performance in Asia.

Full-Year 2018 sales growth from new products and Emerging markets more than offset impact of U.S. LoEs

- Net sales in 2018 were €34,463 million, down 1.7% on a reported basis and grew 2.5% at CER (up 0.6% at CER/CS⁽⁴⁾).
- Sanofi Genzyme grew 30.8% (+14.2% at CER/CS⁽⁴⁾) to €7,226 million.
- Vaccines sales increased 2.4% to €5,118 million while CHC sales were up 3.0% to €4,660 million.
- DCV⁽⁵⁾ GBU sales declined 13.8% to €4,511 million.
- Emerging Markets sales were up 7.5%, supported by strong performance in China (up 12.7%).

Sanofi delivers 2018 business EPS at the high end of its guidance range

- Q4 2018 business EPS⁽¹⁾ up 4.7% at CER to €1.10.
- Full-Year 2018 business EPS of €5.47 up 5.1% at CER and IFRS EPS of €3.45 (down 48.5%⁽²⁾).
- Board proposes dividend of €3.07, the 25th consecutive increase in dividend.

Key achievements in sustaining innovation in R&D

- Isatuximab met primary endpoint of ICARIA phase 3 study in Relapsed/Refractory Multiple Myeloma.
- BIVV001 demonstrated sustained high factor levels at once-weekly dosing with data presented at ASH.
- FDA Priority Review granted for Dupixent[®] in adolescents with moderate-to-severe atopic dermatitis.
- R&D strategy evolves towards prioritization of Specialty Care and Vaccines, leveraging technology platforms and data science.

2019 financial outlook

• Sanofi expects 2019 business EPS⁽¹⁾ to grow between 3% and 5%⁽⁷⁾ at CER, barring unforeseen major adverse events. Applying average January 2019 exchange rates, the positive currency impact on 2019 business EPS is estimated to be between 1% to 2%.

Sanofi Chief Executive Officer, Olivier Brandicourt, commented:

"In the fourth quarter, we continued the momentum of the previous quarter and we delivered 5% full-year business EPS growth, at the high end of our guidance. In 2018, we executed on important launches including Dupixent[®], Libtayo[®] and Cablivi[®], as the headwinds from our U.S. LoEs began to moderate. Additionally, the acquisitions of Bioverativ and Ablynx provided the foundation to build a leading Rare Blood Disorder franchise and to enhance our biologic discovery capabilities. As we enter 2019, our focus remains on delivering our business priorities and transforming Sanofi to address the evolving business dynamics facing our industry."

(1) In order to facilitate an understanding of operational performance, Sanofi comments on the business net income statement. Business net income is a non-GAAP financial measure (see Appendix 10 for definitions). The consolidated income statement for Q4 2018 is provided in Appendix 3 and a reconciliation of reported IFRS net income to business net income is set forth in Appendix 4; (2) Excluding Animal Health gain on disposal, full-year IFRS net income was up 14.5% and full-year IFRS EPS was up 15.3%; (3) Changes in net sales are expressed at constant exchange rates (CER) unless otherwise indicated (see Appendix 10); (4) Constant Structure: Adjusted for Bioverativ acquisition and divestment of European Generics business; (5) DCV: Diabetes and Cardiovascular; (6) See definition page 8; (7) 2018 business EPS was €5.47.

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2018 fourth-quarter and full-year Sanofi sales

Unless otherwise indicated, all percentage changes in sales in this press release are stated at CER⁽⁸⁾.

In the fourth quarter of 2018, Company sales were €8,997 million, up 3.5% on a reported basis. Exchange rate movements had a negative effect of 0.4 percentage points mainly driven by the movement of the Turkish Lira, Brazilian Real and Argentine Peso. At CER, Company sales increased 3.9%.

Full-year Company sales reached €34,463 million, down 1.7% on a reported basis. Exchange rate movements had an unfavorable effect of 4.2 percentage points. At CER, Company sales were up 2.5%.

Global Business Units

The table below presents sales by Global Business Unit (GBU). Please note that Emerging Markets sales for Specialty Care and Diabetes and Cardiovascular are included in the General Medicines and Emerging Markets GBU.

Net Sales by GBU (€ million)	Q4 2018	Change at CER	2018	Change at CER
Sanofi Genzyme (Specialty Care) ^(a)	2,054	+37.4% ^(c)	7,226	+30.8% ^(d)
Diabetes and Cardiovascular ^(a)	1,170	-11.3%	4,511	-13.8%
General Medicines & Emerging Markets ^(b)	3,052	-6.6% ^(e)	12,948	-2.8% ^(f)
Total Pharmaceuticals	6,276	+3.0%	24,685	+2.4%
Consumer Healthcare (CHC)	1,194	+1.9%	4,660	+3.0%
Sanofi Pasteur (Vaccines)	1,527	+9.7%	5,118	+2.4%
Total net sales	8,997	+3.9%	34,463	+2.5%

(a) Does not include Emerging Markets sales - see definition page 8; (b) Includes Emerging Markets sales for Diabetes & Cardiovascular and Specialty Care; (c)+16.1% at CS; (d)+14.2% at CS; (e) -1.8% at CS; (f)-1.6% at CS

Global Franchises

The tables below present fourth-quarter and 2018 sales by global franchise, including Emerging Markets sales, to facilitate comparisons. Appendix 1 provides a reconciliation of sales by GBU and franchise.

Net sales by Franchise (€ million)	Q4 2018	Change at CER	Developed Markets	Change at CER	Emerging Markets	Change at CER
Specialty Care	2,328	+35.2%	2,054	+37.4%	274	+22.4%
Diabetes and Cardiovascular	1,552	-7.1%	1,170	-11.3%	382	+7.9%
Established Rx Products	2,126	-6.8%	1,242	-13.0%	884	+2.9%
Consumer Healthcare (CHC)	1,194	+1.9%	789	-0.4%	405	+6.4%
Generics	270	-33.8%*	97	-61.4%**	173	+3.8%
Vaccines	1,527	+9.7%	1,054	+13.3%	473	+2.5%
Total net sales	8,997	+3.9%	6,406	+3.0%	2,591	+6.0%

* +6.7% at CS **+12.9% at CS

Net sales by Franchise (€ million)	2018	Change at CER	Developed Markets	Change at CER	Emerging Markets	Change at CER
Specialty Care	8,269	+29.0%	7,226	+30.8%	1,043	+18.7%
Diabetes and Cardiovascular	6,083	-7.9%	4,511	-13.8%	1,572	+13.1%
Established Rx Products	8,843	-6.1%	5,090	-14.1%	3,753	+6.6%
Consumer Healthcare (CHC)	4,660	+3.0%	3,072	-0.1%	1,588	+8.9%
Generics	1,490	-9.8%*	805	-19.4%**	685	+3.0%
Vaccines	5,118	+2.4%	3,647	+4.5%	1,471	-2.3%
Total net sales	34,463	+2.5%	24,351	+0.5%	10,112	+7.5%

* -0.6% at CS **-3.8% at CS

(8) See Appendix 10 for definitions of financial indicators.

Pharmaceuticals

Fourth-quarter Pharmaceutical sales were up 3.0% to €6,276 million mainly driven by the Immunology and Rare Blood Disorder franchises which were partially offset by Diabetes, Established Rx Products and the disposal of the European generics business. Full-year sales for Pharmaceuticals increased 2.4% to €24,685 million.

Rare Disease franchise

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Myozyme [®] / Lumizyme [®]	226	+10.7%	840	+10.8%
Fabrazyme [®]	206	+14.4%	755	+9.8%
Cerezyme [®]	190	+9.3%	711	+6.4%
Aldurazyme®	54	+16.7%	206	+6.7%
Cerdelga [®]	44	+33.3%	159	+31.0%
Others Rare Disease	74	-6.5%	287	-5.4%
Total Rare Disease	794	+10.9%	2,958	+8.3%

In the fourth quarter, **Rare Disease** delivered a solid performance with sales up 10.9% to €794 million, driven by Gaucher, Pompe and Fabry therapies. In the U.S. and Europe, fourth-quarter Rare Disease sales grew 8.5% (to €292 million) and 3.1% (to €262 million), respectively, while Emerging Markets sales were up 32.6% to €150 million. Full-year Rare Disease sales increased 8.3% to €2,958 million.

Fourth-quarter **Gaucher** (**Cerezyme**[®] and **Cerdelga**[®]) sales were up 13.0% to €234 million, supported by the increasing penetration of Cerdelga[®] in Europe and the sustained growth of Cerezyme[®] in Emerging Markets. Fourth-quarter Cerdelga[®] sales increased 33.3% to €44 million. Full-year Gaucher sales were €870 million, up 10.0%.

Fourth-quarter **Pompe** (**Myozyme[®]/Lumizyme[®]**) sales grew 10.7% to €226 million, supported by positive trends in naïve patient accruals. Fourth-quarter Myozyme[®]/Lumizyme[®] sales increased 18.8% to €79 million in the U.S. and 1.1% to €96 million in Europe, respectively. Full-year Myozyme[®]/Lumizyme[®] sales increased 10.8% to €840 million.

Fourth-quarter **Fabry** (**Fabrazyme**[®]) sales grew 14.4% to €206 million. Fourth-quarter sales in the U.S. and Europe increased 9.9% (to €104 million) and 4.8% (to €45 million), respectively. Full-year Fabrazyme[®] sales were up 9.8% to €755 million.

Multiple Sclerosis franchise

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Aubagio®	446	+12.6%	1,647	+9.3%
Lemtrada [®]	96	-14.3%	402	-11.6%
Total Multiple Sclerosis	542	+6.6%	2,049	+4.4%

Fourth-quarter **Multiple Sclerosis** (MS) sales were up 6.6% to €542 million, as double-digit Aubagio[®] sales growth was partially offset by the decline in Lemtrada[®] sales. Full-year MS sales increased 4.4% to €2,049 million.

Fourth-quarter **Aubagio**[®] sales increased 12.6% to €446 million, driven by the U.S. (up 13.5% to €311 million) and Europe (up 12.5% to €108 million). Full-year Aubagio[®] sales increased 9.3% to €1,647 million.

In the fourth quarter, **Lemtrada**[®] sales decreased 14.3% to €96 million due to lower U.S. sales (down 19.6% to €45 million) and European sales (down 11.9% to €37 million), reflecting increased competition. Full-year Lemtrada[®] sales decreased 11.6% to €402 million.

Immunology franchise

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Dupixent [®]	280	+130.5%	788	+268.0%
Kevzara®	31	+275.0%	83	+663.6%
Total Immunology	311	+139.7%	871	+287.0%

Dupixent[®] (collaboration with Regeneron) for the treatment of moderate-to-severe atopic dermatitis in adults and moderate-to-severe adolescent and adult asthma generated sales of €280 million in the fourth quarter compared to €118 million in the fourth quarter of 2017. In the U.S., Dupixent[®] sales reached €225 million in the fourth quarter (up 87.9%). Demand for the product remains strong and total prescriptions (source: IQVIA weekly TRx data) increased 25% sequentially in the fourth quarter, bolstered by the branded DTC campaign and the recent U.S. launch in asthma. Fourth-quarter sales in Europe were €29 million. Full-year Dupixent[®] sales were €788 million compared to €219 million in the same period of 2017. By the end of 2018, Dupixent[®] had been launched in 17 countries.

Kevzara[®] (collaboration with Regeneron) for rheumatoid arthritis generated sales of €31 million in the fourth quarter, of which €23 million was in the U.S. reflecting improved commercial coverage. Kevzara[®] was launched in 14 countries in Europe in 2018 (included France in the fourth quarter). Full-year Kevzara[®] sales were €83 million.

Rare Blood Disorder franchise

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Eloctate [®]	196	-	608	-
Alprolix [®]	95	-	285	-
Cablivi [®]	3	-	4	-
Total Rare Blood Disorder	294	-	897	-

Bioverativ was consolidated in Sanofi's Financial Statements from March 9, 2018. Fourth-quarter sales of the **Rare Blood Disorder** franchise were €294 million (up 5.7% on a pro forma basis⁽⁹⁾), including non-U.S. sales of €58 million with Japan as the primary contributor. Full-year consolidated sales of the Rare Blood Disorder franchise were €897 million, up 12.5% on a pro forma basis⁽⁹⁾.

Eloctate[®], a recombinant antihemophilic Factor VIII, indicated for the treatment of hemophilia A, generated sales of €196 million in the fourth quarter, up 4.3% on a pro forma basis⁽¹⁰⁾. The performance in the U.S., Japan and Australia was partially offset by a decline in sales in Canada following the previously announced tender loss. The competitive dynamics in the U.S. resulted in a deceleration in growth compared with the previous quarter. Full-year consolidated Eloctate[®] sales were €608 million, up 15.0% on a pro forma basis⁽¹⁰⁾.

Alprolix[®], a recombinant coagulation Factor IX, indicated for the treatment of hemophilia B, generated sales of \in 95 million in the fourth quarter, up 5.3% on a pro forma basis⁽¹⁰⁾. Full-year consolidated Alprolix[®] sales were \in 285 million, up 6.6% on a pro forma basis⁽¹⁰⁾.

Cablivi[®] (caplacizumab) for the treatment of adults with acquired thrombotic thrombocytopenic purpura (aTTP), received EU approval in September and was launched in its first market, Germany, in October. Sales in the fourth quarter were €3 million.

Oncology franchise

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Jevtana®	114	+14.1%	422	+13.0%
Thymoglobulin [®]	78	+9.9%	297	+7.2%
Mozobil [®]	47	+15.0%	171	+8.6%
Eloxatin [®]	43	0.0%	182	+5.0%
Taxotere®	38	-2.5%	166	-0.6%
Zaltrap [®]	23	+14.3%	91	+27.0%
Others	44	0.0%	165	-32.1%
Total Oncology	387	+8.1%	1,494	+2.1%

(9) Growth comparing fourth-quarter 2018 sales versus fourth-quarter 2017 sales, and full 2018 sales versus full 2017 sales at CER. Excluding the Sobi contract manufacturing sales and including Cabliv[®] sales in 2018. Unaudited data. (10) Growth comparing fourth-quarter 2018 sales versus fourth-quarter 2017 sales, and full 2018 sales versus full 2017 sales at CER. Excluding the Sobi contract manufacturing sales. Unaudited data.

Fourth-quarter **Oncology** sales increased 8.1% to €387 million. Consistent with the Company's portfolio prioritization efforts, Sanofi sold Leukine[®] on January 31, 2018. Excluding Leukine[®], Oncology fourth-quarter sales were up 10.2%. Full-year Oncology sales were up 2.1% to €1,494 million and up 6.3% excluding Leukine[®].

Jevtana[®] sales were up 14.1% to €114 million in the fourth quarter supported by the performance in the U.S. (up 20.0% to €50 million). Full-year Jevtana[®] sales increased 13.0% to €422 million. In the fourth quarter and full year, **Thymoglobulin**[®] sales increased 9.9% (to €78 million) and 7.2% (to €297 million), respectively.

In September, **Libtayo**[®] (cemiplimab-rwlc, collaboration with Regeneron) was approved in the U.S. for the treatment of patients with metastatic cutaneous squamous cell carcinoma (CSCC) or locally advanced CSCC who are not candidates for curative surgery or curative radiation. Libtayo[®] is the only treatment for advanced CSCC approved by the FDA. U.S. Libtayo[®] sales were \$15 million and were consolidated by Regeneron.

Diabetes franchise

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Lantus [®]	866	-19.7%	3,565	-19.0%
Toujeo [®]	211	-2.3%	840	+7.2%
Total glargine	1,077	-16.8%	4,405	-15.1%
Apidra®	89	-6.2%	357	+0.3%
Amaryl [®]	77	-1.3%	335	+4.8%
Insuman [®]	23	-14.8%	91	-12.0%
Admelog [®]	57	-	93	-
Soliqua [®]	27	+188.9%	73	+188.5%
Total Diabetes	1,375	-10.5%	5,472	-10.4%

In the fourth quarter, global **Diabetes** sales decreased 10.5% to \leq 1,375 million, due to lower glargine (Lantus[®] and Toujeo[®]) sales in the U.S. Fourth-quarter U.S. Diabetes sales were down 26.3% to \leq 555 million, reflecting the previously announced changes in coverage of the Part D business and a continued decline in average U.S. glargine net prices. Fourth-quarter sales in Emerging Markets increased 7.7% to \leq 376 million. Fourth-quarter sales in Europe decreased 0.6% to \leq 320 million, supported by Toujeo[®] growth. Full-year global Diabetes sales decreased 10.4% to \leq 5,472 million. This in turn resulted in a CAGR sales decline for the global Diabetes franchise over 2015-2018 of 7.4% at CER, in line with the guidance.

Fourth-quarter **glargine** (Lantus[®] and Toujeo[®]) sales decreased 16.8% to €1,077 million. U.S. glargine sales were down 35.7% to €460 million, reflecting the aforementioned changes in coverage in Part D and a continued decline in average U.S. glargine net prices. In Europe, glargine sales were stable ato €245 million reflecting strong Toujeo[®] performance. Full-year glargine sales decreased 15.1% to €4,405 million. In 2019, Sanofi expects a further net pricing decline for its glargine products in the U.S. as a result of higher rebates needed to maintain broad payer coverage and the increased Part D coverage gap impact.

In the fourth quarter, **Lantus**[®] sales were €866 million, down 19.7%. In the U.S., Lantus[®] sales decreased 37.0% to €379 million, mainly reflecting lower average net price and changes in coverage in Part D. In Europe, fourth-quarter Lantus[®] sales were €168 million, down 8.2% due to biosimilar glargine competition and patients switching to Toujeo[®]. In Emerging Markets, fourth-quarter Lantus[®] sales were up 7.7% to €242 million. Full-year Lantus[®] sales decreased 19.0% to €3,565 million.

Fourth-quarter **Toujeo**[®] sales were €211 million, down 2.3%. In the U.S., fourth-quarter Toujeo[®] sales were €81 million, down 29.1%. In Europe and Emerging Markets, fourth-quarter Toujeo[®] sales were €77 million (up 23.8%) and €31 million (up 32.0%), respectively. Full-year Toujeo[®] sales increased 7.2% to €840 million.

Fourth-quarter **Apidra**[®] sales decreased 6.2% to €89 million. Lower sales in the U.S. (down 36.0% to €17 million) offset growth in Emerging Markets (up 10.7% to €29 million). Full-year Apidra[®] sales increased 0.3% to €357 million.

Amaryl[®] sales were €77 million, down 1.3% in the fourth quarter, of which €66 million were generated in Emerging Markets (up 1.5%). Full-year Amaryl[®] sales were up 4.8% at €335 million.

Admelog[®] (insulin lispro injection) 100 Units/mL, which was launched in the U.S. in April, generated sales of €57 million in the fourth quarter mainly due to access in Managed Medicaid. Full-year Admelog[®] sales were €93 million.

Fourth-quarter and full-year **Soliqua[®]** 100/33 (insulin glargine 100 Units/mL & lixisenatide 33 mcg/mL injection) and **Suliqua**[™] sales were €27 million and €73 million, respectively.

Cardiovascular franchise

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Praluent®	82	+50.9%	261	+56.1%
Multaq [®]	95	+20.8%	350	+7.1%
Total cardiovascular franchise	177	+33.1%	611	+23.5%

Fourth-quarter **Praluent**[®] (collaboration with Regeneron) sales increased 50.9% to €82 million. U.S. sales of €52 million (up 45.7%) benefited from ESI coverage exclusivity which began in the third quarter. In Europe, sales were €23 million (up 53.3%). Full-year Praluent[®] sales increased 56.1% to €261 million. In 2019, Sanofi expects higher U.S. rebates to impact Praluent[®] sales.

Fourth-quarter and full-year **Multaq[®]** sales were up 20.8% (to €95 million) and 7.1% (to €350 million), respectively.

Established Rx Products

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Lovenox [®]	346	-9.0%	1,465	-3.0%
Plavix [®]	328	-4.9%	1,440	+1.2%
Aprovel [®] /Avapro [®]	151	-2.5%	652	-1.7%
Renvela [®] /Renagel [®]	96	-39.4%	411	-46.7%
Synvisc [®] /Synvisc-One [®]	81	-7.0%	313	-15.0%
Myslee [®] /Ambien [®] /Stilnox [®]	59	-1.7%	231	-6.9%
Allegra [®]	26	-21.9%	124	-17.7%
Other	1,039	-2.5%	4,207	-1.8%
Total Established Rx Products	2,126	-6.8%	8,843	-6.1%

In the fourth quarter, **Established Rx Products** sales decreased 6.8% to $\leq 2,126$ million, reflecting lower U.S. sales of Renvela[®]/Renagel[®] (sevelamer) due to generic competition, together with lower sales of Lovenox[®] in Europe and Plavix[®] in Japan. Full-year Established Rx Products sales decreased 6.1% to $\leq 8,843$ million.

Fourth quarter **Lovenox**[®] sales decreased 9.0% to €346 million, reflecting biosimilar competition in the UK, Poland, Germany, Italy and France. Sales in Europe were down 13.9% to €199 million impacted mainly by price erosion in France and Germany triggered by biosimilar launches. In Emerging Markets, Lovenox[®] sales grew 3.3% to €117 million. Full-year Lovenox[®] sales were down 3.0% to €1,465 million

In the fourth quarter, **Plavix**[®] sales were down 4.9% to €328 million. The decline was mainly driven by generic penetration in Japan (sales down 31.5% to €38 million) and procurement timing in the Middle East. Plavix[®] sales continued to grow in China. Sales of the product decreased in the rest of Emerging Markets and increased 2.9% in Europe. Full-year Plavix[®] sales were up 1.2% to €1,440 million.

Fourth-quarter **Aprovel[®]/Avapro[®]** sales decreased 2.5% to €151 million due to loss of exclusivity in Japan in December 2017. In Emerging Markets, performance continued to be strong with sales up 8.6% to €112 million. Full-year Aprovel[®]/Avapro[®] sales decreased 1.7% to €652 million.

Fourth-quarter **Renvela[®]/Renagel[®]** (sevelamer) sales decreased 39.4% to €96 million due to generic competition in the U.S. (down 53.0% to €57 million). Full-year Renvela[®]/Renagel[®] sales decreased 46.7% to €411 million.

Generics

In the fourth quarter, **Generics** sales decreased 33.8% to €270 million, reflecting the divestment of the European generics business Zentiva at the end of the third quarter. This divestiture was consistent with Sanofi's strategy to simplify and reshape the company. At CS, fourth quarter Generic sales increased 6.7%. Emerging Markets Generics sales increased 3.8% to €173 million. Full-year Generics sales decreased 9.8% to €1,490 million and decreased 0.6% at CS.

Consumer Healthcare

CHC sales by geography and category are provided in Appendix 1.

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Allergy Cough & Cold	268	-6.3%	1,124	-1.7%
of which Allegra [®]	80	-3.6%	396	+1.2%
of which Mucosolvan [®]	30	-14.3%	110	+1.8%
of which Xyzal [®]	10	+42.9%	41	-32.3%
Pain	336	+4.6%	1,254	+6.7%
of which Doliprane [®]	98	+3.2%	333	+4.0%
of which Buscopan [®]	49	0.0%	194	+16.0%
Digestive	256	+4.4%	986	+8.7%
of which Dulcolax [®]	55	0.0%	216	+7.1%
of which Enterogermina [®]	47	+14.3%	183	+16.1%
of which Essentiale [®]	48	+4.1%	177	+8.7%
of which Zantac [®]	34	+13.8%	127	+13.7%
Nutritionals	174	+9.1%	675	+4.7%
Other	160	0.0%	621	-5.2%
of which Gold Bond [®]	67	+16.1%	211	+9.5%
Total Consumer Healthcare	1,194	+1.9%	4,660	+3.0%

In the fourth quarter, **Consumer Healthcare** (CHC) sales increased 1.9% to €1,194 million, driven by Emerging Markets and the U.S. Full-year CHC sales increased 3.0% to €4,660 million.

In **Europe**, fourth-quarter CHC sales were down 3.6% to €368 million. Lower sales in the Allergy Cough & Cold category (down 13.3%) resulted from a weak season coupled with a strong base for comparison in the fourth quarter of 2017, which featured an unusual spike in demand. Full-year CHC sales in Europe decreased 0.2% to €1,403 million.

In the **U.S.**, fourth-quarter CHC sales increased 6.0% to €274 million, supported by the Digestive category (up 10.9%) and Gold Bond performance. Full-year U.S. CHC sales decreased 1.1% to €1,066 million.

In **Emerging Markets**, fourth-quarter CHC sales increased 6.4% to €405 million, mainly driven by a solid demand in Brazil (mainly Pain category). Full-year Emerging Markets CHC sales increased 8.9% to €1,588 million.

Vaccines

Net sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
Influenza vaccines	596	+17.1%	1,708	+7.2%
(incl. Vaxigrip [®] , Fluzone HD [®] , Fluzone [®] , Flublok [®])	550	+17.170	1,700	+7.270
Polio/Pertussis/Hib vaccines	504	+3.0%	1.749	-0.7%
(incl. Hexaxim [®] / Hexyon [®] , Pentacel [®] , Pentaxim [®] and Imovax [®])	504	+3.076	1,745	-0.776
Meningitis/Pneumo vaccines	101	+59.3%	600	.0.6%
(incl. Menactra [®])	131	+59.3%	609	+0.6%
Adult Booster vaccines (incl. Adacel®)	135	-2.9%	470	+1.3%
Travel and other endemic vaccines	130	-18.8%	488	+1.8%
Other vaccines	31	+158.3%	94	+3.2%
Total Vaccines	1,527	+9.7%	5,118	+2.4%

Fourth-quarter **Vaccines** sales were up 9.7% driven by the performance in the U.S. (up 10.4%) and Europe (up 21.9%). In Emerging Markets, fourth-quarter Vaccines sales increased 2.5%. Fourth-quarter performance was consistent with Sanofi's expectation that sales of the Vaccines GBU would grow mid to high-single digits in the second half of 2018. Full-year Vaccines sales increased 2.4% to €5,118 million.

Fourth-quarter **Influenza vaccines** sales were up 17.1% to €596 million, reflecting slightly greater weighting of shipments in the fourth quarter versus the prior year as well as Sanofi Pasteur's influenza differentiation strategy which included the successful launch of Flubok[®] in the U.S. and the strong performance of Vaxigrip[®] QIV in Europe. Full-year Influenza vaccines sales increased 7.2% to €1,708 million.

In the fourth quarter, **Polio/Pertussis/Hib** (PPH) vaccines sales were up 3.0% to €504 million, driven by higher Hexaxim sales in Emerging Markets. In China, Pentaxim[®] supply returned to normal. In the U.S., PPH vaccines sales decreased 9.2% to €102 million reflecting lower sales of Polio and Hib vaccines. Full-year Polio/Pertussis/Hib vaccines sales were down 0.7% to €1,749 million.

Fourth-quarter **Menactra[®]** sales increased 63.3% to €130 million, driven by sales in the U.S. and Middle-East. In the U.S., fourth-quarter Menactra[®] sales were €80 million (up 45.3%) reflecting timing differences in CDC and wholesaler buying patterns. Full-year Menactra[®] sales were up 4.5% to €608 million.

Fourth-quarter and full-year **Adult Booster** vaccines sales decreased 2.9% (to €135 million) and increased 1.3% (to €470 million), respectively.

Fourth-quarter **Travel and other endemic vaccines** sales were €130 million, down 18.8% reflecting lower Rabies and Typhoid vaccines sales. Full-year Travel and other endemic vaccines sales were up 1.8% to €488 million.

Company sales by geographic region

Sanofi sales (€ million)	Q4 2018	Change at CER	2018	Change at CER
United States	3,195	+8.7%	11,540	+0.7%
Emerging Markets ^(a)	2,591	+6.0%	10,112	+7.5%
of which Asia	941	+8.4%	3,962	+9.3%
of which Latin America	710	+2.6%	2,612	+8.1%
of which Africa, Middle East	601	+5.2%	2,232	+1.1%
of which Eurasia ^(b)	288	+3.3%	1,152	+10.1%
Europe ^(c)	2,342	-4.8%	9,434	-0.6%
Rest of the World ^(d)	869	+6.7%	3,377	+2.7%
of which Japan	423	-1.4%	1,710	-2.0%
Total Sanofi sales	8,997	+3.9%	34,463	+2.5%

(a) World excluding U.S., Canada, Western & Eastern Europe (except Eurasia), Japan, South Korea, Australia, New Zealand and Puerto Rico

(b) Russia, Ukraine, Georgia, Belarus, Armenia and Turkey

(c) Western Europe + Eastern Europe except Eurasia

(d) Japan, South Korea, Canada, Australia, New Zealand, Puerto Rico

Fourth-quarter sales in the **U.S.** were up 8.7% to \in 3,195 million. This mainly reflected the strong performances of Dupixent[®] and Aubagio[®], together with the consolidation of Eloctate[®] and Alprolix[®] sales, which were partly offset by lower sales of the Diabetes franchise (down 26.3%) and of sevelamer. In the U.S., full-year sales increased 0.7% to \in 11,540 million.

Fourth-quarter sales in **Emerging Markets** increased 6.0% to €2,591 million, mainly driven by Rare Diseases (up 32.6%), Diabetes (up 7.7%) and CHC (up 6.4%). In Asia, sales were up 8.4% to €941 million in the fourth quarter, sustained by the performance in China (up 8.3% to €566 million). In Latin America, fourth-quarter sales increased 2.6% to €710 million. Fourth-quarter sales in Brazil were up 10.0% to €254 million. In Africa and the Middle East region, fourth-quarter sales were €601 million, up 5.2%. Fourth-quarter sales in the Eurasia region increased 3.3% to €288 million, driven by the growth in Turkey which was partially offset by lower sales in Russia (€153 million, down 4.0%). Full-year sales in Emerging Markets increased 7.5% to €10,112 million. In 2018, sales in China, Brazil and Russia were €2,464 million (up 12.7%), €1,023 million (up 7.0%) and €605 million (up 4.6%), respectively.

Fourth-quarter sales in **Europe** were €2,342 million, down 4.8% due to the divestment of the European Generics business. At CS, fourth-quarter sales were up 2.0% driven by Vaccines (up 21.9%) and the roll-out of Dupixent[®] which offset lower sales in Established Rx Products (down 6.8%). In Europe, full-year sales decreased 0.6% to €9,434 million and increased 1.1% at CS.

Sales in **Japan** decreased 1.4% to \in 423 million in the fourth quarter. The consolidation of Rare Blood Disorder sales was more than offset by the impact of Plavix[®] and Aprovel[®] generic competition and lower Vaccines sales. In Japan, full-year sales decreased 2.0% to \in 1,710 million.

R&D update

Consult Appendix 6 for full overview of Sanofi's R&D pipeline

R&D strategy

Sanofi is today providing an update on the evolution of its R&D strategy. Consistent with its ambition to be an industry innovation leader, Sanofi has increased its R&D focus on Speciality Care therapy areas (Oncology, Immunology, Rare Disease and Rare Blood Disorder) while maintaining its commitment to Vaccines. Since 2017, the number of R&D programs in these areas has increased significantly, and they now represent over 90% of Sanofi's clinical portfolio. This change reflects advances in the Company's R&D capabilities and understanding of human biology.

In support of this strategy, Sanofi recently carried out a rigorous pipeline prioritization review to accelerate investment behind its most promising programs and to discontinue those with a less attractive expected return profile. As a result, the Company is accelerating the development of 17 programs, including 8 in Oncology. Thirteen development projects and 25 research projects are being discontinued to enhance the company's focus on delivering first and best in class medicines. Overall, Sanofi could potentially submit 9 new medicines and 25 additional indications to regulatory authorities over 2019 to 2022.

Through the development of its own expertise and the establishment of partnerships with industry pioneers, Sanofi has access to a broad range of therapeutic modalities that enable a more customized, science-driven approach to targeting disease. This includes development of next-generation biologics, such as multi-specific antibodies and Nanobodies, which provide new opportunities relative to traditional monoclonal antibodies in areas such as oncology and immunology, as well as gene therapies. The Company is also employing data science and machine learning across the R&D organization to generate higher quality data, accelerate development and regulatory submissions, and reduce costs. Sanofi expects to maintain an annual R&D budget of approximately €6 billion through 2021.

Regulatory update

Regulatory updates since October 31, 2018 include the following:

- In February, the European Medicine Agency's Committee for Medicinal Products for Human Use (CHMP) has recommended approval of **Praluent**[®] (collaboration with Regeneron) in European Union to reduce cardiovascular risk in people with established atherosclerotic cardiovascular disease.
- In December, the FDA approved the hexavalent vaccine, **Vaxelis**[™], for use in children from 6 weeks through 4 years of age. Vaxelis[™] was developed as part of a joint partnership between Sanofi and Merck in the U.S. and Canada. Commercial supply will not be available in the U.S. prior to 2020.
- In December, **Dupixent**[®] (collaboration with Regeneron) was submitted to the FDA for the treatment of adults with inadequately-controlled chronic rhinosinusitis with nasal polyps (CRSwNP).
- In December, the European Commission granted marketing authorization for **Dengvaxia**[®] to prevent dengue disease in individuals 9-45 years of age with a documented prior dengue infection and who are living in endemic areas.
- In November, the CHMP recommended approval in European Union of **fexinidazole** the first all-oral treatment for sleeping sickness.
- In November, the FDA accepted for Priority Review the supplemental Biologics License Application (sBLA) for Dupixent[®] in adolescent patients 12 to 17 years of age with moderate-to-severe atopic dermatitis, whose disease is inadequately controlled with topical therapies or for whom topical treatment is medically inadvisable. The target action data for the FDA decision is March 11, 2019.

At the beginning of February 2019, the R&D pipeline contained 81 projects including 33 new molecular entities in clinical development. 35 projects are in phase 3 or have been submitted to the regulatory authorities for approval.

Portfolio update

Phase 3:

- In February, Sanofi announced that **Isatuximab** phase 3 trial (ICARIA study) met primary endpoint of prolonging progression free survival in patients with relapsed/refractory multiple myeloma
- In January, the New England Journal of Medicine (NEJM) published positive results of the Phase 3 trial of Cablivi[®] (caplacizumab) in adults with acquired thrombotic thrombocytopenic purpura (aTTP).
- In November, new analyses on mortality from the ODYSSEY OUTCOMES trial evaluating Praluent[®] were
 presented at the American Heart Association (AHA) Scientific Sessions. In November, the New England Journal
 of Medicine (NEJM) also published detailed results of this trial.

• Shan 6, a pediatric hexavalent vaccine, entered phase 3.

Phase 2:

- A phase 2 study evaluating the combination of **isatuximab** (anti-CD38 mAb) and **cemiplimab** (collaboration with Regeneron) in lymphoma was intitiated.
- A phase 2 study evaluating the combination of **isatuximab** and atezolizumab (PD-L1 inhibitor mAb) in solid tumors was initiated.
- A phase 2 study evaluating **SAR440340** (an anti-IL33 mAb, collaboration with Regeneron) in atopic dermatitis was initiated.
- Positive primary analysis of the Phase 2b trial demonstrated the safety and efficacy of SP0232/MEDI8897 (anti RSV mAb - Respiratory Syncytial Virus, collaboration with Medimmune).
- Several projects in phase 2 were stopped:
 - **GZ389988**, a TRKA antagonist, in osteo arthritis;
 - ALX0171, an anti RSV nanobody (from Ablynx) for Respiratory Syncitial Virus;
 - SAR425899, a GLP-1 / GCGR agonist, in obesity in type 2 diabetes patients;
 - **SAR407899**, a rho kinase inhibitor, for microvascular angina;

Phase 1:

- **SAR408701**, an anti-CEACAM5, achieved positive proof of concept in a subgroup of lung cancer patients. A broad development program is expected to start by the end of 2019.
- **BIVV001**, a recombinant Factor VIII for Hemophilia A, achieved positive proof of concept with demonstration of sustained high factor levels at once-weekly dosing.
- **SAR441000**, a cytokine mRNA (collaboration withBioNTech AG) entered phase 1 in the treatment of melanoma.
- **SAR443060/**DNL747 (collaboration with Denali), an oral brain-penetrant small molecule (RIPK1 inhibitor), entered phase 1 clinical study in Amyotrophic Lateral Sclerosis (ALS) and Alzheimer's disease.
- **BIVV003**, a Zinc Finger Nuclease (ZFN) gene editing technology issued from Bioverativ entered phase 1 in the treatment of sickle cell disease.
- SAR441344, an anti-CD40L mAb (license from ImmuNext), entered phase 1 in the treatment of multiple sclerosis.
- A next generation **Pneumococcal Conjugate Vaccine** (PCV) entered phase 1.
- Several projects in phase 1 were stopped:
 - o SAR439794, a TLR4 agonist immunomodulatory evaluated in peanut allergy;
 - SAR247799, a S1P1 agonist evaluated in cardiovascular area;
 - SAR438335, a GLP-1/GIP agonist in Type 2 diabetes;
 - o SAR228810, an anti protofibrillar AB mAb for Alzheimer disease;
- UshStat[®], a myosin 7A gene therapy for Usher Syndrome 1B, will be discontinued contigent upon identification of out-licensing partner.

Collaborations

In January 2019, Sanofi and Regeneron announced a restructuring of their global **Immuno-Oncology Discovery and Development Agreement** for new IO cancer treatments. The 2015 agreement was scheduled to end in approximately mid-2020. This revision provides for ongoing collaborative development of two clinical-stage bispecific antibody programs (BCMAxCD3 and MUC16xCD3 bispecific). It also provides Sanofi with increased flexibility to advance its earlystage IO pipeline independently while Regeneron retains all rights to its other IO discovery and development programs.

In January 2019, **BioNTech** announced that it has extended its research collaboration with Sanofi initiated in late 2015 in the field of mRNA cancer immunotherapy.

In January 2019, **MyoKardia**, Inc. announced that it regained worldwide rights to all programs covered under its license and collaboration agreement with Sanofi. The collaboration has not been extended beyond the initial research term, which ended on December 31, 2018. As a result, MyoKardia now has regained global rights to all programs in its portfolio, including mavacamten (a Myosin inhibitor evaluated in obstructive and non-obstructive hypertrophic cardiomyopathy) and MYK-491 (a Myosin activator evaluated in dilated cardiomyopathy) and the license and collaboration will conclude in its entirety effective April 1, 2019.

In December sanofi and **Medicines for Malaria Ventures** (MMV) agreed to transfer the operational responsibility for the development of Ferroquine/OZ439, to MMV in such a way that MMV would assume leadership while sanofi remains the sponsor of the studies, fulfilling drug supply, regulatory and legal obligations. Ferroquine/OZ439 is a first in class combination for malaria previously developed in collaboration with MMV.

In November, Sanofi announced that it plans to collaborate with **Denali Therapeutics Inc**. on the development of multiple molecules with the potential to treat a range of neurological and systemic inflammatory diseases.

2018 Fourth-quarter and full-year financial results⁽¹¹⁾

Business Net Income⁽¹¹⁾

In the fourth quarter of 2018, Sanofi generated **net sales** of €8,997 million, an increase of 3.5% (up 3.9% at CER). Fullyear sales were €34,463 million, down 1.7% on a reported basis (up 2.5% at CER).

Fourth-quarter **other revenues** increased 13.4% (up 10.3% at CER) to €329 million, reflecting the VaxServe sales contribution of non-Sanofi products (€262 million, up 13.9% at CER) and the royalties received from Swedish Orphan Biovitrum AB. Full-year other revenues increased 5.7% (up 9.3% at CER) to €1,214 million of which €959 million were generated by VaxServe (up 15.6% at CER).

Fourth-quarter **Gross Profit** increased 5.2% to €6,188 million (up 5.2% at CER). The gross margin ratio was 68.8% (68.6% at CER) versus 67.7% in the fourth quarter of 2017. The positive mix impact of Specialty Care as well as the contribution from Bioverativ and Vaccines (impacted by Dengvaxia[®] in the fourth quarter of 2017) more than offset the negative impacts from U.S. Diabetes net price evolution and sevelamer generic competition. In the fourth quarter of 2018, the gross margin ratio of segments was 72.1% for Pharmaceuticals (down 0.2 percentage points), 66.0% for CHC (up 1.6 percentage points) and 60.4% for Vaccines (up 4.9 percentage points). Full-year Gross Profit decreased 1.7% to €24,356 million (up 2.5% at CER). In 2018, the gross margin ratio increased 0.1 percentage point to 70.7% (70.6% at CER) versus 2017. In 2019, Sanofi expects its gross margin ratio to be around 70% at CER.

Research and Development (R&D) expenses increased 14.6% to €1,678 million in the fourth quarter of 2018. At CER, R&D expenses increased 13.5%, mainly reflecting the acquisitions of Bioverativ and Ablynx together with the investments in the immuno-oncology and diabetes programs. Excluding the impact of acquisitions, R&D expenses would have risen by 6.7% in the fourth quarter of 2018. Full-year R&D expenses increased 7.7% to €5,894 million (up 10.3% at CER).

Fourth-quarter **selling general and administrative expenses** (SG&A) increased 0.8% to €2,721 million. At CER, SG&A expenses were up 1.1% mainly reflecting consolidation of Bioverativ and Ablynx. Additional marketing investments in new launches were offset by lower Diabetes expenses in the U.S. In the fourth quarter, the ratio of SG&A to sales decreased 0.9 percentage points to 30.2% compared to the fourth quarter of 2017. Full-year SG&A expenses decreased 2.4% to €9,831 million (up 1.6% at CER). In 2018, the ratio of SG&A to sales was 28.5%, 0.2 percentage points lower than in 2017.

Fourth-quarter **other current operating income net of expenses** was -€148 million versus -€114 million in the fourth quarter of 2017 and included the share of profit/loss to Regeneron of the monoclonal antibodies Alliance net of associated marketing expenses incurred by Regeneron. In the fourth quarter of 2018, this line also included charges related to a legal contingency provision, as well as a capital gain on an associate company and other accruals, which in aggregate represented a net charge of €72 million. In the fourth quarter of 2017, this line included an impairment of tangible assets of €87 million related to Dengvaxia[®]. In 2018, other current operating income net of expenses was -€64 million versus €4 million in 2017.

The **share of profits from associates** was €121 million in the fourth quarter versus €109 million for the same period of 2017, reflecting the increased contribution of the share of profits in Regeneron. In 2018, the share of profits from associates was €423 million versus €214 million in 2017.

In the fourth quarter, **non-controlling interests** were -€22 million versus -€30 million in the fourth quarter of 2017. Fullyear non-controlling interests were -€106 million versus -€125 million in 2017.

Fourth-quarter **business operating income** increased 3.3% to €1,740 million. At CER, business operating income increased 4.5%. The ratio of business operating income to net sales decreased 0.1 percentage points to 19.3% versus the fourth quarter of 2017. Over the period, the business operating income ratio of segments was 27.1% for Pharmaceuticals (down 3.9 percentage points), 29.0% for CHC (up 2.2 percentage points) and 36.1% for Vaccines (up 14.2 percentage points). Full-year business operating income was €8,884 million, down 4.7% (or up 0.9% at CER). In 2018, the ratio of business operating income to net sales decreased by 0.8 percentage points to 25.8%.

Net financial expenses were -€60 million in the fourth quarter versus -€73 million in the same period of 2017. In the fourth quarter of 2018, net financial expenses included the cost associated with the Bioverativ and Ablynx acquisitions coupled with an increase of €22 million in the market value of a financial investment. Full-year net financial expenses were -€271 million versus -€273 million in 2017.

The fourth-quarter **effective tax rate** was 20.0% compared to 18.7% in the fourth quarter of 2017. In 2018, the **effective tax rate** was 21.6% compared to 23.5% in 2017. Sanofi expects its effective tax rate to be around 22% in 2019. (11) See Appendix 3 for 2018 fourth-quarter consolidated income statement; see Appendix 10 for definitions of financial indicators, and Appendix 4 for reconciliation of IFRS net income reported to business net income.

Fourth-quarter **business net income**⁽¹¹⁾ increased 2.9% to \in 1,364 million and 4.3% at CER. The ratio of business net income to net sales was stable at 15.2% versus the fourth quarter of 2017. In 2018, business net income⁽¹¹⁾ decreased 1.8% to \in 6,819 million and increased 4.2% at CER. The ratio of business net income to net sales was stable at 19.8%.

In the fourth quarter of 2018, **business earnings per share**⁽¹¹⁾ (EPS) increased by 3.8% to €1.10 on a reported basis and by 4.7% at CER. The average number of shares outstanding was 1,245.6 million in the fourth quarter of 2018 versus 1,252.9 million in the fourth quarter of 2017.

In 2018, **business earnings per share**⁽¹¹⁾ was €5.47, down 0.9% on a reported basis and up 5.1% at CER. The average number of shares outstanding was 1,247.1 million in 2018 versus 1,256.9 million in 2017.

2019 Guidance

Sanofi expects 2019 Business EPS to grow between 3% and 5% at CER, barring unforeseen major adverse events. Applying average January 2019 exchange rates, the positive currency impact on 2019 Business EPS is estimated to be between 1% to 2%.

Dividend

The Board of Directors convened on February 6, 2019, and proposed a dividend of €3.07 per share.

Financial statements are not audited. The audit procedures by the Statutory Auditors are underway.

Reconciliation of IFRS net income reported to business net income (see Appendix 4)

In 2018, the IFRS net income was €4,306 million. The main items excluded from the business net income were:

- An amortization charge of €2,170 million related to fair value remeasurement on intangible assets of acquired companies (primarily Aventis: €256 million, Genzyme: €760 million, Boehringer Ingelheim CHC business: €242 million, Bioverativ: €430 million) and to acquired intangible assets (licenses/products: €213 million). In the fourth quarter, an amortization charge of €634 million related to fair value remeasurement on intangible assets of acquired companies (primarily Aventis: €56 million, Genzyme: €186 million, Boehringer Ingelheim CHC business: €61 million, Bioverativ: €136 million) and to acquired intangible assets (licenses/products: €114 million) was recorded. These items have no cash impact on the Company.
- An impairment of intangible assets of €718 million (of which €426 million in the fourth quarter) mainly related to Lemtrada[®], intangible assets from the Ablynx acquisition in May 2018 (including the anticipated termination collaboration with Merck & Co), and other Intellectual Property R&D assets of which the rights related to programs in Myokardia portfolio. This item has no cash impact on the Company.
- A charge of €114 million arising from the workdown of inventories of acquired companies (related to Bioverativ) remeasured at fair value due to the application of purchase accounting to acquisitions. This item has no cash impact on the Group.
- An income of €117 million mainly reflecting a decrease of Bayer contingent considerations linked to Lemtrada[®] (income of €109 million) and a charge related to CVR fair value adjustment.
- Restructuring costs and similar items of €1,480 million (of which €765 million in the fourth quarter) which include the termination fee (€283 million) paid to Regeneron related to the research program under the original IO agreement, streamlining initiatives in Europe and Japan, the cost of transfer to Evotec of the early stage infectious diseases R&D portfolio and Research unit for an amount of €252 million and accelerated depreciation of industrial assets in the U.S.

⁽¹¹⁾ See Appendix 3 for 2018 fourth-quarter consolidated income statement; see Appendix 10 for definitions of financial indicators, and Appendix 4 for reconciliation of IFRS net income reported to business net income.

- A €1,125 million tax effect arising from the items listed above, mainly comprising €692 million of deferred taxes generated by amortization and impairments of intangible assets, and €435 million associated with restructuring costs and similar items. The fourth-quarter tax effect was €503 million, including €241 million of deferred taxes on amortization and impairments charged against intangible assets and €220 million associated with restructuring costs and similar items (see Appendix 4).
- A €188 million tax effect (of which €56 million in the fourth quarter) arising from the U.S. tax reform.
- An income of €76 million net of tax (of which €180 million in the fourth quarter) related to restructuring costs of associates and joint ventures, and expenses arising from the impact of acquisitions on associates and joint ventures.

Capital Allocation

In 2018, net cash generated by operating activities was \in 5,061 million after capital expenditures of \in 1,674 million and an increase in working capital of \in 1,099 million. In 2018, restructuring costs and similar items were \in 894 million while expenditure on share repurchases was \in 1,104 million. Over the period, the dividend paid by Sanofi amounted to \in 3,773 million and acquisitions and partnerships net of disposals were \in 11,243 million (including \in 12,728 million related to the Bioverativ and Ablynx acquisitions and \in 1,598 million related to the European generics business divestment). As a consequence, net debt increased from \in 5,161 million at December 31, 2017, to \in 17,628 million at December 31, 2018 (amount net of \in 6,925 million in cash and cash equivalents).

Forward-Looking Statements

This press release contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, as amended. Forwardlooking statements are statements that are not historical facts. These statements include projections and estimates and their underlying assumptions, statements regarding plans, objectives, intentions and expectations with respect to future financial results, events, operations, services, product development and potential, and statements regarding future performance. Forward-looking statements are generally identified by the words "expects", "anticipates", "believes", "intends", "estimates", "plans" and similar expressions. Although Sanofi's management believes that the expectations reflected in such forward-looking statements are reasonable, investors are cautioned that forward-looking information and statements are subject to various risks and uncertainties, many of which are difficult to predict and generally beyond the control of Sanofi, that could cause actual results and developments to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include among other things, the uncertainties inherent in research and development, future clinical data and analysis, including post marketing, decisions by regulatory authorities, such as the FDA or the EMA, regarding whether and when to approve any drug, device or biological application that may be filed for any such product candidates as well as their decisions regarding labelling and other matters that could affect the availability or commercial potential of such product candidates, the absence of guarantee that the product candidates if approved will be commercially successful, the future approval and commercial success of therapeutic alternatives, Sanofi's ability to benefit from external growth opportunities, to complete related transactions, and/or obtain regulatory clearances, risks associated with intellectual property and any related pending or future litigation and the ultimate outcome of such litigation, trends in exchange rates and prevailing interest rates, volatile economic conditions, the impact of cost containment initiatives and subsequent changes thereto, the average number of shares outstanding as well as those discussed or identified in the public filings with the SEC and the AMF made by Sanofi, including those listed under "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements" in Sanofi's annual report on Form 20-F for the year ended December 31, 2017. Other than as required by applicable law, Sanofi does not undertake any obligation to update or revise any forward-looking information or statements.

Appendices

List of appendices

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Appendix 1: 2018 fourth-quarter net sales by GBU, franchise, geographic region and product

Q4 2018 (€ million)	Total GBUs	% CER	% reported	Europe	% CER	United States	% CER	Rest of the World	% CER	Emerging Markets	% CER	Total Franchises	% CER	% reported
Aubagio Lemtrada	436 87	12.4% -17.1%	15.0% -17.1%	108 37	12.5% -11.9%	311 45	13.5% -19.6%	17 5	-5.9% -28.6%	10 9	20.0% 28.6%	446 96	12.6% -14.3%	14.7% -14.3%
Total MS	523	6.0%	8.1%	145	5.1%	356	7.8%	22	-12.5%	19	23.5%	542	6.6%	8.2%
Cerezyme Cerdelga	127 43	-1.6% 31.3%	-0.8% 34.4%	72 16	-2.7% 87.5%	47 26	4.7% 0.0%	8	-18.2%	63 1	34.5% 100.0%	190 44	9.3% 33.3%	3.8% 33.3%
Myozyme	190	8.0%	9.2%	96	1.1%	79	18.8%	15	6.7%	36	25.8%	226	10.7%	10.2%
Fabrazyme	180	9.3%	11.1%	45	4.8%	104	9.9%	31	13.8%	26	61.1%	206	14.4%	14.4%
Aldurazyme	39	8.3%	8.3%	20	5.3%	12	20.0%	7	0.0%	15	41.7%	54	16.7%	12.5%
Total Rare Disease Taxotere	644 6	6.2% -25.0%	7.9% -25.0%	262	3.1%	-1 -1	8.5%	90 6	8.4% -25.0%	150 32	32.6% 3.1%	794 38	10.9% -2.5%	9.4% -5.0%
Jevtana	109	-25.0%	17.2%	41	- 10.5%	50	- 20.0%	18	20.0%	5	-16.7%	114	-2.5%	-5.0%
Eloxatine	8	-12.5%	0.0%	0	-100.0%	0		8	0.0%	35	2.8%	43	0.0%	-2.3%
Thymoglobulin	59	7.4%	9.3%	9	0.0%	43	5.0%	7	40.0%	19	17.6%	78	9.9%	9.9%
Mozobil Total Oncology	44 286	16.2% 9.3%	18.9% 10.4%	12 89	18.2% 10.8%	26 141	18.2% 8.7%	6 56	0.0% 8.0%	3 101	0.0% 5.0%	47 387	15.0% 8.1%	17.5% 7.8%
Dupixent	200	9.3% 128.8%	135.6%	29	2800.0%	225	87.9%	24	2200.0%	2	5.0%	280	130.5%	137.3%
Kevzara	31	275.0%	287.5%	29	2000.0 <i>%</i> 500.0%	223	214.3%	24	- 2200.078	0	-	31	275.0%	287.5%
Total Immunology	309	138.1%	145.2%	35	-	248	95.1%	26	-	2	-	311	139.7%	146.8%
Alprolix	95	-	-	0	-	76	-	19	-	0	-	95	-	-
Eloctate	194 292	-	-	0	-	160 236	-	34 53	-	2 2	-	196 294	-	-
Total Hemophilia Rare blood disorders Sanofi Genzyme (Specialty Care)	292	- 37.4%	- 40.1%		- 12.6%	1,273	48.8%	247	- 52.5%	274	22.4%	294	35.2%	- 36.0%
Lantus	624	-27.3%	-25.9%	168	-8.2%	379	-37.0%	77	1.3%	242	7.7%	2,320	-19.7%	-19.5%
Toujeo	180	-6.8%	-5.8%	77	23.8%	81	-29.1%	22	22.2%	31	32.0%	211	-2.3%	-2.3%
Apidra	60	-13.0%	-13.0%	34	0.0%	17	-36.0%	9	0.0%	29	10.7%	89	-6.2%	-8.2%
Amaryl	11	-14.3%	-21.4%	4	-20.0%	1	0.0%	6	-12.5%	66	1.5%	77	-1.3%	-3.8%
Admelog	57	5400.0%	5600.0%	2	100.0%	54	-	1	-	0		57	5400.0%	5600.0%
Total Diabetes	999	-16.2%	-14.6%	320	-0.6%	555	-26.3%	124	4.3%	376	7.7%	1,375	-10.5%	-10.3%
Multaq Praluent	93 78	22.7% 48.1%	24.0% 50.0%	10 23	0.0% 53.3%	82 52	23.1% 45.7%	1	- 50.0%	2 4	-50.0% 200.0%	95 82	20.8% 50.9%	23.4% 54.7%
Total Cardiovascular	171	48.1% 33.1%	34.6%	23 33	53.3% 32.0%	52 134	45.7% 31.0%	3	50.0% 150.0%	4	200.0% 33.3%	177	30.9% 33.1%	54.7% 36.2%
Diabetes & Cardiovascular	1.170	-11.3%	-9.8%	353	1.7%	689	-19.4%	128	6.7%	382	7.9%	1.552	-7.1%	-6.7%
Plavix	328	-4.9%	-5.7%	37	2.9%	0	-100.0%	53	-23.5%	238	-0.4%	328	-4.9%	-5.7%
Lovenox	346	-9.0%	-10.8%	199	-13.9%	9	-28.6%	21	-13.0%	117	3.3%	346	-9.0%	-10.8%
Renagel / Renvela	96	-39.4%	-38.1%	14	-18.8%	57	-53.0%	8	28.6%	17	13.3%	96	-39.4%	-38.1%
Aprovel	151	-2.5%	-4.4%	27	-3.7%	3	50.0%	9	-54.2%	112	8.6%	151	-2.5%	-4.4%
Allegra Myslee / Ambien / Stilnox	26 59	-21.9% -1.7%	-18.8% 0.0%	1 11	-50.0% 10.0%	0 12	- -26.7%	25 21	-20.0% -13.0%	0 15	- 45.5%	26 59	-21.9% -1.7%	-18.8% 0.0%
Synvisc / Synvisc One	81	-7.0%	-5.8%	7	0.0%	55	-13.1%	3	0.0%	16	14.3%	81	-7.0%	-5.8%
Depakine	109	-0.9%	-2.7%	39	-2.4%	0	-	5	-25.0%	65	1.5%	109	-0.9%	-2.7%
Tritace	54	-8.2%	-11.5%	35	-7.7%	0	-	1	-50.0%	18	-5.0%	54	-8.2%	-11.5%
Other Rx Drugs Total Established Rx Products	876 2,126	-2.3% -6.8%	-4.1% -8.0%	447 817	-4.3% -6.8%	49 185	-4.2% -31.0%	94 240	-4.2% -16.0%	286 884	1.7% 2.9%	876 2,126	-2.3% -6.8%	-4.1% -8.0%
Generics	2,120	-33.8%	-37.5%	32	-82.9%	45	5.0%	240	0.0%	173	3.8%	2,120	-33.8%	-37.5%
Total Emerging Markets Specialty Care	270	-33.8%	-37.5%	JZ	02.370		0.070	20	0.070	274	22.4%	210	00.070	01.076
Total Emerging Markets Diabetes & Cardiovascular	382	7.9%	4.4%							382	7.9%			
General Medicines & Emerging Markets	3,052	-6.6%	-9.1%	849	-20.2%	230	-26.2%	260	-14.9%	1,713	6.9%			
Total Pharmaceuticals	6,276	3.0%	2.6%	1,736	-7.8%	2,192	8.5%	635	7.9%	1,713	6.9%	6,276	3.0%	2.6%
Allergy, Cough and Cold	268	-6.3%	-6.6%	91	-13.3%	62	-4.8%	29	11.1%	86	-4.3%	268	-6.3%	-6.6%
Pain	336	4.6%	2.1%	147	3.5%	45	10.0%	33	3.3%	111	4.3%	336	4.6%	2.1%
Digestive	256	4.4%	2.4%	82	0.0%	53	10.9%	12	-18.8%	109	8.5%	256	4.4%	2.4%
Nutritional Consumer Healthcare	174 1,194	9.1% 1.9%	6.1% 0.5%	33 368	3.1% -3.6%	10 274	0.0% 6.0%	62 147	3.2% -2.7%	69 405	19.7% 6.4%	174 1,194	9.1% 1.9%	6.1% 0.5%
Polio / Pertussis / Hib	504	3.0%	2.2%	83	-2.4%	102	-9.2%	32	-24.4%	287	14.3%	504	3.0%	2.2%
Adult Booster Vaccines	135	-2.9%	-1.5%	33	-8.3%	76	-6.3%	8	0.0%	18	26.7%	135	-2.9%	-1.5%
Meningitis/Pneumonia	131	59.3%	61.7%	0	-	80	45.3%	5	0.0%	46	104.3%	131	59.3%	61.7%
Influenza Vaccines	596	17.1% -18.8%	18.7%	93 27	95.8%	411 33	24.1%	26 15	212.5%	66 55	-44.7%	596	17.1%	18.7%
Travel And Other Endemics Vaccines Vaccines	130 1,527	-18.8% 9.7%	-18.8% 10.3%	27	7.7% 21.9%	33 729	-32.7% 10.4%	15 87	7.7% 15.8%	55 473	-23.6% 2.5%	130 1,527	-18.8% 9.7%	-18.8% 10.3%
Total Company	8,997	3.9%	3.5%	2,342	-4.8%	3,195	8.7%	869	6.7%	2,591	6.0%	8,997	3.9%	3.5%
rotar company	0,397	3.9%	3.3 /0	2,342	-4.0 /0	3,195	0.1 /0	009	0.7 /0	2,391	0.078	0,997	3.5%	3.3%

2018 net sales by GBU, franchise, geographic region and product

2018 (€ million)	Total GBUs	% CER	% reported	Europe	% CER	United States	% CER	Rest of the World	% CER	Emerging Markets	% CER	Total Franchises	% CER	% reported
Aubagio	1,599	8.0%	4.5%	385	-0.3%	1,157	11.4%	57	0.0%	48	59.5%	1,647	9.3%	5.1%
Lemtrada Total MS	375 1,974	-14.0% 3.0%	-16.7% -0.3%	167 552	-3.4% -1.2%	189 1,346	-19.1% 5.8%	19 76	-33.3% -11.2%	27 75	33.3% 49.2%	402 2,049	-11.6% 4.4%	-15.2% 0.4%
Cerezyme	481	-1.8%	-4.0%	270	-3.6%	174	2.8%	37	-9.3%	230	24.3%	711	6.4%	-2.7%
Cerdelga	156	28.8%	24.8%	51	96.2%	98	7.4%	7	100.0%	3	300.0%	159	31.0%	26.2%
Myozyme Fabrazyme	716 673	8.8% 7.9%	6.4% 4.5%	374 175	6.5% 7.4%	284 383	13.0% 8.1%	58 115	3.4% 8.0%	124 82	22.4% 25.6%	840 755	10.8% 9.8%	6.5% 4.6%
Aldurazyme	144	4.2%	1.4%	76	1.3%	44	9.5%	24	4.0%	62	12.1%	206	6.7%	-1.0%
Total Rare Disease	2,416	5.3%	2.6%	1,008	5.3%	1,072	5.8%	336	3.6%	542	21.5%	2,958	8.3%	2.4%
Taxotere Jevtana	32 399	-13.5% 13.9%	-13.5% 10.8%	3 158	0.0% 7.4%	1 179	- 17.6%	28 62	-17.6% 20.8%	134 23	2.9% 0.0%	166 422	-0.6% 13.0%	-4.0% 9.3%
Eloxatine	335	-3.0%	-3.0%	2	-50.0%	0	-100.0%	30	7.1%	150	6.8%	182	5.0%	9.3 <i>%</i> 1.7%
Thymoglobulin	222	2.7%	-0.9%	37	-5.1%	162	4.9%	23	0.0%	75	22.7%	297	7.2%	2.4%
Mozobil Total Oncology	161 1,075	7.8% -0.4%	4.5% -3.2%	47 351	9.1% 4.1%	96 523	5.2% -6.8%	18 201	21.4% 12.2%	10 419	22.2% 8.8%	171 1,494	8.6% 2.1%	4.9% -1.5%
Dupixent	783	265.8%	257.5%	75	3650.0%	660	213.9%	48	4700.0%		-	788	268.0%	259.8%
Kevzara	83	663.6%	654.5%	14	1300.0%	64	550.0%	5	-	0	-	83	663.6%	654.5%
Total Immunology	866	284.8%	276.5%	89	<u>-</u>	724	228.8%	53		5	<u> </u>	871	287.0%	278.7%
Alprolix Eloctate	285 606	-	-	0	-	222 500	-	63 106	-	0	-	285 608	-	-
Total Hemophilia Rare blood disorders	895	-	-	4	-	722	-	169	-	2	-	897	-	-
Sanofi Genzyme (Specialty Care)	7,226	30.8%	27.4%	2,004	7.9%	4,387	42.3%	835	40.9%	1,043	18.7%	8,269	29.0%	23.8%
Lantus	2,588	-25.8%	-28.4%	684	-9.7%	1,614	-33.3%	290	-3.8%	977	5.3%	3,565	-19.0%	-22.9%
Toujeo Apidra	710 248	-0.9% -9.0%	-3.7% -11.1%	290 136	34.6% 0.0%	344 74	-20.7% -23.5%	76 38	18.5% -2.4%	130 109	83.5% 26.5%	840 357	7.2% 0.3%	2.9% -5.3%
Amaryl	47	-16.9%	-20.3%	17	-19.0%	2	0.0%	28	-16.7%	288	9.4%	335	4.8%	-0.3%
Admelog	93	9100.0%	9200.0%	7	600.0%	86	-	0	-	0	-	93	9100.0%	9200.0%
Total Diabetes	3,918	-17.5%	-20.0%	1,272	-0.9%	2,185	-26.9%	461	-0.8%	1,554	12.7%	5,472	-10.4%	-14.5%
Multaq Praluent	343 250	7.2% 53.3%	3.3% 49.7%	43 86	2.4% 87.0%	296 154	8.0% 37.1%	4 10	0.0% 120.0%	7 11	0.0% 175.0%	350 261	7.1% 56.1%	3.2% 52.6%
Total Cardiovascular	593	22.6%	18.8%	129	46.6%	450	16.4%	10	66.7%	18	63.6%	611	23.5%	19.8%
Diabetes & Cardiovascular	4,511	-13.8%	-16.4%	1,401	2.2%	2,635	-22.0%	475	0.4%	1,572	13.1%	6,083	-7.9%	-11.9%
Plavix	1,440	1.2%	-2.0%	147	-2.0%	0	-100.0%	218	-23.5%	1,075	8.8%	1,440	1.2%	-2.0%
Lovenox Renagel / Renvela	1,465 411	-3.0% -46.7%	-6.9% -48.7%	870 60	-8.3% -15.5%	38 253	-29.3% -59.1%	81 31	-6.6% -8.6%	476 67	11.4% 42.0%	1,465 411	-3.0% -46.7%	-6.9% -48.7%
Aprovel	652	-40.7%	-40.7%	108	-6.1%	203	-59.1%	69	-6.0%	465	42.0%	652	-40.7%	-46.7%
Allegra	124	-17.7%	-21.5%	8	-11.1%	0	-	116	-18.1%	0	-	124	-17.7%	-21.5%
Myslee / Ambien / Stilnox Synvisc / Synvisc One	231 313	-6.9% -15.0%	-10.8% -19.1%	39 25	-2.5% -16.7%	45 217	-14.5% -22.3%	86 13	-16.0% 0.0%	61 58	13.8% 23.5%	231 313	-6.9% -15.0%	-10.8% -19.1%
Depakine	452	4.7%	1.1%	163	-1.2%	0	-22.570	14	-6.7%	275	9.0%	452	4.7%	1.1%
Tritace	221	-3.8%	-7.9%	142	-5.9%	0	-	5	0.0%	74	0.0%	221	-3.8%	-7.9%
Other Rx Drugs Total Established Rx Products	3,534 8,843	-2.5% -6.1%	-6.8% -9.9%	1,768 3,330	-2.0% -4.4%	188 751	-6.3% -38.2%	376 1,009	-7.1% -16.9%	1,202 3,753	-1.1% 6.6%	3,534 8,843	-2.5% -6.1%	-6.8% -9.9%
Generics	1,490	-9.8%	-15.8%	568	-24.4%	124	-15.3%	113	9.1%	685	3.0%	1,490	-9.8%	-15.8%
Total Emerging Markets Specialty Care	1,043	18.7%	3.9%							1,043	18.7%			
Total Emerging Markets Diabetes & Cardiovascular	1,572	13.1%	4.2%							1,572	13.1%			
General Medicines & Emerging Markets	12,948	-2.8%	-8.2%	3,898	-7.9%	875	-35.8%	1,122	-14.8%	7,053	9.3%			ł
Total Pharmaceuticals	24,685	2.4%	-1.9%	7,303	-2.1%	7,897	0.9%	2,432	1.9%	7,053	9.3%	24,685	2.4%	-1.9%
Allergy, Cough and Cold	1,124	-1.7%	-6.7%	347	-0.9%	303	-12.3%	135	2.9%	339	6.9%	1,124	-1.7%	-6.7%
Pain	1,254	6.7%	-0.6%	521	1.8%	165	3.6%	119	3.4%	449	14.0%	1,254	6.7%	-0.6%
Digestive Nutritional	986 675	8.7% 4.7%	3.4% -1.5%	314 125	2.6% 5.9%	195 37	8.5% -5.0%	54 256	1.8% 5.9%	423 257	14.4% 4.4%	986 675	8.7% 4.7%	3.4% -1.5%
Consumer Healthcare	4,660	3.0%	-2.9%	1,403	-0.2%	1,066	-1.1%	603	2.1%	1,588	8.9%	4,660	3.0%	-2.9%
Polio / Pertussis / Hib	1,749	-0.7%	-4.3%	296	-1.0%	397	-4.8%	156	5.9%	900	0.3%	1,749	-0.7%	-4.3%
Adult Booster Vaccines	470	1.3%	-0.8%	129	9.2%	273	-4.1%	26	0.0%	42	18.9%	470	1.3%	-0.8%
Meningitis/Pneumonia Influenza Vaccines	609 1,708	0.6% 7.2%	-2.2% 7.5%	0 177	-100.0% 57.5%	466 1,233	-1.6% 7.5%	16 81	-50.0% 62.7%	127 217	29.1% -22.9%	609 1,708	0.6% 7.2%	-2.2% 7.5%
Travel And Other Endemics Vaccines	488	1.8%	-1.0%	117	31.1%	134	-10.3%	56	7.4%	181	-3.6%	488	1.8%	-1.0%
Vaccines	5,118	2.4%	0.3%	728	16.0%	2,577	1.1%	342	9.5%	1,471	-2.3%	5,118	2.4%	0.3%
Total Company	34,463	2.5%	-1.7%	9,434	-0.6%	11,540	0.7%	3,377	2.7%	10,112	7.5%	34,463	2.5%	-1.7%

Fourth Quarter 2018	Pha	armaceu	ticals	Consu	mer Hea	Ithcare		Vaccine	s		Others ⁽²	!)	Тс	otal Gro	up
€ million	Q4 2018	Q4 2017 ⁽¹⁾	Change	Q4 2018	Q4 2017 ⁽¹⁾	Change	Q4 2018	Q4 2017 ⁽¹⁾	Change	Q4 2018	Q4 2017 ⁽¹⁾	Change	Q4 2018	Q4 2017 ⁽¹⁾	Change
Net sales	6,276	6,119	2.6%	1,194	1,188	0.5%	1,527	1,385	10.3%	-	_		8,997	8,692	3.5%
Other revenues	67	66	1.5%	-	_		262	224	17.0%	-	-		329	290	13.4%
Cost of Sales	(1,820)	(1,760)	3.4%	(406)	(423)	(4.0)%	(866)	(841)	3.0%	(46)	(75)	(38.7)%	(3,138)	(3,099)	1.3%
As % of net sales	(29.0)%	(28.8)%		(34.0)%	(35.6)%		(56.7)%	(60.7)%					(34.9)%	(35.7)%	
Gross Profit	4,523	4,425	2.2%	788	765	3.0%	923	768	20.2%	(46)	(75)	(38.7%)	6,188	5,883	5.2%
As % of net sales	72.1%	72.3%		66 .0%	64.4%		60.4%	55.5%					68.8%	67.7%	
Research and development expenses	(1,311)	(1,067)	22.9%	(48)	(41)	17.1%	(162)	(166)	(2.4)%	(157)	(190)	(17.4)%	(1,678)	(1,464)	14.6%
As % of net sales	(20.9)%	(17.4)%		(4.0)%	(3.5)%		(10.6)%	(12.0)%					(18.7)%	(16.8)%	
Selling and general expenses	(1,485)	(1,523)	(2.5)%	(409)	(406)	0.7%	(210)	(197)	6.6%	(617)	(573)	7.7%	(2,721)	(2,699)	0.8%
As % of net sales	(23.7)%	(24.9)%		(34.3)%	(34.2)%		(13.8)%	(14.2)%					(30.2)%	(31.1)%	
Other current operating income/expenses	(123)	(19)		16	2		(1)	(100)		(40)	3		(148)	(114)	
Share of profit/loss of associates* and joint-ventures	120	109		-	1		1	(1)		-	-		121	109	
Net income attributable to non controlling interests	(21)	(26)		(1)	(3)		-	(1)		-	_		(22)	(30)	
Business operating income	1,703	1,899	(10.3)%	346	318	8.8%	551	303	81.8%	(860)	(835)	3.0%	1,740	1,685	3.3%
As % of net sales	27.1%	31.0%		29.0%	26.8%		36.1%	21.9%					19.3%	19.4%	
								tax expens	nd expense es	es			(60) (316) 20.0%	(73) (287) 18.7%	
							Busine	ess net in	come				1,364	1,325	2.9%

Appendix 2: Business net income statement

* Net of tax.

** Determined on the basis of Business income before tax, associates, and non-controlling interests.

*** Based on an average number of shares outstanding of 1,245.6 million in the fourth quarter of 2018 and 1,252.9 million in the fourth quarter of 2017.

(1) Includes the effects of first-time application of IFRS 15 on revenue recognition, effective January 1, 2018.

(2) Other includes the cost of Global Support Functions (Medical Affairs, External Affairs, Finance, Human Resources, Information Solution & Technologies, Sanofi Business Services, etc.).

As % of net sales

Business earnings / share (in euros)***

15.2%

1.10

15.2%

1.06

3.8%

Full year 2018	Pha	rmaceut	icals	Consu	mer Hea	Ithcare		Vaccines	;		Others ^{(;}	2)	Т	otal Grou	ıp
€ million	2018	2017 ⁽¹⁾	Change	2018	2017 ⁽¹⁾	Change	2018	2017 ⁽¹⁾	Change	2018	2017 ⁽¹⁾	Change	2018	2017 ⁽¹⁾	Change
Net sales	24,685	25,173	(1.9)%	4,660	4,798	(2.9)%	5,118	5,101	0.3%	-	_		34,463	35,072	(1.7)%
Other revenues	252	287	(12.2)%	—	-		962	862	11.6%	-	-		1,214	1,149	5.7%
Cost of Sales	(6,738)	(6,766)	(0.4)%	(1,539)	(1,612)	(4.5)%	(2,854)	(2,798)	2.0%	(190)	(271)	(29.9)%	(11,321)	(11,447)	(1.1)%
As % of net sales	(27.3)%	(26.9)%		(33.0)%	(33.6)%		(55.8)%	(54.9)%					(32.8)%	(32.6)%	
Gross Profit	18,199	18,694	(2.6)%	3,121	3,186	(2.0)%	3,226	3,165	1.9%	(190)	(271)	(29.9%)	24,356	24,774	(1.7)%
As % of net sales	73.7%	74.3%		67.0%	66.4%		63 .0%	62.0%					70.7%	70.6%	
Research and development expenses	(4,572)	(4,056)	12.7%	(143)	(123)	16.3%	(555)	(557)	(0.4)%	(624)	(736)	(15.2)%	(5,894)	(5,472)	7.7%
As % of net sales	(18.5)%	(16.1)%		(3.1)%	(2.6)%		(10.8)%	(10.9)%					(17.1)%	(15.6)%	
Selling and general expenses	(5,431)	(5,649)	(3.9)%	(1,534)	(1,645)	(6.7)%	(710)	(728)	(2.5)%	(2,156)	(2,050)	5.2%	(9,831)	(10,072)	(2.4)%
As % of net sales	(22.0)%	(22.4)%		(32.9)%	(34.3)%		(13.9)%	(14.3)%					(28.5)%	(28.7)%	
Other current operating income/expenses	(37)	34		101	94		(4)	(107)		(124)	(17)		(64)	4	
Share of profit/loss of associates* and joint-ventures	425	212		1	1		(3)	1		_	-		423	214	
Net income attributable to non controlling interests	(96)	(110)		(10)	(15)		_	_		_	-		(106)	(125)	
Business operating income	8,488	9,125	(7.0)%	1,536	1,498	2.5%	1,954	1,774	10.1%	(3,094)	(3,074)	0.7%	8,884	9,323	(4.7)%
As % of net sales	34.4%	36.2%		33.0%	31.2%		38.2%	34.8%					25.8%	26.6%	
							Financial income and expenses Income tax expenses <i>Tax rate**</i> Business net income						(271) (1,794) 21.6% 6,819	(273) (2,107) 23.5% 6,943	(1.8)%
							As % o	f net sale	es				19.8%	19.8%	

* Net of tax.

** Determined on the basis of Business income before tax, associates, and non-controlling interests.

*** Based on an average number of shares outstanding of 1,247.1 million in 2018 and 1,256.9 million in 2017.

Includes the effects of first-time application of IFRS 15 on revenue recognition, effective January 1, 2018.
 Other includes the cost of Global Support Functions (Medical Affairs, External Affairs, Finance, Human Resources, Information Solution & Technologies, Sanofi Business Services, etc.).

Business earnings / share (in euros)***

5.47

5.52

(0.9)%

Appendix 3: Consolidated income statements

€ million	Q4 2018	Q4 2017 ⁽¹⁾	2018	2017 ⁽¹⁾
Net sales	8,997	8,692	34,463	35,072
Other revenues	329	290	1,214	1,149
Cost of sales	(3,138)	(3,089)	(11,435)	(11,613)
Gross profit	6,188	5,893	24,242	24,608
Research and development expenses	(1,678)	(1,464)	(5,894)	(5,472)
Selling and general expenses	(2,730)	(2,699)	(9,859)	(10,072)
Other operating income	83	10	484	237
Other operating expenses	(231)	(124)	(548)	(233)
Amortization of intangible assets	(634)	(442)	(2,170)	(1,866)
Impairment of intangible assets	(426)	(262)	(718)	(293)
Fair value remeasurement of contingent consideration	—	15	117	(159)
Restructuring costs and similar items	(765)	(118)	(1,480)	(731)
Other gains and losses, and litigation	(7)	(61)	502	(215)
Operating income	(200)	748	4,676	5,804
Financial expenses	(103)	(99)	(435)	(420)
Financial income	43	26	164	147
Income before tax and associates and joint ventures	(260)	675	4,405	5,531
Income tax expense	243	(699)	(481)	(1,722)
Share of profit/(loss) of associates and joint ventures	301	21	499	85
Net income excluding the exchanged/held-for-exchange Animal Health business	284	(3)	4,423	3,894
Net income/(loss) of the exchanged/held-for-exchange Animal Health business ⁽²⁾	(9)	159	(13)	4,643
Net income	275	156	4,410	8,537
Net income attributable to non-controlling interests	21	30	104	121
Net income attributable to equity holders of Sanofi	254	126	4,306	8,416
Average number of shares outstanding (million)	1,245.6	1,252.9	1,247.1	1,256.9
Earnings per share excluding the exchanged/held-for-exchange Animal Health business (in euros)	0.21	(0.03)	3.46	3.00
IFRS Earnings per share (in euros)	0.20	0.10	3.45	6.70

Includes the effects of first-time application of IFRS 15 on revenue recognition, effective January 1, 2018.
 In 2017, net gain resulting from the divestment of the Animal Health business presented separately in accordance with IFRS 5, Non current assets held-for-sale and discontinued operations.

Appendix 4: Reconciliation of Net income attributable to equity holders of Sanofi to **Business net income**

€ million	Q4 2018	Q4 2017 ⁽¹⁾	Change
Net income attributable to equity holders of Sanofi	254	126	101.6%
Amortization of intangible assets ⁽²⁾	634	442	
Impairment of intangible assets	426	262	
Fair value remeasurement of contingent consideration	—	(15)	
Expenses arising from the impact of acquisitions on inventories	—	(10)	
Other expenses related to business combinations	9	—	
Restructuring costs and similar items	765	118	
Other gains and losses, and litigation	7	61	
Tax effect of the items listed above ⁽³⁾ :	(503)	(219)	
Amortization and impairment of intangible assets	(241)	(242)	
Fair value remeasurement of contingent consideration	3	37	
Expenses arising from the impact of acquisitions on inventories	—	4	
Other expenses related to business combinations	(2)	_	
Restructuring costs and similar items	(220)	82	
Other tax effects	(43)	(100)	
Other tax items ⁽⁴⁾	(56)	631	
Share of items listed above attributable to non-controlling interests	(1)	_	
Restructuring costs of associates and joint ventures, and expenses arising from the impact of acquisitions on associates and joint ventures	(180)	88	
Animal Health items ⁽⁵⁾	9	(159)	
Business net income	1,364	1,325	2.9%
IFRS earnings per share ⁽⁶⁾ (in euros)	0.20	0.10	

 (1) Includes the effects of first-time application of IFRS 15 on revenue recognition, effective January 1, 2018.
 (2) Of which related to amortization expense generated by the remeasurement of intangible assets as part of business combinations: €520 million in the fourth quarter of 2018 and €407 million in the fourth quarter of 2017.

(3) In 2017, this line includes the impact of changes in corporate income tax rates, mainly in France (25% standard rate effective as of January 1, 2022). (4) In 2018, adjustments made to our preliminary analysis of the direct and indirect impacts of US tax reform. In 2017, includes an amount of €562m related to litigation

(a) In 2010, adjustments induce to be preliminary analysis of the bincharge and an amount of (€1,193) million related to US tax reform.
(b) In 2017, net gain resulting from the divestment of the Animal Health business presented separately in accordance with IFRS 5, Non-current assets held-for-sale and discontinued operations (including the closing in Mexico in Q4 2017).
(6) Based on an average number of shares outstanding of 1,245.6 million in the fourth quarter of 2018 and 1,252.9 million in the fourth quarter of 2017.

€ million	2018	2017 ⁽¹⁾	Change
Net income attributable to equity holders of Sanofi	4,306	8,416	(48.8)%
Amortization of intangible assets ⁽²⁾	2,170	1,866	
Impairment of intangible assets	718	293	
Fair value remeasurement of contingent consideration	(117)	159	
Expenses arising from the impact of acquisitions on inventories	114	166	
Other expenses related to business combinations	28	_	
Restructuring costs and similar items	1,480	731	
Other gains and losses, and litigation ⁽³⁾	(502)	215	
Tax effect of the items listed above ⁽⁴⁾ :	(1,125)	(1,127)	
Amortization and impairment of intangible assets	(692)	(719)	
Fair value remeasurement of contingent consideration	38	4	
Expenses arising from the impact of acquisitions on inventories	(27)	(52)	
Other expenses related to business combinations	(6)	_	
Restructuring costs and similar items	(435)	(134)	
Other tax effects	(3)	(226)	
Other tax items ⁽⁵⁾	(188)	742	
Share of items listed above attributable to non-controlling interests	(2)	(4)	
Restructuring costs of associates and joint ventures, and expenses arising from the impact of acquisitions on associates and joint ventures	(76)	129	
Animal Health items ⁽⁶⁾	13	(4,643)	
Business net income	6,819	6,943	(1.8)%
IFRS earnings per share ⁽⁷⁾ (in euros)	3.45	6.70	

(1) Includes the effects of first-time application of IFRS 15 on revenue recognition, effective January 1, 2018. (2) Of which related to amortization expense generated by the remeasurement of intangible assets as part of business combinations: \in 1,957 million in 2018 and \in 1,726 million in 2017.

(3) In 2018, of which gain resulting from the European Generics business divestiture amounting to €510 million. In 2017, mainly adjustment to vendor's guarantee provision in connection with past divestment.

(4) In 2017, this line includes the impact of changes in corporate income tax rates, mainly in France (25% standard rate effective as of January 1, 2022). (5) In 2018, adjustments made to our preliminary analysis of the direct and indirect impacts of US tax reform. In 2017, includes French 3% tax on dividends and temporary exceptional surcharge for an amount of €451 million and US tax reform amounting to €(1,193) million.

(6) In 2017, net gain resulting from the divestment of the Animal Health business presented separately in accordance with IFRS 5, Non-current assets held-for-sale and discontinued operations. (7) Based on an average number of shares outstanding of 1,247.1 million in 2018 and 1,256.9 million in 2017.

Appendix 5: Change in net debt

€ million	2018	2017 ⁽¹⁾
Business net income	6,819	6,943
Depreciation, amortization and impairment of property, plant and equipment and software	1,208	1,349
Gains and losses on disposals of non-current assets, net of tax	(284)	(127)
Other non cash items	91	728
Operating cash flow before changes in working capital ⁽²⁾	7,834	8,893
Changes in working capital ⁽²⁾	(1,099)	(589)
Acquisitions of property, plant and equipment and software	(1,674)	(1,500)
Free cash flow ⁽²⁾	5,061	6,804
Acquisitions of intangible assets excluding software	(312)	(398)
Acquisitions of investments in consolidated undertakings including assumed debt	(13,051)	(1,063)
Restructuring costs and similar items paid	(894)	(754)
Proceeds from disposals of property, plant and equipment, intangible assets and other non- current assets net of tax	2,120	408
Issuance of Sanofi shares	177	319
Dividends paid to shareholders of Sanofi	(3,773)	(3,710)
Acquisition of treasury shares	(1,104)	(2,158)
Transactions with non-controlling interests including dividends	(91)	(52)
Foreign exchange impact	(288)	434
Net cash-flow from the swap between BI - CHC and Sanofi Animal Health business	(6)	3,535
Other items	(306)	(292)
Change in net debt	(12,467)	3,073

(1) Includes the effects of first-time application of IFRS 15 on revenue recognition, effective January 1, 2018.

(2) Excluding restructuring costs and similar items.

Appendix 6: Simplified consolidated balance sheet

ASSETS € million	Dec 31, 2018	Dec 31, 2017 ⁽¹⁾	LIABILITIES & EQUITY € million	Dec 31, 2018	Dec 31, 2017 ⁽¹⁾
			Equity attributable to equity holders of Sanofi	58,876	58,070
			Equity attributable to non-controlling interests	159	169
			Total equity	59,035	58,239
			Long-term debt	22,007	14,326
Property, plant and equipment	9,651	9,579	Non-current liabilities related to business combinations and to non-controlling interests	963	1,026
Intangible assets (including goodwill)	66,124	53,344	Provisions and other non-current liabilities	8,613	9,154
Non-current financial assets & investments in associates and deferred tax assets	10,986	10,502	Deferred tax liabilities	3,414	1,605
Non-current assets	86,761	73,425	Non-current liabilities	34,997	26,111
			Accounts payable & Other current liabilities	14,402	13,845
Inventories, accounts receivable and other current assets	17,654	16,039	Current liabilities related to business combinations and to non-controlling interests	341	343
Cash and cash equivalents	6,925	10,315	Short-term debt and current portion of long-term debt	2,633	1,275
Current assets	24,579	26,354	Current liabilities	17,376	15,463
Assets held for sale or exchange	68	34	Liabilities related to assets held for sale or exchange	_	_
Total ASSETS	111,408	99,813	Total LIABILITIES & EQUITY	111,408	99,813

(1) Includes the effects of first-time application of IFRS 15 on revenue recognition, effective January 1, 2018.

Appendix 7 : currency sensitivity

2019 Business EPS currency sensitivity

Currency	Variation	Business EPS Sensitivity
U.S. Dollar	+0.05 USD/EUR	-EUR 0.10
Japanese Yen	+5 JPY/EUR	-EUR 0.02
Chinese Yuan	+0.2 CNY/EUR	-EUR 0.02
Brazilian Real	+0.4 BRL/EUR	-EUR 0.01
Russian Ruble	+10 RUB/EUR	-EUR 0.03

Currency exposure on Q4 2018 sales

Currency	Q4 2018
US \$	36.6%
Euro€	23.8%
Chinese Yuan	6.2%
Japanese Yen	4.7%
Brazilian Real	2.7%
British Pound	1.8%
Mexican Peso	1.8%
Canadian \$	1.8%
Russian Ruble	1.7%
Australian \$	1.4%
Others	17.5%

Currency average rates

	Q4 2017	Q4 2018	Change
€/\$	1.18	1.14	-3.1%
€/Yen	133.0	128.82	-3.1%
€/Yuan	7.79	7.90	+1.4%
€/Real	3.83	4.35	+13.6%
€/Ruble	68.80	75.91	+10.3%

Appendix 8: R&D Pipeline

- ${\bf O}$: Opt-in rights products for which rights have not been exercised yet ${\bf R}$: Registrational Study (other than Phase 3)
- Immuno-inflammation
- Oncology
- Rare Diseases

- Rare Blood Disorders
- MS & Neuro
- Diabetes

Cardiovascular & metabolism

Vaccines

New Molecular Entities^(*)

Phase 1 (Total : 17)		Phase 2 (Total : 7)		Phase 3 (Total : 7)	(Total : 2)	
SAR441344 Anti-CD40L mAb Multiple Sclerosis	BIVV001 ⁽⁴⁾ rFVIIIFc – vWF – XTEN ⁽⁵⁾ Hemophilia A	SAR440340 ^(**) Anti-IL33 mAb Atopic Dermatitis	HIV Viral vector prime & rgp120 boost vaccine	isatuximab Anti-CD38 mAb 3L Relapsing Refractory MM (ICARIA)	cemiplimab ^(**) PD-1 inhibitor mAb Advanced CSCC (EU)	
SAR408701 Maytansin-loaded anti-CEACAM5 mAb Solid Tumors	ST400⁽⁶⁾ ZFN Gene Editing Technology Beta thalassemia	SAR156597 IL4/IL13 bispecific mAb Systemic Scleroderma	SP0232 ^{(**)(13)} Respiratory syncytial virus Monoclonal Antibody	avalglucosidase alfa Neo GAA Pompe Disease	Zynquista ^{™(**)} Oral SGLT-1&2 inhibitor Type 1 Diabetes (U.S./EU)	
SAR439459 anti-TGFb mAb Advanced Solid Tumors	BIVV003 ⁽⁶⁾ ZFN Gene Editing Technology Sickle Cell Disease	R olipudase alfa rhASM Acid Sphingomyelinase Deficiency ⁽¹⁰⁾		venglustat Oral GCS inhibitor ADPKD ⁽¹⁴⁾		
REGN5458 ⁽¹⁾ Anti-BCMA-CD3 bispecific mAb RRMM	SAR442168 ^{(7)(**)} BTK inhibitor Multiple Sclerosis	SAR339375 ⁽¹¹⁾ miRNA-21 Alport Syndrome		fitusiran RNAi therapeutic targeting anti- thrombin Hemophilia A and B		
REGN4018 ⁽¹⁾ Anti-MUC16-CD3 bispecific mAb Ovarian Cancer	SAR443060⁽⁸⁾ RIPK1 inh ⁽⁹⁾ Amyotrophic Lateral Sclerosis	SAR422459 ^{(**)(12)} ABCA4 gene therapy Stargardt Disease		sutimlimab⁽¹⁵⁾ Anti Complement C1s mAb Cold Agglutinin Disease		
SAR439859 SERD Metastatic Breast Cancer	Next Gen PCV Pneumococcal Conjugate Vaccines			SAR341402 Rapid acting insulin Type 1/2 Diabetes		
SAR442720 ⁽²⁾ SHP2 inhibitor Solid Tumors	Herpes Simplex Virus Type 2 HSV-2 vaccine			efpeglenatide^(**) Long-acting GLP-1 agonist Type 2 Diabetes		
SAR440234 T cell engaging multi spe mAb Leukemia	Respiratory syncytial virus Infants Vaccines		 Regeneron product for which Sanofi has opt-in rights Developed in collaboration with REVOLUTION Medicines; also known as RMC-4630 Developed in collaboration with BioNtech Sanofi Product for which Sobi has opt-in rights 			
SAR441000 ⁽³⁾ Cytokine mRNA Melanoma		 (5) Recombinant Coagulation Factor VIII Fc - von Willebrand Factor - XTEN Fusion protein (6) Developed in collaboration with Sangamo (7) Also known as PRN2246 (8) Also known as DNL747 (9) Receptor-interacting serine/threonine-protein kinase 1 (10) Also known as Niemann Pick type B 				
		 (10) Also information has view internet in the kype b (11) Regulus product for which Sanofi has decided to opt-in (12) Identification of out-licensing partner ongoing (13) Also known as MEDI8897 (14) Autosomal Dominant Polycystic Kidney Disease (15) Also Known as BIVV009 (*) Phase of projects determined by clinicaltrials.gov disclosure timing (*) Partnered and/or in collaboration – Sanofi may have limited or shared rights on some of these products 			ts on some of these products	

Additional Indications(*)

Phase 1		Phase 2 (Total : 17)		Phase 3 (Total : 23)	
(Total : 5) SAR439459 + cemiplimab ^(**) Anti-TGFb mAb + PD-1 inhibitor mAb Advanced Solid Tumors	dupilumab ^(**) Anti-IL4Rα mAb Grass Immunotherapy	istuximab + atezolizumab ^(**) Anti-CD38 mAb + PD-L1 inhibitor mAb Advanced Malignancies	dupilumab^(**) Anti-IL4Rα mAb Asthma 6 - 11 years old	isatuximab Anti-CD38 mAb Newly Diagnosed MM Te ⁽⁶⁾ (GMMG)	(Total : 3) dupilumab^(**) Anti-IL4Rα mAb Asthma 12y+ (EU)
• cemiplimab ^(*) + REGN4018 ⁽¹⁾ PD-1 inhibitor mAb + Anti-MUC16-CD3 bispecific mAb - Ovarian Cancer	R sarilumab ^(**) Anti-IL6R mAb Polyarticular Juvenile Idiopathic Arthritis	isatuximab + atezolizumab ^(**) Anti-CD38 mAb + PD-L1 inhibitor mAb Solid Tumors	dupilumab^(**) Anti-IL4Rα mAb Nasal Polyposis	isatuximab Anti-CD38 mAb 1-3L Relapsing Refractory MM (IKEMA)	Dupixent^{®(**)} dupilumab Atopic Dermatitis 12 – 17 years old (U.S./EU)
SAR439859 SERD + Palbociclib Metastatic Breast Cancer	sarilumab^(**) Anti-IL6R mAb Systemic Juvenile Arthritis	venglustat Oral GCS inhibitor Fabry Disease	dupilumab^(**) Anti-IL4Rα mAb Eosinophilic Esophagitis	Aubagio[®] teriflunomide Relapsing Multiple Sclerosis – Pediatric	Praluent^{®(**)} alirocumab CV events reduction (U.S./EU)
sutimlimab⁽²⁾ Anti Complement C1s mAb Idiopathic Thrombocytopenic Purpura	SAR440340 ^(**) Anti-IL33 mAb COPD	venglustat Oral GCS inhibitor Gaucher Type 3	Dupixent^{®(**)} dupilumab Atopic Dermatitis 6 – 11 years old	Lemtrada[®] alemtuzumab Relapsing Remitting Multiple Sclerosis - Pediatric	
SAR443060⁽³⁾ RIPK1 inh ⁽⁴⁾ Alzheimer's Disease	dupilumab^(**) + AR101 Anti-IL4Rα mAb Peanut Allergy - Pediatric	venglustat Oral GCS inhibitor Gaucher related Parkinson's Disease	Dupixent^{®(**)} dupilumab Atopic Dermatitis 6 months - 5 years old	Zynquista^{™(**)} Oral SGLT-1&2 inhibitor Worsening Heart Failure in Diabetes	
	SAR440340 ^(**) Anti-IL33 mAb Asthma	Rabies VRVg Purified vero rabies vaccine	sarilumab^(**) Anti-IL6R mAb Giant Cell Arteritis	Zynquista ^{™(*)} Oral SGLT-1&2 inhibitor ⊺ype 2 Diabetes	
	R cemiplimab ^(**) PD-1 inhibitor mAb Advanced Basal Cell Carcinoma	SP0173 Tdap booster US Tdap booster	sarilumab^(**) Anti-IL6R mAb Polymyalgia Rheumatica	Cerdelga [™] eliglustat Gaucher Type 1, switch from ERT - Pediatric	
	isatuximab + cemiplimab ^(**) Anti-CD38 mAb + PD-1 inhibitor mAb Relapsing Refractory MM		cemiplimab^(**) PD-1 inhibitor mAb 1L NSCLC	(**) alirocumab LDL-C reduction - Pediatric	
	isatuximab + cemiplimab^(**) Anti-CD38 mAb + PD-1 inhibitor mAb Advanced Malignancies		cemiplimab^(**)+ chemotherapy PD-1 inhibitor mAb 1L NSCLC	Fluzone [®] QIV HD Quadrivalent inactivated Influenza vaccine - High dose	
	isatuximab + cemiplimab^(**) Anti-CD38 mAb + PD-1 inhibitor mAb Lymphoma		cemiplimab^(**) PD-1 inhibitor mAb 2L Cervical Cancer	Men Quad TT Advanced generation meningococcal ACYW conjugate vaccine	
(1) Regeneron product for which s	Sanofi has opt-in rights		isatuximab Anti-CD38 mAb 1L Newly Diagnosed MM Ti ⁽⁵⁾ (IMROZ)	Pediatric pentavalent vaccine DTP-Polio-Hib Japan	
 (2) Also known as BIVV009 (3) Also known as DNL747 (4) Receptor-interacting serine/thi (5) Transplant ineligible (6) Transplant eligible 	reonine-protein kinase 1			Shan 6 DTP-HepB-Polio-Hib Pediatric hexavalent vaccine	
	by clinicaltrials.gov disclosure timing ion - Sanofi may have limited or shared rig	hts on some of these products			

Expected Submission Timeline⁽¹⁾

	New Molecular Entities		Additional	Indications
2019 ⁽²⁾	isatuximab anti-CD38 mAb 3L RRMM (ICARIA)		dupilumab ^(**) Anti-IL4Ra mAb Nasal Polyposis Adult	Pentacel[®] vIPV DTaP-IPV/Hib
	SAR341402 Rapid acting insulin Type 1/2 Diabetes – EU ⁽³⁾		Fluzone [®] QIV HD Quadrivalent inactivated Influenza vaccine - High dose	Men Quad TT Adv. generation meningococcal U.S.: 2y+ & EU: Toddlers+
2020 ⁽²⁾	olipudase alfa rhASM ASD ⁽⁴⁾	fitusiran RNAi therapeutic targeting anti-thrombin Hemophilia A/B	sarilumab^(**) Anti-IL6R mAb Polyarticular Juvenile Idiopathic Arthritis	isatuximab Anti-CD38 mAb 1-3L RRMM (IKEMA)
	avalglucosidase alfa NeoGAA Pompe Disease	sutimlimab⁽⁵⁾ Anti Complement C1s mAb Cold Agglutinin Disease	Dupixent^{®(**)} dupilumab AD 6 - 11 years old	Zynquista^{™(**)} Oral SGLT-1&2 inhibitor Type 2 Diabetes
			cemiplimab ^(**) PD-1 inhibitor mAb Advanced BCC	Aubagio[®] teriflunomide Relapsing MS – Pediatric
				Shan 6 DTP-HepB-Polio-Hib Pediatric hexavalent vaccine
2021 ⁽²⁾	efpeglenatide^(**) Long acting GLP1-R agonist Type 2 Diabetes		isatuximab Anti-CD38 mAb 1L Newly Diagnosed MM Ti (IMROZ)	Zynquista^{™(**)} Oral SGLT 1/2 inhibitor Worsening Heart Failure in Diabetes
	venglustat Oral GCS inhibitor ADPKD ⁽⁶⁾		cemiplimab ^(**) PD-1 inhibitor mAb 2L Cervical Cancer	
			cemiplimab ^(**) PD-1 inhibitor mAb 1L NSCLC	

	New Molecular Entities		Additional Indications	
2022 ⁽²⁾	SP0232 mAbs ^{(7)(**)} Respiratory Syncytial Virus		Dupixent ^{®(**)} dupilumab AD 6 months - 5 years old	sarilumab^(**) Anti-IL6R mAb Systemic Juvenile Arthritis
			dupilumab ^(**) Anti-IL4Ra mAb Eosinophilic Esophagitis	sarilumab^(**) Anti-IL6R mAb Polymyalgia Rheumatica
			dupilumab^(**) Anti-IL4Rα mAb Asthma 6 - 11 years old	Cerdelga [®] eliglustat Gaucher Type 1, switch from ERT Pediatric
			sarilumab^(**) Anti-IL6R mAb Giant Cell Arteritis	venglustat Oral GCS inhibitor Gaucher Type 3
			SP0173 Tdap booster US Tdap booster	Praluent ^{®(**)} alirocumab LDL-C reduction – Pediatric
2023 and beyond ⁽²⁾	SAR440340 ^(**) Anti-IL33 mAb Atopic Dermatitis	SAR156597 IL4/IL13 bispecific mAb Systemic Scleroderma	SAR440340 ^(**) Anti-IL33 mAb COPD	dupilumab^(**) + AR101 Anti-IL4Rα mAb Peanut Allergy - Pediatric
	SAR422459 ^(**) ABCA4 gene therapy Stargardt Disease	HIV Viral vector prime & rgp120 boost vaccine	SAR440340 ^(**) Anti-IL33 mAb Asthma	venglustat Oral GCS inhibitor Fabry Disease
			isatuximab Anti-CD38 mAb Newly Diagnosed MM Te (GMMG)	Rabies VRVg Purified vero rabies vaccine
			venglustat Oral GCS inhibitor GrPD ⁽⁸⁾	Pediatric pentavalent vaccine DTP-Polio-Hib (Japan)

- Excluding Phase 1
 Projects within a specified year are not arranged by submission timing
 Submission strategy for the U.S. under evaluation
 Acid Sphingomyelinase Deficiency
 Also known as BIVV009
 Autosomal Dominant Polycystic Kidney Disease
 Also known as MEDI8897
 Gaucher Related Parkinson's Disease
 (**) Partnered and/or in collaboration Sanofi may have limited or shared rights on some of these products

Pipeline Movements Since Q3 2018

	Addi	tions	Removals		
Registration					
Phase 3	Shan 6 DTP-HepB-Polio-Hib Pediatric hexavalent vaccine		mavacamten ^(**) Myosin inhibitor Obstructive Hypertrophic Cardiomyopathy	cemiplimab ^(**) + ipilimumab PD-1 inh. mAb + CTLA4 mAb 1L NSCLC≥ 50% PDL1+	
Phase 2	SAR440340 ^(**) Anti-IL33 mAb Atopic Dermatitis	isatuximab + atezolizumab^(**) Anti-CD38 mAb + PD-L1 inhibitor mAb Solid Tumors	GZ389988 TRKA antagonist Osteoarthritis	SAR425899 GLP-1/GCG dual agonist Obesity/Overweight in T2D	
	isatuximab + cemiplimab^(**) Anti-CD38 mAb + PD-1 inhibitor mAb Lymphoma		Combination ferroquine / OZ439 ^(**) Antimalarial	SAR407899 rho kinase Microvascular Angina	
			ALX0171 Anti RSV Nanobody Respiratory Syncitial Virus	mavacamten ^(**) Myosin inhibitor Non -Obstructive Hypertrophic Cardiomyopathy	
Phase 1	SAR441344 Anti-CD40L mAb Multiple Sclerosis	SAR443060 RIPK1 inh Amyotrophic Lateral Sclerosis	SAR439794 ^(**) TLR4 agonist Peanut Allergy	REGN3767 Anti-LAG-3 mAb Advanced Cancers	
	REGN5458 Anti-BCMA-CD3 bispecific mAb RRMM	SAR443060 RIPK1 inh Alzheimer's Disease	SAR440181 ^(**) Myosin activation Dilated Cardiomyopathy	REGN4659 Anti-CTLA-4 mAb Cancer	
	SAR441000 Cytokine mRNA Melanoma	BIVV003 ZFN Gene Editing Technology Sickle Cell Disease	SAR247799 S1P1 agonist Cardiovascular indication	SAR228810^(**) Anti-protofibrillar AB mAb Alzheimer's Disease	
		Next Gen PCV Pneumococcal Conjugate Vaccines	SAR438335 GLP-1/GIP dual agonist Type 2 Diabetes	UshStat ^{®(**)(1)} Myosin 7A gene therapy Usher Syndrome 1B	
			Cemiplimab ^(**) + REGN3767 PD-1 inhibitor mAb + Anti-LAG-3 mAb Advanced Cancers	Cemiplimab ^(**) + REGN4659 PD-1 inhibitor mAb + Anti-CTLA-4 mAb NSCLC	

(**) Partnered and/or in collaboration - Sanofi mav have limited or shared rights on some of these products

(1) Discontinuation contingent upon identification of out-licensing partner

Appendix 9: Expected R&D milestones

Products	Expected milestones	Timing
Dupixent [®]	U.S. regulatory decision in Atopic Dermatitis in Adolescent patients	Q1 2019
Zynquista [™] (sotagliflozin)	U.S. regulatory decision expected in Type 1 Diabetes	Q1 2019
dupilumab	U.S. sBLA filing in Nasal Polyposis	Q1 2019
Dupixent [®]	EU regulatory decision in Asthma in Adult/Adolescent patients	Q2 2019
Zynquista [™] (sotagliflozin)	EU regulatory decision expected in Type 1 Diabetes	Q2 2019
Praluent®	EU regulatory decision in CV events reduction ODYSSEY OUTCOMES	Q2 2019
Praluent®	U.S. regulatory decision in CV events reduction ODYSSEY OUTCOMES	Q2 2019
cemiplimab	EU regulatory decision expected in Advanced Cutaneous Squamous Cell Carcinoma	Q2 2019
dupilumab	Start of Phase 2b/3 trial in Chronic Obstructive Pulmonary Disease	H1 2019
Dupixent [®]	EU regulatory decision in Atopic Dermatitis in Adolescent patients	Q3 2019
sutimlimab	Expected pivotal trial read-outs in Cold Agglutinin Disease	Q4 2019
Zynquista [™] (sotagliflozin)	Expected pivotal trial read-out in Type 2 Diabetes	Q4 2019
Dupixent [®]	Expected pivotal trial read-out in Atopic Dermatitis in 6-11 years	Q4 2019
Olipudase	Expected pivotal trial read-out in Niemann Pick Type B	Q4 2019
Isatuximab	Expected pivotal trial read-out in 1-3L RRMM (IKEMA)	Q1 2020

Appendix 10: Definitions of non-GAAP financial indicators

Company

"Company" corresponds to Sanofi and its subsidiaries

Company sales at constant exchange rates (CER)

When we refer to changes in our net sales "at constant exchange rates" (CER), this means that we exclude the effect of changes in exchange rates.

We eliminate the effect of exchange rates by recalculating net sales for the relevant period at the exchange rates used for the previous period.

Reconciliation of net sales to Company sales at constant exchange rates for the fourth quarter and full-year 2018

€ million	Q4 2018	2018
Net sales	8,997	34,463
Effect of exchange rates	(33)	(1,492)
Company sales at constant exchange rates	9,030	35,955

Business net income

Sanofi publishes a key non-GAAP indicator. Business net income is defined as net income attributable to equity holders of Sanofi excluding:

- amortization of intangible assets,
- impairment of intangible assets,
- fair value remeasurement of contingent consideration related to business combinations or to disposals,
- other impacts associated with acquisitions (including impacts of acquisitions on associates and joint ventures),
- restructuring costs and similar items⁽¹⁾,
- other gains and losses (including gains and losses on disposals of non-current assets⁽¹⁾),
- costs or provisions associated with litigation⁽¹⁾,
- tax effects related to the items listed above as well as effects of major tax disputes,
- net income attributable to non-controlling interests related to the items listed above.
- (1) Reported in the line items **Restructuring costs and similar items** and **Gains and losses on disposals, and litigation**, which are defined in Notes B.19 and B.20. to our consolidated financial statements.