

Sanofi delivered solid growth in Q2 2019

	Q2 2019	Change	Change at CER	H1 2019	Change	Change at CER
IFRS net sales reported	€8,628m	+5.5%	+3.9%	€17,019m	+5.9%	+4.1%
IFRS net income reported	-€87m	-111.4% ⁽²⁾	-	€1,050m	-40.9%	-
IFRS EPS reported	-€0.07	-111.5% ⁽²⁾	-	€0.84	-40.8%	-
Business net income ⁽¹⁾	€1,641m	+5.3%	+4.9%	€3,406m	+7.9%	+7.0%
Business EPS ⁽¹⁾	€1.31	+4.8%	+4.8%	€2.73	+7.9%	+7.1%

Second-quarter 2019 sales growth⁽³⁾ driven by Sanofi Genzyme, Sanofi Pasteur and Emerging Markets

- Net sales were €8,628 million, up 5.5% on a reported basis, up 3.9%⁽³⁾ at CER and up 5.8% at CER/CS⁽⁴⁾.
- Sanofi Genzyme sales up 21.8% due to strong launch performance of Dupixent[®].
- Vaccines sales increased 24.7% mainly reflecting the recovery and growth of Pentaxim[®] in China and low basis for comparison.
- CHC sales up 1.1%, as U.S. growth more than offset lower sales in Europe impacted by non-strategic brand divestments.
- Primary Care GBU sales declined 10.4% at CER/CS mainly as a result of lower Diabetes sales.
- Emerging Markets sales⁽⁵⁾ grew double-digits (up 10.0%) supported by higher Vaccines and Rare Disease sales.

2019 business EPS guidance revised upward

- Q2 2019 business net income increased 5.3% to €1,641 million and 4.9% at CER.
- Q2 2019 business EPS⁽¹⁾ up 4.8% at CER to €1.31.
- Q2 2019 IFRS EPS was -€0.07 (-115.5%) reflecting a €1.8 billion impairment charge mainly related to Elocate[®].
- Business EPS⁽¹⁾ in 2019 is now expected to grow approximately 5% at CER⁽⁶⁾ barring unforeseen major adverse events. Applying the average July 2019 exchange rates, the currency impact on 2019 business EPS is estimated to be between 1% and 2%.

Key regulatory milestones achieved in R&D

- Isatuximab accepted for review by the FDA and EMA for approval in relapsed/refractory multiple myeloma.
- Libtayo[®] approved for advanced cutaneous squamous cell carcinoma in the EU.
- Dupixent[®] recommended by CHMP for atopic dermatitis in adolescents.
- Dupixent[®] approved in the U.S. for chronic rhinosinusitis with nasal polyposis.
- FDA accepted for review MenQuadfi[™], a meningococcal vaccine candidate.

Sanofi Chief Executive Officer, Olivier Brandicourt, commented:

“Sanofi continued its growth phase with a solid business performance in the second quarter, led by the strong launch of Dupixent[®] driven by the accelerated uptake in atopic dermatitis and asthma in the U.S. Specialty Care and Vaccines were significant contributors across all geographies. Our increased focus in R&D delivered important results with several positive data read-outs and the achievement of regulatory milestones. We are confident in the growth outlook for the year. Consequently, we have revised upward our guidance for full-year business EPS growth to approximately 5%.”

(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 Q2 2019 is provided in Appendix 3 and a reconciliation of reported IFRS net income to business net income is set forth in Appendix 4;(2) including a €1.8 billion impairment charge mainly related to Elocate[®] – see page 12; (3) Changes in net sales are expressed at constant exchange rates (CER) unless otherwise indicated (see Appendix 10); (4) Constant Structure: Adjusted for divestment of European Generics business and sales of Bioverativ products to SOBI; (5) See definition page 9; (6) 2018 business EPS was €5.47.

2019 Second-quarter and first-half Sanofi sales

Unless otherwise indicated, all percentage changes in sales in this press release are stated at CER⁽⁷⁾.

In the second quarter of 2019, Company sales were €8,628 million, up 5.5% on a reported basis. Exchange rate movements had a positive effect of 1.6 percentage points mainly driven by the U.S. dollar which largely offset the negative impact from the Argentine Peso and Turkish Lira. At CER, Company sales increased 3.9%.

First-half Company sales reached €17,019 million, up 5.9% on a reported basis. Exchange rate movements had a favorable effect of 1.8 percentage points. At CER, Company sales were up 4.1%.

Global Business Units

The table below presents sales by Global Business Unit (GBU). Please note that Emerging Markets sales for Specialty Care and Primary Care are included in the China & Emerging Markets GBU.

Net Sales by GBU (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Sanofi Genzyme (Specialty Care) ^(a)	2,292	+21.8%	4,311	+25.9% ^(c)
Primary Care ^(a)	2,281	-15.7% ^(d)	4,566	-16.3% ^(e)
China & Emerging Markets ^(b)	1,891	+7.0%	3,849	+8.7%
Total Pharmaceuticals	6,464	+1.7%	12,726	+2.4%
Consumer Healthcare (CHC)	1,143	+1.1%	2,399	+0.8%
Sanofi Pasteur (Vaccines)	1,021	+24.7%	1,894	+22.5%
Total net sales	8,628	+3.9%	17,019	+4.1%^(f)

(a) Does not include China & Emerging Markets sales - see definition page 10; (b) Includes Emerging Markets sales for Primary Care and Specialty Care; (c) +18.6% at CS - Adjusted for Bioverativ acquisition and sales of Bioverativ products to SOBI - see page 5; (d) -10.4% at CS; (e) -11.1% at CS; (f) +4.8% at CS - Adjusted for Bioverativ and sales of Bioverativ products to SOBI and European Generics.

Global Franchises

The tables below present second-quarter and first-half 2019 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)	Q2 2019	Change at CER	Developed Markets	Change at CER	Emerging Markets	Change at CER
Specialty Care franchises	2,620	+22.9%	2,292	+21.8%	328	+30.0%
Rare Disease	810	+8.3%	640	+3.0%	170	+31.7%
Multiple Sclerosis	540	+2.8%	522	+2.9%	18	0.0%
Oncology	431	+14.1%	302	+10.2%	129	+24.3%
Immunology	548	+166.3%	541	+164.1%	7	ns
Rare Blood Disorder	291	+7.8% ⁽¹⁾	287	+6.2% ⁽²⁾	4	ns
Primary Care franchises	3,844	-8.7%⁽³⁾	2,281	-15.7%⁽⁴⁾	1,563	+3.1%
Established Rx Products ⁽⁵⁾	2,406	-10.0% ⁽⁶⁾	1,275	-18.2% ⁽⁷⁾	1,131	+1.0%
Diabetes	1,290	-7.0%	865	-13.3%	425	+8.2%
Cardiovascular	148	-1.4%	141	-4.2%	7	+133.3%
Consumer Healthcare	1,143	+1.1%	753	+1.5%	390	+0.3%
Vaccines	1,021	+24.7%	578	+15.8%	443	+37.7%
Total net sales	8,628	+3.9%⁽⁸⁾	5,904	1.2%⁽⁹⁾	2,724	+10.0%

(1) +2.2% at CS - see page 5; (2) +0.7% at CS - see page 5; (3) -5.2% at CS; (4) -10.4% at CS; (5) including Generics; (6) -4.5% at CS; (7) -8.9% at CS; (8) +5.8% at CS; (9) +3.8% at CS

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

Net sales by Franchise (€ million)	H1 2019	Change at CER	Developed Markets	Change at CER	Emerging Markets	Change at CER
Specialty Care franchises	4,947	+26.7%⁽¹⁾	4,311	+25.9%	636	+31.8%
Rare Disease	1,576	+9.2%	1,253	+3.4%	323	+34.3%
Multiple Sclerosis	1,069	+4.3%	1,029	+3.7%	40	+18.9%
Oncology	830	+11.0%	575	+6.3%	255	+22.7%
Immunology	907	+173.8%	897	+171.5%	10	ns
Rare Blood Disorder	565	+65.4% ⁽²⁾	557	+62.9% ⁽³⁾	8	ns
Primary Care franchises	7,779	-8.5%⁽⁴⁾	4,566	-16.3%⁽⁵⁾	3,213	+4.9%
Established Rx Products ⁽⁶⁾	4,912	-9.7% ⁽⁷⁾	2,582	-18.5% ⁽⁸⁾	2,330	+2.3%
Diabetes	2,584	-6.9%	1,714	-14.6%	870	+11.7%
Cardiovascular	283	-1.1%	270	-3.4%	13	+85.7%
Consumer Healthcare	2,399	+0.8%	1,586	-0.9%	813	+4.2%
Vaccines	1,894	+22.5%	1,102	+10.8%	792	+42.2%
Total net sales	17,019	+4.1%⁽⁹⁾	11,565	+0.6%⁽¹⁰⁾	5,454	+11.8%

(1)+20.3 % at CS- Adjusted for Bioverativ and sales of products to SOBI – see page 5; (2) +1.7% at CS- see page 5; (3) +0.2% -see page 5; (4) -5.0% at CS; (5) -11.1% at CS; (6) including Generics; (7)-4.1% at CS; (8) -9.4% at CS; (9) +4.8% at CS- Adjusted for Bioverativ and sales of Bioverativ products to SOBI and European Generics;(10)+1.6% at CS - Adjusted for Bioverativ and sales of Bioverativ products to SOBI and European Generics

Pharmaceuticals

Second-quarter Pharmaceutical sales were up 1.7% to €6,464 million mainly driven by Dupixent® which was partially offset by Diabetes and Established Rx Products including the disposal of the European generics business. First-half sales for Pharmaceuticals increased 2.4% to €12,726 million.

Specialty Care franchises

Immunology franchise

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Dupixent®	496	+168.2%	825	+175.3%
Kevzara®	52	+150.0%	82	+160.0%
Total Immunology	548	+166.3%	907	+173.8%

Dupixent® (collaboration with Regeneron) generated sales of €496 million in the second quarter (up 168.2%). In the U.S., Dupixent® sales of €403 million (up 152.3%) were driven by continued growth in atopic dermatitis which benefited from launch in the adolescent age group (12 to 17 years of age) in mid-March and from rapid uptake in asthma. In Europe, second-quarter sales were €46 million (up 187.5%). First-half Dupixent® sales increased 175.3% to €825 million. Dupixent® has been launched in 28 countries as of the second quarter of 2019 with 11 more launches in atopic dermatitis and 7 in asthma planned over the remainder of 2019. The U.S. FDA approved Dupixent® for chronic rhinosinusitis with nasal polyposis on June 26, 2019.

Kevzara® (collaboration with Regeneron) sales were €52 million (up 150.0%) in the second quarter, of which €30 million was in the U.S. (up 86.7%) reflecting increased adoption and category share. First-half Kevzara® sales increased 160.0% to €82 million.

Multiple Sclerosis franchise

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Aubagio®	466	+10.6%	903	+11.2%
Lemtrada®	74	-28.4%	166	-21.7%
Total Multiple Sclerosis	540	+2.8%	1,069	+4.3%

Second-quarter **Multiple Sclerosis** (MS) sales increased 2.8% to €540 million driven by double-digit growth of Aubagio® in the U.S and Europe, partially offset by lower Lemtrada® sales. First-half MS sales increased 4.3% to €1,069 million.

Second-quarter **Aubagio**[®] sales increased 10.6% to €466 million, supported by the U.S. performance (up 10.5% to €336 million) and Europe (up 18.0% to €105 million). First-half Aubagio[®] sales increased 11.2% to €903 million.

In the second quarter, **Lemtrada**[®] sales decreased 28.4% to €74 million due to lower U.S. sales (down 13.0% to €42 million) and European sales (down 51.1% to €22 million), reflecting increased global competition and the update to the EU label. First-half Lemtrada[®] sales decreased 21.7% to €166 million.

Oncology franchise

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Jevtana [®]	126	+18.4%	237	+13.4%
Thymoglobulin [®]	94	+23.0%	175	+17.4%
Eloxatin [®]	55	+19.6%	109	+20.0%
Mozobil [®]	49	+9.1%	93	+9.8%
Taxotere [®]	42	0.0%	89	+3.6%
Zaltrap [®]	23	-4.2%	45	-2.2%
Others	42	+10.8%	82	0.0%
Total Oncology	431	+14.1%	830	+11.0%

Second-quarter **Oncology** sales increased 14.1% to €431 million driven by Emerging Markets (up 24.3% to €129 million) and the U.S. (up 12.7% to €150 million). First-half Oncology sales increased 11.0% to €830 million.

Jevtana[®] sales were up 18.4% to €126 million in the second quarter supported by the performance in the U.S. (up 18.6% to €54 million) and Europe (up 15.8% to €44 million). First-half Jevtana[®] sales increased 13.4% to €237 million. In the second quarter, **Thymoglobulin**[®] sales increased 23.0% to €94 million driven by Emerging Markets and the U.S. **Eloxatin**[®] sales grew 19.6% to €55 million driven by China. First-half sales of Thymoglobulin[®] and Eloxatin[®] increased 17.4% (to €175 million) and 20.0% (to €109 million), respectively.

Libtayo[®] (cemiplimab-rwlc, collaboration with Regeneron) was approved in the U.S. in September 2018 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. U.S. Libtayo[®] sales are consolidated by Regeneron. Libtayo[®] was approved in Brazil at the end of March and in Canada in April. In July, Libtayo[®] was approved in the European Union for adult patients with metastatic or locally advanced CSCC who are not candidates for curative surgery or curative radiation.

Rare Disease franchise

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Myozyme [®] / Lumizyme [®]	234	+11.0%	454	+10.9%
Fabrazyme [®]	211	+9.6%	396	+7.8%
Cerezyme [®]	187	+5.5%	363	+5.9%
Aldurazyme [®]	54	+5.8%	121	+18.4%
Cerdelga [®]	50	+28.9%	98	+28.4%
Others Rare Disease	74	-4.0%	144	-0.7%
Total Rare Disease	810	+8.3%	1,576	+9.2%

In the second quarter, **Rare Disease** sales increased 8.3% to €810 million, driven by Emerging Markets (up 31.7% to €170 million). In the U.S., second-quarter Rare Disease sales grew 6.8% to €299 million. In Europe, sales were stable in the quarter at €256 million. First-half Rare Disease sales increased 9.2% to €1,576 million.

Second-quarter **Gaucher (Cerezyme[®] and Cerdelga[®])** sales were up 9.6% to €237 million, supported by the increasing penetration of Cerdelga[®] in Europe and the U.S. and the sustained growth of Cerezyme[®] in Emerging Markets. Second-quarter Cerdelga[®] sales increased 28.9% to €50 million, with sales up 50% in Europe (to €18 million) and up 17.4% in the U.S. (to €29 million). First-half Gaucher sales were €461 million, up 9.8%.

Second-quarter **Pompe (Myozyme[®]/Lumizyme[®])** sales grew 11.0% to €234 million, supported by positive trends in naïve patient accruals. This performance was driven by the U.S. (up 13.0% to €83 million) and Emerging Markets (up 36.7% to €39 million). First-half Myozyme[®]/Lumizyme[®] sales increased 10.9% to €454 million.

Second-quarter **Fabry (Fabrazyme®)** sales grew 9.6% to €211 million, reflecting strong performance in Emerging Markets (up 55.0% to €29 million). Over the period, U.S. sales increased 6.5% (to €105 million) and European sales were stable (at €45 million). First-half Fabrazyme® sales were up 7.8% to €396 million.

Rare Blood Disorder franchise

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Eloctate®	171	-8.0%*	345	+47.5%*
Alprolix®	105	+23.5%**	200	+84.3%**
Cablivi®	15	-	20	-
Total Rare Blood Disorder	291	+7.8%***	565	+65.4%***

*-11% at CS in Q2 2019 and -7.7% in H1 2019 at CS-see footnotes 8 and 9; **+12.4% at CS in Q2 2019 and +9.3% at CS in H1 2019 –see footnotes 8 and 9);

***+2.2% at CS in Q2 2019 and +1.7% in H1 2019 at CS-see footnotes 8 and 9

Bioerativ was consolidated in Sanofi's Financial Statements from March 9, 2018. Second-quarter sales of the Rare Blood Disorder franchise were €291 million, up 2.2% at CS⁽⁸⁾. Non U.S. sales were €71 million with Japan as the primary contributor. Consolidated first-half sales of the Rare Blood Disorder franchise were €565 million, up 1.7% at CS⁽⁹⁾.

Eloctate® sales were €171 million in the second quarter, down 11.0% at CS⁽⁸⁾. In the U.S., sales of the product decreased 16.4% to €135 million, reflecting ongoing competitive pressure. In the Rest of the World region, Eloctate® sales increased 6.9% at CS⁽⁸⁾ to €32 million. First-half Eloctate® sales were €345 million, down 7.7% at CS⁽⁹⁾.

Alprolix® sales were €105 million in the second quarter, up 12.4% at CS⁽⁸⁾. In the U.S., sales of the product increased 4.5% to €74 million. In the Rest of the World region, Alprolix® sales increased 42.9% at CS⁽⁸⁾ to €31 million due to growth in product sales to SOBI. First-half Alprolix® sales were €200 million, up 9.3% at CS⁽⁹⁾.

Cablivi® (caplacizumab-yhdp) for the treatment of adults with acquired thrombotic thrombocytopenic purpura (aTTP), generated second-quarter sales of €15 million. In the U.S., where Cablivi® was launched on April 2, 2019, sales were €11 million. In Europe, where the product is commercially available in Germany, Denmark and Austria, sales were €4 million. Additional European launches are expected by year-end. First-half Cablivi® sales were €20 million.

Primary Care franchises

Cardiovascular franchise

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Praluent®	66	+3.2%	122	+6.3%
Multaq®	82	-4.8%	161	-6.2%
Total cardiovascular franchise	148	-1.4%	283	-1.1%

Second-quarter **Praluent®** (collaboration with Regeneron) sales increased 3.2% to €66 million, driven by growth in Europe (up 40.9% to €32 million). In the U.S., sales decreased 37.1% to €24 million, impacted by significantly higher rebates. As a result of negotiations to further improve patient access and affordability throughout 2019, lower average U.S. net pricing for Praluent® versus prior year is expected. First-half Praluent® sales increased 6.3% to €122 million.

In the Praluent® patent litigation in Germany, the Regional Court of Düsseldorf ruled on July 11, 2019 finding infringement and issued an injunction which requires Sanofi and Regeneron to stop marketing, selling, and manufacturing Praluent® in Germany. Sanofi and Regeneron appealed. Amgen enforced the injunction on July 19, 2019 and Sanofi and Regeneron complied. On July 23, 2019, the Higher Regional Court ordered a temporary stay of the injunction until it rules on the request by Sanofi and Regeneron for a stay of the injunction during the pendency of main appeal. Praluent® sales in Germany were €20 million in the first half of 2019.

(8) Sales of products to SOBI were initially recorded in "other revenues" in H1 2018" and in sales from H2 2018; H1 2018 sales were adjusted accordingly for calculation of CS. Unaudited data.

(9) Growth comparing first-half 2019 sales versus full first-half 2018 sales at CER. Sales of products to SOBI were initially recorded in "other revenues" in H1 2018" and in sales from H2 2018; H1 2018 sales were adjusted accordingly for calculation of CS. Unaudited data.

Diabetes franchise

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Lantus®	758	-16.2%	1,532	-16.7%
Toujeo®	220	-0.9%	431	+2.2%
Total glargine	978	-13.2%	1,963	-13.2%
Apidra®	84	-7.6%	173	-4.9%
Amaryl®	81	-6.9%	171	0.0%
Admelog®	77	ns	143	ns
Soliqua®	28	+64.7%	50	+84.6%
Insuman®	22	-4.3%	43	-6.4%
Total Diabetes	1,290	-7.0%	2,584	-6.9%

In the second quarter, global **Diabetes** sales decreased 7.0% to €1,290 million, due to lower glargine (Lantus® and Toujeo®) sales in the U.S. Second-quarter U.S. Diabetes sales were down 17.5% to €461 million, reflecting the increased contribution to the coverage gap related to Medicare Part D and a continued decline in average U.S. glargine net prices. Second-quarter sales in Emerging Markets increased 8.2% to €425 million. Second-quarter sales in Europe decreased 6.8% to €303 million despite Toujeo® growth (up 10.7%). First-half global Diabetes sales decreased 6.9% to €2,584 million.

In the second quarter, **Lantus®** sales were €758 million, down 16.2%. In the U.S., Lantus® sales decreased 33.7% to €284 million, mainly reflecting lower average net price and the increased contribution to the coverage gap related to Medicare Part D. In Europe, second-quarter Lantus® sales were €146 million, down 16.1% due to biosimilar glargine competition and patients switching to Toujeo®. In Emerging Markets, second-quarter Lantus® sales were up 14.3% to €272 million. First-half Lantus® sales decreased 16.7% to €1,532 million.

Second-quarter **Toujeo®** sales were €220 million, down 0.9%. In the U.S., second-quarter Toujeo® sales were €70 million, down 23.3% mainly reflecting lower average net price and the increased contribution to the coverage gap related to Medicare Part D. In Europe and Emerging Markets, second-quarter Toujeo® sales were €83 million (up 10.7%) and €45 million (up 24.3%), respectively. First-half Toujeo® sales increased 2.2% to €431 million.

Second-quarter **Apidra®** sales decreased 7.6% to €84 million. Lower sales in the U.S. (down 42.1% to €12 million) offset growth in Emerging Markets (up 14.8% to €30 million). First-half Apidra® sales decreased 4.9% to €173 million.

Second-quarter and first-half **Amaryl®** sales were €81 million (down 6.9%) and €171 million (stable), respectively.

Admelog® (insulin lispro injection) generated sales of €77 million in the second quarter of which €73 million were in the U.S. (versus €1 million in the second quarter of 2018) mainly due to access in Managed Medicaid. In the U.S., Admelog® sales are expected to be lower in the second half of 2019 due to WAC price adjustment of -44% as of July 1.

Second-quarter and first-half **Soliqua®** 100/33 (insulin glargine 100 Units/mL & lixisenatide 33 mcg/mL injection) and **Suliqua™** sales increased 64.7% (to €28 million) and 84.6% (to €50 million), respectively.

Established Rx Products

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Lovenox®	347	-8.0%	690	-9.9%
Plavix®	362	-3.5%	766	-0.4%
Aprovel®/Avapro®	173	+0.6%	374	+7.9%
Synvisc®/Synvisc-One®	87	-9.8%	155	-8.1%
Renvela®/Renagel®	66	-35.0%	145	-30.3%
Myslee®/Ambien®/Stilnox®	55	-3.6%	107	-11.2%
Allegra®	26	-7.1%	82	-2.5%
Generics	254	-35.8%	536	-34.8%
Other	1,036	-3.2%	2,057	-4.3%
Total Established Rx Products	2,406	-10.0%	4,912	-9.7%

In the second quarter, **Established Rx Products** sales decreased 10.0% to €2,406 million, primarily reflecting the divestment of the European generics business Zentiva at the end of the third quarter of 2018. Excluding the generics divestment, Established Rx Products sales decreased 4.5% in the second quarter, reflecting generic competition to Renvela®/Renagel® (sevelamer) in the U.S. and lower Lovenox sales in Europe®. First-half Established Rx Products sales decreased 9.7% to €4,912 million (down 4.1% at CS).

Second-quarter **Lovenox**® sales decreased 8.0% to €347 million, reflecting lower Mature Markets sales (down 18.0% to €211 million) due to biosimilar competition in several countries in Europe. In Emerging Markets, Lovenox® sales grew 13.2% to €136 million. First-half Lovenox® sales were down 9.9% to €690 million.

In the second quarter, **Plavix**® sales decreased 3.5% to €362 million due to generic competition in Japan (sales down 19.0% to €36 million). In China, Plavix® sales were stable at €208 million, reflecting implementation of the volume based procurement program (VBP) in key cities at the beginning of the second quarter. The VBP program is expected to result in a decline in Plavix® sales in China over the remainder of 2019. First-half Plavix® sales decreased 0.4% to €766 million.

Second-quarter **Aprovel**®/Avapro® sales increased 0.6% to €173 million. In China, Aprovel®/Avapro® sales were stable at €75 million reflecting the implementation of the VBP program in key cities at the beginning of the second quarter. The VBP program is expected to result in a decline in Aprovel®/Avapro® sales in China over the remainder of 2019. Second-quarter Aprovel®/Avapro® sales continued to grow in the rest of Emerging Markets. First-half Aprovel®/Avapro® sales increased 7.9% to €374 million.

Second-quarter **Renvela**®/Renagel® (sevelamer) sales decreased 35.0% to €66 million, due to generic competition in the U.S. (down 65.0% to €22 million) and despite growth in China. First-half Renvela®/Renagel® sales decreased 30.3% to €145 million.

In the second quarter, **Generics** sales decreased 35.8% to €254 million, reflecting the divestment of the European generics business Zentiva at the end of the third quarter of 2018. At CS, second-quarter Generics sales increased 4.9% driven by the U.S. (up 60.0% to €42 million). In Emerging Markets, Generics sales decreased 5.8% to €155 million, due to lower sales in Africa and the Middle East region. First-half Generics sales were €536 million, down 34.8% and up 4.2% at CS.

Consumer Healthcare

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

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Allergy Cough & Cold	249	+1.7%	611	+2.8%
of which Allegra®	105	+3.0%	243	+1.7%
of which Mucosolvan®	15	-27.3%	43	-10.2%
of which Xyza®	13	+85.7%	27	+23.8%
Pain	308	+1.6%	630	+2.1%
of which Doliprane®	77	0.0%	156	-3.1%
of which Buscopan®	50	+10.0%	98	+4.8%
Digestive	277	+10.1%	548	+9.1%
of which Dulcolax®	60	+7.1%	116	+5.5%
of which Enterogermina®	54	+20.0%	115	+22.3%
of which Essentiale®	50	+8.7%	99	+12.4%
of which Zantac®	37	+12.9%	69	+4.8%
Nutritionals	162	-3.0%	314	-5.5%
Other	147	-10.8%	296	-11.3%
of which Gold Bond®	48	-6.3%	100	-4.1%
Total Consumer Healthcare	1,143	+1.1%	2,399	+0.8%

In the second quarter, CHC sales increased 1.1% to €1,143 million, led by the U.S. In the first-half, **Consumer Healthcare** (CHC) sales growth of 0.8% to €2,399 million was impacted by strengthening regulatory requirements, particularly in Europe, as well as the continued effect of divestments. These factors are expected to have a dampening effect on CHC performance in 2019 and through the first part of 2020.

In **Europe**, second-quarter CHC sales decreased 2.8% to €314 million reflecting a continued weak Cough & Cold season, as well as divestments of non-strategic brands and strengthening regulatory requirements. First-half CHC sales in Europe were down 3.4% to €680 million.

In **the U.S.**, second-quarter CHC sales increased 5.5% to €284 million driven by growth of the Allergy Cough & Cold (up 11.8%), Pain (up 12.2%) and Digestive (up 8.5%) categories which were partially offset by a lower performance of Gold Bond. In the U.S., first-half CHC sales increased 1.5% to €588 million.

In **Emerging Markets**, second-quarter CHC sales increased 0.3% to €390 million, reflecting growth in the Digestive (up 15.7%) category, partially offset by lower Allergy Cough & Cold, Pain and Nutritional categories. In the first half, Emerging Markets CHC sales increased 4.2% to €813 million.

Vaccines

Net sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
Polio/Pertussis/Hib vaccines (incl. Hexaxim® / Hexyon®, Pentacel®, Pentaxim® and Imovax®)	502	+41.5%	988	+33.5%
Travel and other endemic vaccines	138	+7.9%	257	+10.5%
Meningitis/Pneumo vaccines (incl. Menactra®)	136	+13.8%	248	+17.1%
Adult Booster vaccines (incl. Adacel®)	134	+38.3%	234	+22.0%
Influenza vaccines (incl. Vaxigrip®, Fluzone HD® & Fluzone®)	85	-10.2%	117	-5.5%
Other vaccines	26	+4.3%	50	+12.2%
Total Vaccines	1,021	+24.7%	1,894	+22.5%

Second-quarter **Vaccines** sales increased 24.7% to €1,021 million. This growth was driven by the strong performance of Polio/Pertussis/Hib vaccines in Emerging Markets (up 64.6% to €291 million), together with the timing of CDC purchases in the U.S. (up 20.4% to €337 million) and the performance of Boosters and Hexaxim® in Europe (up 20.1% to €161 million). First-half Vaccines sales were up 22.5% to €1,894 million.

In the second quarter, **Polio/Pertussis/Hib** (PPH) vaccines sales increased 41.5% to €502 million, driven by recovery and increased demand for Pentaxim® in China, coupled with favorable sales phasing and growth in other Emerging Markets. In the U.S., PPH sales increased 44.6% to €100 million helped by the low base for comparison in the second quarter of 2018, which resulted from the timing of CDC purchases. In Europe, PPH vaccines sales increased 14.7% to €78 million, driven by Hexaxim®. First-half PPH vaccines sales were up 33.5% to €988 million.

Second-quarter **Travel and other endemic vaccines** sales were €138 million up 7.9%, supported by Rabies vaccines. First-half Travel and other endemic vaccines sales were up 10.5% to €257 million.

Second-quarter **Menactra®** sales increased 13.8% to €136 million, driven by expansion in the Middle East. First-half Menactra® sales increased 17.1% to €248 million.

Second-quarter **Adult Booster** vaccines sales were up 38.3% to €134 million, reflecting strong performance of Repevax® in Europe and the low base for comparison of Adacel® in the U.S. in the second quarter of 2018, which resulted from the timing of CDC purchases. First-half Adult Booster vaccines sales increased 22.0% to €234 million.

Influenza vaccines sales decreased 10.2% (to €85 million) in the second quarter and decreased 5.5% (to €117 million) in the first half due to lower sales in the southern hemisphere campaign. Due to a delay in strain selection by the WHO, Sanofi expects influenza vaccine sales in the second half of 2019 to be significantly weighted towards the fourth quarter.

Company sales by geographic region

Sanofi sales (€ million)	Q2 2019	Change at CER	H1 2019	Change at CER
United States	2,851	+8.4%	5,401	+7.8%
Emerging Markets^(a)	2,724	+10.0%	5,454	+11.8%
of which Asia	1,132	+13.5%	2,338	+15.7%
of which Latin America	690	+12.3%	1,305	+8.5%
of which Africa, Middle East	553	+1.7%	1,109	+6.6%
of which Eurasia ^(b)	322	+13.4%	634	+17.6%
Europe^(c)	2,164	-7.5%	4,351	-8.4%
Rest of the World^(d)	889	+4.3%	1,813	+6.3%
of which Japan	465	+2.6%	997	+7.7%
Total Sanofi sales	8,628	+3.9%	17,019	+4.1%

(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

Second-quarter sales in the **U.S.** increased 8.4% to €2,851 million, driven by Dupixent[®]. In the U.S., first-half sales increased 7.8% to €5,401 million.

Second-quarter sales in **Emerging Markets** grew 10.0% to €2,724 million, mainly driven by Vaccines (up 37.7%), Rare Disease (up 31.7%), Diabetes (up 8.2%) and Oncology (up 24.3%). In Asia, second-quarter sales were up 13.5% to €1,132 million. In China, sales increased 17.1% to €709 million, driven by recovery and strong demand for Pentaxim[®], as well as by strong growth in Oncology. In Latin America, second-quarter sales increased 12.3% to €690 million. Second-quarter sales in Brazil were stable at €235 million impacted by lower CHC and Vaccines sales. In Africa and the Middle East region, second-quarter sales were €553 million up 1.7% driven by Africa performance partially offset by lower sales in the Middle East. Second-quarter sales in the Eurasia region increased 13.4% to €322 million, supported by strong growth in Turkey. Second-quarter sales in Russia were €173 million up 1.2%. In Emerging Markets, first-half sales increased 11.8% to €5,454 million.

Second-quarter sales in **Europe** were €2,164 million, down 7.5% reflecting divestment of the European generics business. At CS, second-quarter sales decreased 0.9% reflecting lower Lovenox[®] and Diabetes sales which were partially offset by Dupixent[®] and Vaccines performance. In Europe, first-half sales decreased 8.4% (-2.0% at CS) to €4,351 million.

Sales in **Japan** increased 2.6% to €465 million in the second quarter, driven by Dupixent[®] which largely offset lower sales of Plavix[®] and Aprovel[®] due to generic competition. In Japan, first-half sales increased 7.7% to €997 million.

R&D update

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

Regulatory update

Regulatory updates since April 26, 2019 include the following:

- In July, the U.S. Food and Drug Administration (FDA) accepted for review the Biologics License Application (BLA) for **isatuximab** for the treatment of patients with relapsed/refractory multiple myeloma (RRMM). The target action date for the FDA decision is April 30, 2020.
- In June, **Libtayo[®]** (cemiplimab, collaboration with Regeneron) was approved in the European Union (EU) for the treatment of adults with metastatic or locally advanced cutaneous squamous cell carcinoma (CSCC) who are not candidates for curative surgery or curative radiation.
- In June, the European Medicines Agency's (EMA) Committee for Medicinal Products for Human Use (CHMP) adopted a positive opinion for **Dupixent[®]** (dupilumab, collaboration with Regeneron) recommending extending its approval in the EU to include adolescents 12 to 17 years of age with moderate-to-severe atopic dermatitis who are candidates for systemic therapy.
- The FDA accepted for review the BLA for Sanofi's **MenQuadfi[™]** Meningococcal Polysaccharide Tetanus Toxoid Conjugate Vaccine candidate to help prevent meningococcal meningitis. The target action date for the FDA decision is April 25, 2020.

- In June, the FDA approved **Dupixent**[®] for the treatment of chronic rhinosinusitis with nasal polyposis (CRSwNP) in adults whose disease is not adequately controlled.
- In May, the European Commission approved **Dupixent**[®] for use in adults and adolescents 12 years and older as an add-on maintenance treatment for severe asthma with type 2 inflammation characterized by raised blood eosinophils and/or raised fractional exhaled nitric oxide (FeNO), who are inadequately controlled with high dose inhaled corticosteroid (ICS) plus another medicinal product for maintenance treatment.
- In May, SAR341402 (insulin aspart), a rapid acting insulin, was submitted to the EMA for the treatment of Type I and II diabetes.
- In April, the FDA approved **Praluent**[®] (collaboration with Regeneron) to reduce the risk of heart attack, stroke, and unstable angina requiring hospitalization in adults with established cardiovascular disease.

At the end of July 2019, the R&D pipeline contained 83 projects, including 34 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:

- Topline results from three Phase 3 trials of **Zynquista**[™] (sotagliflozin) in adults with type 2 diabetes from the InSynchrony clinical program were announced on July 26. Given the primary endpoint results of blood sugar control (HbA1c) reduction in the SOTA-CKD3 and SOTA-CKD4 studies, Sanofi provided notice to Lexicon that it is terminating the collaboration to develop, manufacture, and commercialize Zynquista[™] in all ongoing global type 1 and type 2 diabetes programs. At this time, the ongoing Phase 3 clinical trials will continue and there will be no immediate changes. Sanofi has expressed willingness to work with Lexicon to ensure a smooth transition of the studies. Sanofi remains committed to working and supporting the investigators and patients enrolled in the studies while next steps are discussed with Lexicon.
- Results from a phase 3 study evaluating **Soliqua**[®]/**Suliqua**[®] (insulin glargine 100 Units/mL and lixisenatide) in adults with type 2 diabetes inadequately controlled by GLP-1 receptor agonist (GLP-1 RA) treatments were presented at the American Diabetes Association (ADA) Scientific Sessions in June. The study met the primary objective by demonstrating a statistically superior reduction of average blood sugar level (HbA1c) after 26 weeks, compared with continuing GLP-1 RA treatment.
- Pivotal phase 3 ICARIA-MM trial results were presented at the 2019 American Society of Clinical Oncology (ASCO) Annual Meeting in June and demonstrated that **isatuximab** added to pomalidomide and dexamethasone (isatuximab combination therapy) showed statistically significant improvements compared to pomalidomide and dexamethasone (pom-dex) alone in patients with relapsed/refractory multiple myeloma (RRMM).
- A phase 3 study evaluating **cemiplimab**, a PD-1 inhibitor, in adjuvant treatment for Cutaneous Squamous Cell Carcinoma (CSCC) started.
- **Dupilumab**, moved into phase 3 in Chronic Obstructive Pulmonary Disease (COPD).
- **Fitusiran**, a siRNA inhibitor targeting AT3, entered phase 3 for pediatric hemophilia.
- **Nirsevimab** (SP0232, collaboration with Medimmune), a monoclonal antibody, entered phase 3 for respiratory syncytial virus (RSV)

Phase 2:

- **SAR440340/REGN3500** (collaboration with Regeneron), an investigational IL-33 antibody, met the primary endpoint of improvement in loss of asthma control when comparing monotherapy to placebo in a phase 2 proof-of-concept trial. The trial also met a key secondary endpoint, demonstrating SAR440340 monotherapy significantly improved lung function compared to placebo. Patients treated with Dupixent[®] monotherapy did numerically better than SAR440340 across all endpoints, although the trial was not powered to show differences between active treatment arms. The combination of SAR440340 and Dupixent[®] did not demonstrate increased benefit compared to Dupixent[®] monotherapy in this trial.

Phase 1:

- A phase 1 trial evaluating **SAR441255**, a trigonal GLP1R/GIPR/GCGR agonist was initiated.
- **SAR441236**, a tri-specific neutralizing anti-HIV mAb, entered into phase 1.

An additional seven research projects have been discontinued to enhance the company's focus on delivering first and best in class medicines

Collaboration

In June, Sanofi and Google announced that they will establish a new virtual Innovation Lab with the ambition to transform how future medicines and health services are delivered by tapping into the power of emerging data technologies. The collaboration aims to change how Sanofi develops new treatments and will focus on three key objectives: to better understand patients and diseases, to increase Sanofi's operational efficiency, and to improve the experience of Sanofi's patients and customers.

2019 Second-quarter and first-half financial results⁽¹⁰⁾

Business Net Income⁽¹⁰⁾

In the second quarter of 2019, Sanofi generated **net sales** of €8,628 million, an increase of 5.5% (up 3.9% at CER). First-half sales were €17,019 million, up 5.9% on a reported basis (up 4.1% at CER).

Second-quarter **other revenues** increased 15.4% (up 9.2% at CER) to €352 million, reflecting the VaxServe sales contribution of non-Sanofi products (€302 million, up 25.0% at CER). First-half other revenues increased 26.5% (up 18.8% at CER) to €674 million driven by the VaxServe sales contribution of non-Sanofi products (€543 million, up 28.0% at CER) and the consolidation of collaboration revenues from Swedish Orphan Biovitrum AB (SOBI).

Second-quarter **Gross Profit** increased 6.5% to €6,211 million (up 4.7% at CER). The gross margin ratio was 72.0% (71.8% at CER) versus 71.3% in the second quarter of 2018 and benefited from the strong performance of Dupixent®, Vaccines and the divestment of the Generics business in Europe as well as the end of royalty payments to Bristol-Myers Squibb on Plavix® and Avapro® sales. These positive drivers more than offset the negative impact from U.S. Diabetes net price evolution and the decline in Established Rx Products sales in mature markets. In the second quarter of 2019, the gross margin ratio of segments were 75.1% for Pharmaceuticals (up 0.2 percentage points), 67.1% for CHC (down 0.3 percentage points) and 62.3% for Vaccines (up 7.2 percentage points). First-half Gross Profit increased 7.6% to €12,308 million (up 5.5% at CER). In the first half of 2019, the gross margin ratio increased 1.1 percentage point to 72.3% (72.1% at CER) versus the first half of 2018. Sanofi now expects its full-year 2019 gross margin ratio to be between 70% and 71% at CER.

Research and Development (R&D) expenses increased 7.7% to €1,588 million in the second quarter of 2019. At CER, R&D expenses increased 5.4%, due to expansion of phase 3 clinical programs together with investments in Vaccines and Emerging Markets. These increased expenditures were partly offset by lower research costs resulting from the end of the Immuno-oncology agreement with Regeneron. First-half R&D expenses increased 7.9% to €2,973 million (up 5.2% at CER).

Second-quarter **selling general and administrative expenses (SG&A)** decreased 1.5% to €2,462 million. At CER, SG&A expenses were down 3.1%, reflecting investments in Specialty Care offset by cost efficiency measures notably in Primary Care in Mature Markets and support functions. In the second quarter, the ratio of SG&A to sales decreased 2.1 percentage points to 28.5% compared to the second quarter of 2018. First-half SG&A expenses increased 0.7% to €4,842 million (down 1.3% at CER). In the first half of 2019, the ratio of SG&A to sales was 1.4 percentage points lower at 28.5% compared to the same period of 2018.

Second-quarter **operating expenses** were €4,050 million, an increase of 1.9% and 0.1% at CER. First-half operating expenses were €7,815 million, an increase of 3.3% and 1.0% at CER.

Second-quarter **other current operating income net of expenses** was -€91 million versus €189 million in the second quarter of 2018 and included the share of profit to Regeneron of the monoclonal antibodies Alliance. In the second quarter of 2018, this line also included €123 million of capital gains on disposals of some small products and income from a data share agreement. First-half other current operating income net of expenses was -€193 million versus €158 million in the first half of 2018.

The **share of profits from associates** was €98 million in the second quarter versus €75 million for the same period of 2018, partly driven by the increased contribution of the share of profits in Regeneron. In the first half, the share of profits from associates was €169 million versus €149 million for the same period of 2018.

In the second quarter, **non-controlling interests** were -€5 million versus -€28 million in the second quarter of 2018, reflecting the end of non-controlling interests related to the Alliance with Bristol-Myers Squibb on Plavix® and Avapro®. First-half non-controlling interests were -€15 million versus -€58 million for the same period of 2018.

(10) See Appendix 3 for 2019 second-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.

Second-quarter **business operating income** increased 3.4% to €2,163 million. At CER, business operating income increased 3.0%. The ratio of business operating income to net sales decreased 0.5 percentage points to 25.1% versus the second quarter of 2018. Over the period, the business operating income ratio of segments were 33.8% for Pharmaceuticals (down 3.7 percentage points), 38.6% for CHC (up 3.0 percentage points) and 27.0% for Vaccines (up 11.0 percentage points). First-half business operating income was €4,454 million, up 7.9% (up 7.1% at CER). In the first half of 2019, the ratio of business operating income to net sales increased 0.5 percentage point to 26.2%.

Net financial expenses were -€85 million in the second quarter versus -€107 million in the same period of 2018, reflecting lower cost of net debt. First-half net financial expenses were -€130 million versus -€105 million in the first half of 2018.

Second-quarter and first-half **effective tax rate** was stable at 22.0%.

Second-quarter **business net income**⁽¹⁰⁾ increased 5.3% to €1,641 million and increased 4.9% at CER. The ratio of business net income to net sales decreased 0.1 percentage points to 19.0% versus the second quarter of 2018. First-half 2019 business net income⁽¹⁰⁾ increased 7.9% to €3,406 million and increased 7.0% at CER. The ratio of business net income to net sales increased 0.4 percentage points to 20.0% versus the first half of 2018.

In the second quarter of 2019, **business earnings per share**⁽¹⁰⁾ (EPS) increased 4.8% to €1.31 on a reported basis and at CER. The average number of shares outstanding was 1,248.5 million versus 1,247.4 million in the second quarter of 2018.

In the first half of 2019, business earnings per share⁽¹⁰⁾ was €2.73, up 7.9% on a reported basis and up 7.1% at CER. The average number of shares outstanding was 1,247.2 million in the first half of 2019 versus 1,247.8 million in the first half of 2018.

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

In the first half of 2019, the IFRS net income was €1,050 million. The main items excluded from the business net income were:

- An amortization charge of €1,116 million related to fair value remeasurement on intangible assets of acquired companies (primarily Genzyme: €368 million, Bioverativ: €272 million, Boehringer Ingelheim CHC business: €122 million, Aventis: €107 million) and to acquired intangible assets (licenses/products: €56 million). An amortization charge of €559 million related to fair value remeasurement on intangible assets of acquired companies (primarily Genzyme: €182 million, Bioverativ: €137 million, Boehringer Ingelheim CHC business: €61 million, Aventis: €53 million), and to acquired intangible assets (licenses/products: €26 million) was recorded in the second quarter. These items have no cash impact on the Company.
- An impairment of intangible assets of €1,840 million (of which €1,835 million in the second quarter) mainly related to Eloctate® based on actual sales performance in the U.S. and revision of sales projections.
- Restructuring costs and similar items of €747 million (of which €426 million in the second quarter) mainly related to streamlining initiatives in Europe and the U.S.
- An income of €190 million (of which €130 million in the second quarter) mainly reflecting a decrease of Bayer contingent considerations linked to Lemtrada® (income of €140 million, of which €143 million in second quarter).
- A €905 million tax effect arising from the items listed above, mainly comprising €711 million of deferred taxes generated by amortization and impairments of intangible assets, and €197 million associated with restructuring costs and similar items. The second quarter tax effect was €678 million, including €573 million of deferred taxes generated by amortization and impairments of intangible assets and €102 million associated with restructuring costs and similar items (see Appendix 4).
- A net gain of €317 million mainly related to litigation.
- An income of €53 million net of tax (of which €28 million in the second quarter) related to restructuring costs of associates and joint ventures, and expenses arising from the impact of acquisitions on associates and joint ventures.

⁽¹⁰⁾ See Appendix 3 for 2019 second-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.

Capital Allocation

In the first half of 2019, net cash generated by operating activities was €2,850 million after capital expenditures of €684 million and an increase in working capital of €833 million. Over the period, the dividend paid by Sanofi was €3,834 million, restructuring costs and similar items were €705 million and acquisitions and partnerships net of disposals were €631 million. As a consequence, net debt increased from €17,628 million at December 31, 2018, to €18,705 million at June 30, 2019 (amount net of €6,742 million 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. Forward-looking 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, 2018. 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: 2019 second-quarter net sales by GBU, franchise, geographic region and product

Q2 2019 (€ million)	Total GBUs	% CER	% reported	Europe	% CER	United States	% CER	Rest of the World	% CER	Emerging Markets	% CER	Total Franchises	% CER	% reported
Aubagio	456	11.5%	16.6%	105	18.0%	336	10.5%	15	-6.7%	10	-15.4%	466	10.6%	15.3%
Lemtrada	66	-32.6%	-30.5%	22	-51.1%	42	-13.0%	2	-50.0%	8	28.6%	74	-28.4%	-27.5%
Total MS	522	2.9%	7.4%	127	-5.2%	378	7.2%	17	-15.8%	18	0.0%	540	2.8%	6.7%
Cerezyme	115	-7.5%	-4.2%	60	-11.8%	45	2.4%	10	-20.0%	72	31.1%	187	5.5%	3.3%
Cerdelga	49	29.7%	32.4%	18	50.0%	29	17.4%	2	50.0%	1	0.0%	50	28.9%	31.6%
Myozyme	195	6.7%	8.9%	98	3.2%	83	13.0%	14	0.0%	39	36.7%	234	11.0%	12.0%
Fabrazyme	182	4.2%	8.3%	45	0.0%	105	6.5%	32	3.3%	29	55.0%	211	9.6%	12.2%
Aldurazyme	39	5.4%	5.4%	19	0.0%	14	18.2%	6	0.0%	15	6.7%	54	5.8%	3.8%
Total Rare Disease	640	3.0%	6.0%	256	0.0%	299	6.8%	85	0.0%	170	31.7%	810	8.3%	9.0%
Jevtana	118	18.6%	21.6%	44	15.8%	54	18.6%	20	25.0%	8	16.7%	126	18.4%	22.3%
Mozobil	45	4.9%	9.8%	13	8.3%	28	8.3%	4	-20.0%	4	66.7%	49	9.1%	11.4%
Thymoglobulin	67	14.3%	19.6%	9	-10.0%	51	17.1%	7	40.0%	27	50.0%	94	23.0%	27.0%
Taxotere	8	-22.2%	-11.1%	1	0.0%	-1	-200.0%	8	0.0%	34	6.3%	42	0.0%	2.4%
Eloxatine	4	-55.6%	-55.6%	1	-	-4	-	7	-22.2%	51	37.8%	55	19.6%	19.6%
Total Oncology	302	10.2%	13.5%	93	6.9%	150	12.7%	59	9.4%	129	24.3%	431	14.1%	16.8%
Dupixent	490	166.3%	180.0%	46	187.5%	403	152.3%	41	387.5%	6	500.0%	496	168.2%	181.8%
Kevzara	51	145.0%	155.0%	10	233.3%	30	86.7%	11	450.0%	1	-	52	150.0%	160.0%
Total immunology	541	164.1%	177.4%	56	194.7%	433	146.4%	52	400.0%	7	600.0%	548	166.3%	179.6%
Alprolix	105	23.5%	29.6%	0	-	74	4.5%	31	114.3%	0	-	105	23.5%	29.6%
Eloctate	167	-10.2%	-5.1%	0	-	135	-16.4%	32	29.2%	4	-	171	-8.0%	-2.8%
Cablivi	15	-	-	4	-	11	-	0	-	0	-	15	-	-
Total Rare Blood Disorder	287	6.2%	11.7%	4	-	220	-5.5%	63	63.2%	4	-	291	7.8%	13.2%
Sanofi Genzyme (Specialty Care)	2,292	21.8%	26.8%	536	8.1%	1,480	26.1%	276	32.2%	328	30.0%	2,620	22.9%	26.5%
Lantus	486	-27.7%	-24.9%	146	-16.1%	284	-33.7%	56	-21.4%	272	14.3%	758	-16.2%	-14.9%
Toujeo	175	-6.1%	-2.8%	83	10.7%	70	-23.3%	22	5.3%	45	24.3%	220	-0.9%	1.4%
Apidra	54	-16.9%	-16.9%	33	-5.7%	12	-42.1%	9	-9.1%	30	14.8%	84	-7.6%	-8.7%
Amaryl	11	-15.4%	-15.4%	4	0.0%	1	0.0%	6	-25.0%	70	-5.4%	81	-6.9%	-6.9%
Admelog	77	-	-	4	300.0%	73	-	0	-100.0%	0	-	77	-	-
Total Diabetes	865	-13.3%	-10.4%	303	-6.8%	461	-17.5%	101	-12.2%	425	8.2%	1,290	-7.0%	-5.6%
Praluent	61	-1.7%	1.7%	32	40.9%	24	-37.1%	5	100.0%	5	150.0%	66	3.2%	6.5%
Multaq	80	-6.1%	-2.4%	10	0.0%	69	-5.8%	1	-33.3%	2	100.0%	82	-4.8%	-1.2%
Total Cardiovascular	141	-4.2%	-0.7%	42	28.1%	93	-16.3%	6	33.3%	7	133.3%	148	-1.4%	2.1%
Plavix	88	-11.5%	-8.3%	35	-7.9%	0	-	53	-13.8%	274	-0.7%	362	-3.5%	-3.2%
Lovenox	211	-18.0%	-17.6%	183	-19.4%	9	0.0%	19	-9.5%	136	13.2%	347	-8.0%	-8.0%
Renagel / Renvela	43	-47.6%	-47.6%	13	-18.8%	22	-65.0%	8	50.0%	23	22.2%	66	-35.0%	-34.0%
Aprovel	52	2.0%	2.0%	27	0.0%	7	133.3%	18	-14.3%	121	0.0%	173	0.6%	1.2%
Synvisc / Synvisc one	71	-10.5%	-6.6%	8	0.0%	59	-13.6%	4	33.3%	16	-6.3%	87	-9.8%	-5.4%
Allegra	26	-7.1%	-7.1%	4	33.3%	0	-	22	-12.0%	0	-	26	-7.1%	-7.1%
Stilnox	41	-4.9%	0.0%	9	0.0%	11	-8.3%	21	-5.0%	14	0.0%	55	-3.6%	0.0%
Depakine	44	-4.3%	-4.3%	40	-4.8%	0	-	4	0.0%	72	2.9%	116	0.0%	0.0%
Tritace	39	0.0%	2.6%	37	2.7%	0	-	2	-100.0%	17	-10.0%	56	-3.4%	-3.4%
Generics	99	-58.3%	-57.0%	31	-83.1%	42	60.0%	26	13.6%	155	-5.8%	254	-35.8%	-36.8%
Other other Rx	561	-6.1%	-4.4%	421	-4.3%	46	-18.0%	94	-8.4%	303	1.3%	864	-3.6%	-3.5%
Total Established Rx Products	1,275	-18.2%	-16.7%	808	-21.4%	196	-17.4%	271	-6.9%	1,131	1.0%	2,406	-10.0%	-9.8%
Primary Care	2,281	-15.7%	-13.5%	1,153	-16.9%	750	-17.4%	378	-7.8%	1,563	3.1%	3,844	-8.7%	-8.0%
China and Emerging Markets	1,891	7.0%	4.8%							1,891	7.0%			
Total Pharmaceuticals	6,464	1.7%	3.4%	1,689	-10.3%	2,230	7.2%	654	5.8%	1,891	7.0%	6,464	1.7%	3.4%
Allergy, Cough and Cold	249	1.7%	4.2%	62	-7.5%	80	11.8%	28	12.5%	79	-2.5%	249	1.7%	4.2%
Pain	308	1.6%	1.3%	125	2.5%	48	12.2%	34	3.3%	101	-3.6%	308	1.6%	1.3%
Digestive	277	10.1%	11.7%	82	5.1%	54	8.5%	15	0.0%	126	15.7%	277	10.1%	11.7%
Nutritional	162	-3.0%	-2.4%	29	0.0%	9	0.0%	70	6.2%	54	-14.3%	162	-3.0%	-2.4%
Consumer Healthcare	1,143	1.1%	2.5%	314	-2.8%	284	5.5%	155	4.1%	390	0.3%	1,143	1.1%	2.5%
Polio / Pertussis / Hib	502	41.5%	41.8%	78	14.7%	100	44.6%	33	-22.5%	291	64.6%	502	41.5%	41.8%
Adult Booster Vaccines	134	38.3%	42.6%	49	69.0%	73	23.2%	7	16.7%	5	66.7%	134	38.3%	42.6%
Meningitis/Pneumonia	136	13.8%	17.2%	0	-	101	6.7%	4	33.3%	31	39.1%	136	13.8%	17.2%
Influenza Vaccines	85	-10.2%	-13.3%	1	-	2	-	17	-5.3%	65	-13.9%	85	-10.2%	-13.3%
Travel And Other Endemic Vaccines	138	7.9%	9.5%	33	3.1%	41	-2.5%	16	30.8%	48	14.6%	138	7.9%	9.5%
Vaccines	1,021	24.7%	25.9%	161	20.1%	337	20.4%	80	-6.0%	443	37.7%	1,021	24.7%	25.9%
Total Company	8,628	3.9%	5.5%	2,164	-7.5%	2,851	8.4%	889	4.3%	2,724	10.0%	8,628	3.9%	5.5%

2019 first-half net sales by GBU, franchise, geographic region and product

H1 2019 (€ million)	Total GBUs	% CER	% reported	Europe	% CER	United States	% CER	Rest of the World	% CER	Emerging Markets	% CER	Total Franchises	% CER	% reported
Aubagio	877	11.2%	16.9%	203	10.3%	645	11.3%	29	16.0%	26	12.0%	903	11.2%	16.5%
Lemtrada	152	-25.1%	-22.1%	63	-31.5%	83	-17.2%	6	-40.0%	14	33.3%	166	-21.7%	-19.8%
Total MS	1,029	3.7%	8.9%	266	-3.6%	728	7.1%	35	0.0%	40	18.9%	1,069	4.3%	8.9%
Cerezyme	228	-6.4%	-3.4%	123	-8.2%	88	-1.2%	17	-15.8%	135	30.0%	363	5.9%	2.0%
Cerdega	96	26.0%	31.5%	34	54.5%	57	12.8%	5	25.0%	2	200.0%	98	28.4%	32.4%
Myozyme	383	6.6%	9.7%	192	2.1%	162	13.5%	29	3.6%	71	37.5%	454	10.9%	12.1%
Fabrazyme	349	4.4%	9.1%	90	3.4%	199	3.9%	60	7.4%	47	36.8%	396	7.8%	10.6%
Aldurazyme	78	7.0%	9.9%	39	2.6%	26	14.3%	13	8.3%	43	43.8%	121	18.4%	17.5%
Total Rare Disease	1,253	3.4%	7.1%	511	1.8%	576	5.7%	166	1.3%	323	34.3%	1,576	9.2%	9.6%
Jevtana	223	12.6%	16.8%	86	10.3%	101	11.9%	36	20.7%	14	27.3%	237	13.4%	17.3%
Mozobil	87	7.8%	13.0%	24	0.0%	54	11.1%	9	12.5%	6	40.0%	93	9.8%	13.4%
Thymoglobulin	125	10.3%	16.8%	18	-5.3%	95	14.1%	12	10.0%	50	37.8%	175	17.4%	21.5%
Taxotere	15	-17.6%	-11.8%	2	0.0%	-1	-200.0%	14	-7.1%	74	9.0%	89	3.6%	6.0%
Eloxatine	10	-37.5%	-37.5%	1	0.0%	-4	-	13	-13.3%	99	32.4%	109	20.0%	21.1%
Total Oncology	575	6.3%	10.6%	181	2.8%	287	8.1%	107	8.3%	255	22.7%	830	11.0%	14.2%
Dupixent	816	173.0%	189.4%	82	215.4%	669	154.5%	65	520.0%	9	800.0%	825	175.3%	191.5%
Kezvara	81	156.7%	170.0%	18	260.0%	48	95.7%	15	600.0%	1	-	82	160.0%	173.3%
Total immunology	897	171.5%	187.5%	100	222.6%	717	149.4%	80	533.3%	10	900.0%	907	173.8%	189.8%
Alprolix	200	84.3%	96.1%	0	-	144	62.7%	56	178.9%	0	-	200	84.3%	96.1%
Eloctate	337	43.8%	53.9%	0	-	272	35.8%	65	90.6%	8	-	345	47.5%	57.5%
Cablivi	20	-	-	9	-	11	-	0	-	0	-	20	-	-
Total Rare Blood Disorder	557	62.9%	73.5%	9	-	427	47.8%	121	125.5%	8	-	565	65.4%	76.0%
Sanofi Genzyme (Specialty Care)	4,311	25.9%	31.9%	1,067	8.3%	2,735	32.4%	509	39.1%	636	31.8%	4,947	26.7%	30.8%
Lantus	979	-28.5%	-25.3%	298	-16.1%	568	-35.2%	113	-20.9%	553	14.6%	1,532	-16.7%	-15.0%
Toujeo	342	-5.2%	-2.0%	163	14.8%	139	-24.0%	40	5.6%	89	41.5%	431	2.2%	4.1%
Apidra	109	-17.1%	-15.5%	66	-5.7%	25	-42.5%	18	-5.3%	64	24.1%	173	-4.9%	-5.5%
Amaryl	22	-8.3%	-8.3%	8	0.0%	1	0.0%	13	-13.3%	149	1.4%	171	0.0%	0.6%
Admelog	143	-	-	7	250.0%	136	-	0	-100.0%	0	-	143	-	-
Total Diabetes	1,714	-14.6%	-11.1%	608	-6.2%	906	-20.2%	200	-12.2%	870	11.7%	2,584	-6.9%	-5.1%
Praluent	113	1.9%	5.6%	61	46.3%	44	-32.8%	8	60.0%	9	125.0%	122	6.3%	9.9%
Multaq	157	-6.9%	-1.3%	20	-4.8%	135	-6.7%	2	-33.3%	4	33.3%	161	-6.2%	-0.6%
Total Cardiovascular	270	-3.4%	1.5%	81	29.0%	179	-14.8%	10	25.0%	13	85.7%	283	-1.1%	3.7%
Plavix	169	-11.8%	-9.1%	69	-9.2%	0	-	100	-13.6%	597	3.3%	766	-0.4%	0.7%
Lovenox	429	-19.5%	-19.4%	375	-20.4%	18	-15.0%	36	-12.2%	261	11.9%	690	-9.9%	-10.2%
Renagel / Renvela	101	-42.3%	-39.9%	26	-18.8%	59	-54.5%	16	6.7%	44	30.3%	145	-30.3%	-27.9%
Aprovel	107	5.0%	5.9%	54	-1.8%	14	160.0%	39	-4.9%	267	9.1%	374	7.9%	9.0%
Synvisc / Synvisc one	124	-10.7%	-5.3%	14	7.7%	103	-12.6%	7	-14.3%	31	3.4%	155	-8.1%	-3.1%
Allegra	82	-2.5%	2.5%	6	20.0%	0	-	76	-4.0%	0	-	82	-2.5%	2.5%
Stilnox	76	-14.3%	-9.5%	17	-15.0%	18	-22.7%	41	-9.5%	31	-3.1%	107	-11.2%	-7.8%
Depakine	87	-4.4%	-4.4%	80	-4.8%	0	-	7	0.0%	149	7.2%	236	2.6%	2.6%
Tritace	74	-1.3%	-1.3%	71	-1.4%	0	-	3	4.0%	35	-10.0%	109	-4.3%	-5.2%
Generics	214	-57.6%	-56.0%	61	-83.4%	79	54.2%	74	0.0%	322	-3.1%	536	-34.8%	-36.0%
Other other Rx	1,119	-6.0%	-5.2%	835	-5.7%	93	-16.0%	191	-2.1%	593	-3.5%	1,712	-5.1%	-5.5%
Total Established Rx Products	2,582	-18.5%	-17.1%	1,608	-22.7%	384	-16.4%	590	-5.5%	2,330	2.3%	4,912	-9.7%	-9.4%
Primary Care	4,566	-16.3%	-14.0%	2,297	-17.7%	1,469	-18.6%	800	-7.0%	3,213	4.9%	7,779	-8.5%	-7.6%
China and Emerging Markets	3,849	8.7%	6.3%							3,849	8.7%			
Total Pharmaceuticals	12,726	2.4%	4.3%	3,364	-10.9%	4,204	8.6%	1,309	6.8%	3,849	8.7%	12,726	2.4%	4.3%
Allergy, Cough and Cold	611	2.8%	5.3%	163	-2.4%	187	0.6%	88	9.0%	173	7.4%	611	2.8%	5.3%
Pain	630	2.1%	0.3%	254	0.4%	93	11.5%	63	3.5%	220	0.4%	630	2.1%	0.3%
Digestive	548	9.1%	10.5%	167	3.1%	103	1.1%	28	0.0%	250	18.5%	548	9.1%	10.5%
Nutritional	314	-5.5%	-4.8%	62	1.6%	19	0.0%	122	-3.3%	111	-11.8%	314	-5.5%	-4.8%
Consumer Healthcare	2,399	0.8%	2.0%	680	-3.4%	588	1.5%	318	0.7%	813	4.2%	2,399	0.8%	2.0%
Polio / Pertussis / Hib	988	33.5%	34.6%	151	7.9%	192	1.7%	110	29.6%	535	61.5%	988	33.5%	34.6%
Adult Booster Vaccines	234	22.0%	25.8%	85	28.8%	124	19.6%	13	7.7%	12	20.0%	234	22.0%	25.8%
Meningitis/Pneumonia	248	17.1%	21.0%	0	-	175	4.5%	7	0.0%	66	68.3%	248	17.1%	21.0%
Influenza Vaccines	117	-5.5%	-7.9%	2	100.0%	4	-25.0%	20	-12.5%	91	-4.1%	117	-5.5%	-7.9%
Travel And Other Endemic Vaccines	257	10.5%	12.7%	67	13.6%	74	12.9%	30	7.1%	86	7.6%	257	10.5%	12.7%
Vaccines	1,894	22.5%	24.4%	307	12.9%	609	8.8%	186	13.9%	792	42.2%	1,894	22.5%	24.4%
Total Company	17,019	4.1%	5.9%	4,351	-8.4%	5,401	7.8%	1,813	6.3%	5,454	11.8%	17,019	4.1%	5.9%

Appendix 2: Business net income statement

Second Quarter 2019	Pharmaceuticals			Consumer Healthcare			Vaccines			Others ⁽¹⁾			Total Group		
	Q2 2019	Q2 2018	Change	Q2 2019	Q2 2018	Change	Q2 2019	Q2 2018	Change	Q2 2019	Q2 2018	Change	Q2 2019	Q2 2018	Change
€ million															
Net sales	6,464	6,250	3.4%	1,143	1,115	2.5%	1,021	811	25.9%	—	—		8,628	8,176	5.5%
Other revenues	49	76	(35.5)%	1	—		302	229	31.9%	—	—		352	305	15.4%
Cost of Sales	(1,661)	(1,643)	1.1%	(377)	(364)	3.6%	(687)	(593)	15.9%	(44)	(51)	(13.7)%	(2,769)	(2,651)	4.5%
As % of net sales	(25.7)%	(26.3)%		(33.0)%	(32.6)%		(67.3)%	(73.1)%					(32.1)%	(32.4)%	
Gross Profit	4,852	4,683	3.6%	767	751	2.1%	636	447	42.3%	(44)	(51)		6,211	5,830	6.5%
As % of net sales	75.1%	74.9%		67.1%	67.4%		62.3%	55.1%					72.0%	71.3%	
Research and development expenses	(1,233)	(1,135)	8.6%	(35)	(30)	16.7%	(169)	(142)	19.0%	(151)	(168)	(10.1)%	(1,588)	(1,475)	7.7%
As % of net sales	(19.1)%	(18.2)%		(3.1)%	(2.7)%		(16.6)%	(17.5)%					(18.4)%	(18.0)%	
Selling and general expenses	(1,379)	(1,394)	(1.1)%	(383)	(399)	(4.0)%	(185)	(173)	6.9%	(515)	(533)	(3.4)%	(2,462)	(2,499)	(1.5)%
As % of net sales	(21.3)%	(22.3)%		(33.5)%	(35.8)%		(18.1)%	(21.3)%					(28.5)%	(30.6)%	
Other current operating income/expenses	(147)	139		94	77		(6)	(2)		(32)	(25)		(91)	189	
Share of profit/loss of associates* and joint-ventures	98	75		—	—		—	—		—	—		98	75	
Net income attributable to non-controlling interests	(3)	(26)		(2)	(2)		—	—		—	—		(5)	(28)	
Business operating income	2,188	2,342	(6.6)%	441	397	11.1%	276	130	112.3%	(742)	(777)	(4.5)%	2,163	2,092	3.4%
As % of net sales	33.8%	37.5%		38.6%	35.6%		27.0%	16.0%					25.1%	25.6%	
Financial income and expenses													(85)	(107)	
Income tax expenses													(437)	(427)	
Tax rate**													22.0%	22.0%	
Business net income													1,641	1,558	5.3%
As % of net sales													19.0%	19.1%	
Business earnings / share (in euros)***													1.31	1.25	4.8%

*** 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 1,248.5 million in the second quarter of 2019 and 1,247.4 million in the second quarter of 2018.

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

Half year 2019	Pharmaceuticals			Consumer Healthcare			Vaccines			Others ⁽¹⁾			Total Group		
€ million	H1 2019	H1 2018	Change	H1 2019	H1 2018	Change	H1 2019	H1 2018	Change	H1 2019	H1 2018	Change	H1 2019	H1 2018	Change
Net sales	12,726	12,199	4.3%	2,399	2,353	2.0%	1,894	1,522	24.4%	—	—	—	17,019	16,074	5.9%
Other revenues	129	134	(3.7)%	1	—	—	544	399	36.3%	—	—	—	674	533	26.5%
Cost of Sales	(3,242)	(3,230)	0.4%	(773)	(763)	1.3%	(1,259)	(1,068)	17.9%	(111)	(105)	5.7%	(5,385)	(5,166)	4.2%
As % of net sales	(25.5)%	(26.5)%	—	(32.2)%	(32.4)%	—	(66.5)%	(70.2)%	—	—	—	—	(31.6)%	(32.1)%	—
Gross Profit	9,613	9,103	5.6%	1,627	1,590	2.3%	1,179	853	38.2%	(111)	(105)	—	12,308	11,441	7.6%
As % of net sales	75.5%	74.6%	—	67.8%	67.6%	—	62.2%	56.0%	—	—	—	—	72.3%	71.2%	—
Research and development expenses	(2,306)	(2,113)	9.1%	(70)	(58)	20.7%	(302)	(268)	12.7%	(295)	(316)	(6.6)%	(2,973)	(2,755)	7.9%
As % of net sales	(18.1)%	(17.3)%	—	(2.9)%	(2.5)%	—	(15.9)%	(17.6)%	—	—	—	—	(17.5)%	(17.1)%	—
Selling and general expenses	(2,654)	(2,648)	0.2%	(777)	(788)	(1.4)%	(358)	(326)	9.8%	(1,053)	(1,047)	0.6%	(4,842)	(4,809)	0.7%
As % of net sales	(20.9)%	(21.7)%	—	(32.4)%	(33.5)%	—	(18.9)%	(21.4)%	—	—	—	—	(28.5)%	(29.9)%	—
Other current operating income/expenses	(234)	132	—	105	82	—	(6)	—	—	(58)	(56)	—	(193)	158	—
Share of profit/loss of associates* and joint-ventures	169	150	—	—	—	—	—	(1)	—	—	—	—	169	149	—
Net income attributable to non-controlling interests	(9)	(52)	—	(6)	(6)	—	—	—	—	—	—	—	(15)	(58)	—
Business operating income	4,579	4,572	0.2%	879	820	7.2%	513	258	98.8%	(1,517)	(1,524)	(0.5)%	4,454	4,126	7.9%
As % of net sales	36.0%	37.5%	—	36.6%	34.8%	—	27.1%	17.0%	—	—	—	—	26.2%	25.7%	—
Financial income and expenses	—	—	—	—	—	—	—	—	—	—	—	—	(130)	(105)	—
Income tax expenses	—	—	—	—	—	—	—	—	—	—	—	—	(918)	(865)	—
Tax rate**	—	—	—	—	—	—	—	—	—	—	—	—	22.0%	22.0%	—
Business net income	4,449	4,419	0.7%	879	820	7.2%	513	258	98.8%	(1,517)	(1,524)	(0.5)%	3,406	3,156	7.9%
As % of net sales	35.0%	36.5%	—	36.6%	34.8%	—	27.1%	17.0%	—	—	—	—	20.0%	19.6%	—
Business earnings / share (in euros)***	2.73	2.53	7.9%	2.73	2.53	7.9%	2.73	2.53	7.9%	2.73	2.53	7.9%	2.73	2.53	7.9%

*** 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 1,247.2 million in the first half 2019 and 1,247.8 million in the first half 2018.

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

Appendix 3: Consolidated income statements

€ million	Q2 2019	Q2 2018	H1 2019	H1 2018
Net sales	8,628	8,176	17,019	16,074
Other revenues	352	305	674	533
Cost of sales	(2,767)	(2,720)	(5,385)	(5,265)
Gross profit	6,213	5,761	12,308	11,342
Research and development expenses	(1,587)	(1,475)	(2,972)	(2,755)
Selling and general expenses	(2,459)	(2,507)	(4,835)	(4,819)
Other operating income	209	298	273	323
Other operating expenses	(300)	(109)	(466)	(165)
Amortization of intangible assets	(559)	(541)	(1,116)	(999)
Impairment of intangible assets	(1,835)	(98)	(1,840)	(101)
Fair value remeasurement of contingent consideration	130	66	190	10
Restructuring costs and similar items	(426)	(416)	(747)	(607)
Other gains and losses, and litigation ⁽¹⁾	317	(18)	317	(67)
Operating income	(297)	961	1,112	2,162
Financial expenses	(138)	(107)	(244)	(202)
Financial income	42	—	94	97
Income before tax and associates and joint ventures	(393)	854	962	2,057
Income tax expense	242	(110)	(13)	(297)
Share of profit/(loss) of associates and joint ventures	69	45	116	75
Net income excluding the exchanged/held-for-exchange Animal Health business	(82)	789	1,065	1,835
Net income/(loss) of the exchanged/held-for-exchange Animal Health business	—	1	—	—
Net income	(82)	790	1,065	1,835
Net income attributable to non-controlling interests	5	28	15	57
Net income attributable to equity holders of Sanofi	(87)	762	1,050	1,778
Average number of shares outstanding (million)	1,248.5	1,247.4	1,247.2	1,247.8
Earnings per share excluding the exchanged/held-for-exchange Animal Health business (in euros)	(0.07)	0.61	0.84	1.42
IFRS Earnings per share (in euros)	(0.07)	0.61	0.84	1.42

(1) In 2019, net gain of €317 million mainly related to litigation. In 2018, separation costs for the European Generics business divestiture.

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

€ million	Q2 2019	Q2 2018	Change
Net income attributable to equity holders of Sanofi	(87)	762	(111.4)%
Amortization of intangible assets ⁽¹⁾	559	541	
Impairment of intangible assets ⁽²⁾	1,835	98	
Fair value remeasurement of contingent consideration	(130)	(66)	
Expenses arising from the impact of acquisitions on inventories	—	69	
Other expenses related to business combinations	—	8	
Restructuring costs and similar items	426	416	
Other gains and losses, and litigation ⁽³⁾	(317)	18	
Effects of IFRS 16 on Lease contracts ⁽⁴⁾	5	—	
Tax effect of the items listed above :	(678)	(290)	
<i>Amortization and impairment of intangible assets</i>	<i>(573)</i>	<i>(153)</i>	
<i>Fair value remeasurement of contingent consideration</i>	<i>28</i>	<i>17</i>	
<i>Expenses arising from the impact of acquisitions on inventories</i>	<i>—</i>	<i>(17)</i>	
<i>Other expenses related to business combinations</i>	<i>—</i>	<i>1</i>	
<i>Restructuring costs and similar items</i>	<i>(102)</i>	<i>(131)</i>	
<i>Other tax effects</i>	<i>(31)</i>	<i>(7)</i>	
Other tax items ⁽⁵⁾	—	(27)	
Restructuring costs of associates and joint ventures, and expenses arising from the impact of acquisitions on associates and joint ventures	28	30	
Animal Health items	—	(1)	
Business net income	1,641	1,558	5.3%
IFRS earnings per share⁽⁶⁾ (in euros)	(0.07)	0.61	

(1) Of which related to amortization expense generated by the remeasurement of intangible assets as part of business combinations: €533 million in the second quarter of 2019 and €509 million in the second quarter of 2018.

(2) In 2019, of which Eloctate impairment.

(3) In 2019, net gain of €317 million mainly related to litigation. In 2018, separation costs for the European Generics business divestiture.

(4) Impact of new lease standard IFRS 16, is effective January 1, 2019 using the modified retrospective transition method (no restatement of prior periods), since Business.

(5) In 2018, mainly due to US tax reform.

(6) Based on an average number of shares outstanding of 1,248.5 million in the second quarter of 2019 and 1,247.4 million in the second quarter of 2018.

€ million	H1 2019	H1 2018	Change
Net income attributable to equity holders of Sanofi	1,050	1,778	(40.9)%
Amortization of intangible assets ⁽¹⁾	1,116	999	
Impairment of intangible assets ⁽²⁾	1,840	101	
Fair value remeasurement of contingent consideration	(190)	(10)	
Expenses arising from the impact of acquisitions on inventories	3	99	
Other expenses related to business combinations	—	10	
Restructuring costs and similar items	747	607	
Other gains and losses, and litigation ⁽³⁾	(317)	67	
Effects of IFRS 16 on Lease contracts ⁽⁴⁾	9	—	
Tax effect of the items listed above:	(905)	(475)	
<i>Amortization and impairment of intangible assets</i>	<i>(711)</i>	<i>(275)</i>	
<i>Fair value remeasurement of contingent consideration</i>	<i>24</i>	<i>11</i>	
<i>Expenses arising from the impact of acquisitions on inventories</i>	<i>—</i>	<i>(23)</i>	
<i>Restructuring costs and similar items</i>	<i>(197)</i>	<i>(183)</i>	
<i>Other tax effects</i>	<i>(21)</i>	<i>(5)</i>	
Other tax items ⁽⁵⁾	—	(93)	
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	53	74	
Business net income	3,406	3,156	7.9%
IFRS earnings per share⁽⁶⁾ (in euros)	0.84	1.42	

(1) Of which related to amortization expense generated by the remeasurement of intangible assets as part of business combinations: €1,060 million in the first half 2019 and €934 million in the first half 2018.

(2) In 2019, of which Elocate impairment.

(3) In 2019, net gain of €317 million mainly related to litigation. In 2018, separation costs for the European Generics business divestiture.

(4) Impact of new lease standard IFRS 16, is effective January 1, 2019 using the modified retrospective transition method (no restatement of prior periods), since Business Net Income remains reported as previously under IAS 17 and related interpretations for comparison purposes.

(5) In 2018, mainly due to US tax reform

(6) Based on an average number of shares outstanding of 1,247.2 million in the first half 2019 and 1,247.8 million in the first half 2018.

Appendix 5: Change in net debt

€ million	H1 2019	H1 2018
Business net income	3,406	3,156
Depreciation, amortization and impairment of property, plant and equipment and software	647	591
Gains and losses on disposals of non-current assets, net of tax	(63)	(216)
Other non cash items	377	151
Operating cash flow before changes in working capital ⁽¹⁾	4,367	3,682
Changes in working capital ⁽¹⁾	(833)	(1,139)
Acquisitions of property, plant and equipment and software	(684)	(689)
Free cash flow ⁽¹⁾	2,850	1,854
Acquisitions of intangible assets excluding software	(115)	(77)
Acquisitions of investments in consolidated undertakings including assumed debt	(122)	(12,872)
Restructuring costs and similar items paid	(705)	(414)
Proceeds from disposals of property, plant and equipment, intangible assets and other non-current assets net of tax	868	489
Issuance of Sanofi shares	58	19
Dividends paid to shareholders of Sanofi	(3,834)	(3,773)
Acquisition of treasury shares	(9)	(730)
Transactions with non-controlling interests including dividends	(9)	(18)
Foreign exchange impact	(60)	(210)
Net cash-flow from the swap between BI - CHC and Sanofi Animal Health business	—	5
Other items	1	(322)
Change in net debt	(1,077)	(16,049)

(1) Excluding restructuring costs and similar items.

Appendix 6: Simplified consolidated balance sheet

ASSETS € million	June 30, 2019	Dec 31, 2018	LIABILITIES & EQUITY € million	June 30, 2019	Dec 31, 2018
			Equity attributable to equity holders of Sanofi	56,353	58,876
			Equity attributable to non-controlling interests	165	159
			Total equity	56,518	59,035
			Long-term debt	21,087	22,007
Property, plant and equipment - Owned assets	9,606	9,651	Long-term lease liability	958	—
Right of use	1,105	—	Non-current liabilities related to business combinations and to non-controlling interests	739	963
Intangible assets (including goodwill)	63,516	66,124	Provisions and other non-current liabilities	9,099	8,613
Non-current financial assets & investments in associates and deferred tax assets	10,934	10,986	Deferred tax liabilities	2,938	3,414
Non-current assets	85,161	86,761	Non-current liabilities	34,821	34,997
			Accounts payable & Other current liabilities	14,282	14,402
			Current liabilities related to business combinations and to non-controlling interests	273	341
Inventories, accounts receivable and other current assets	18,572	17,654	Short-term lease liability	240	—
Cash and cash equivalents	6,742	6,925	Short-term debt and current portion of long-term debt	4,411	2,633
Current assets	25,314	24,579	Current liabilities	19,206	17,376
Assets held for sale or exchange	70	68	Liabilities related to assets held for sale or exchange	—	—
Total ASSETS	110,545	111,408	Total LIABILITIES & EQUITY	110,545	111,408

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 Q2 2019 sales

Currency	Q2 2019
US \$	34.2%
Euro €	22.5%
Chinese Yuan	8.2%
Japanese Yen	5.2%
Brazilian Real	2.6%
Russian Ruble	1.9%
Australian \$	1.7%
Mexican Peso	1.6%
British Pound	1.5%
Canadian \$	1.5%
Others	19.1%

Currency average rates

	Q2 2018	Q2 2019	Change
€/\$	1.19	1.12	-5.7%
€/Yen	130.15	123.48	-5.1%
€/Yuan	7.60	7.68	+1.1%
€/Real	4.30	4.40	+2.5%
€/Ruble	74.02	72.56	-2.0%

Appendix 8: R&D Pipeline

■ Immuno-inflammation
■ Oncology
■ Rare Diseases

■ Rare Blood Disorders
■ MS & Neuro
■ Diabetes

■ Cardiovascular & metabolism
■ Vaccines

New Molecular Entities^(*)

Phase 1 (Total : 19)		Phase 2 (Total : 7)		Phase 3 (Total : 6)	Registration (Total : 2)
SAR441344 ^{(**)(1)} Anti-CD40L mAb Multiple Sclerosis	BIVV001 ^{(**)(5)} rFVIII Fc – vWF – XTEN ⁽⁶⁾ Hemophilia A	SAR440340 ^{(**)(12)} Anti-IL33 mAb Atopic Dermatitis	SAR422459 ^{(**)(14)} ABCA4 gene therapy Stargardt Disease	avalglucosidase alfa Neo GAA Pompe Disease	isatuximab Anti-CD38 mAb 3L RRMM (ICARIA) (U.S., EU)
SAR408701 Maytansin-loaded anti-CEACAM5 mAb, Solid Tumors	ST400 ^{(**)(7)} Ex Vivo ZFN Gene-Edited Cell Therapy, Beta thalassemia	SAR156597 IL4/IL13 bispecific mAb Systemic Scleroderma	SAR442168 ^{(**)(15)} BTK inhibitor Multiple Sclerosis	venglustat Oral GCS inhibitor ADPKD ⁽¹⁶⁾	SAR341402 (insulin aspart) Rapid acting insulin Type 1/2 Diabetes (EU)
SAR439459 anti-TGFb mAb Advanced Solid Tumors	BIVV003 ^{(**)(7)} Ex Vivo ZFN Gene-Edited Cell Therapy, Sickle Cell Disease	R olipudase alfa rhASM AS Deficiency ⁽¹³⁾	HIV Viral vector prime & rgp120 boost vaccine	fitusiran RNAi targeting anti-thrombin Hemophilia A and B	
O REGN5458 ^{(**)(2)} Anti-BCMA-CD3 bispecific mAb Relapsing Refractory MM	SAR443060 ^{(**)(8)} RIPK1 inhibitor ⁽⁹⁾ Amyotrophic Lateral Sclerosis	SAR339375 miRNA-21 Alport Syndrome		sutimlimab Anti Complement C1s mAb Cold Agglutinin Disease	
O REGN4018 ^{(**)(2)} Anti-MUC16-CD3 bispecific mAb Ovarian Cancer	Next Gen PCV ^{(**)(10)} Pneumococcal Conjugate Vaccines			efpeglenatide ^{(**)(17)} Long-acting GLP-1 agonist Type 2 Diabetes	
SAR439859 SERD Metastatic Breast Cancer	Herpes Simplex Virus Type 2 HSV-2 therapeutic vaccine			nirsevimab ^{(**)(18)} Respiratory syncytial virus Monoclonal Antibody	
SAR442720 ^{(**)(3)} SHP2 inhibitor Solid Tumors	Respiratory syncytial virus Infants 4-month and older Vaccines				
SAR440234 T cell engaging multi spe mAb Leukemia	SAR441169 ^{(**)(11)} RORC (ROR gamma T) antagonist, Psoriasis				
SAR441000 ^{(**)(4)} Cytokine mRNA Solid tumors	SAR441255 Trigonal GLP1R/GIPR/GCGR agonist, Obesity / T2 Diabetes				
SAR441236 Tri-specific neutralizing mAb HIV					

- (1) Developed in collaboration with Immunext
- (2) Regeneron product for which Sanofi has opt-in rights
- (3) Developed in collaboration with REVOLUTION Medicines
- (4) Developed in collaboration with BioNtech
- (5) Sanofi product for which Sobi has opt-in rights in SOBI territories
- (6) Recombinant Coagulation Factor VIII Fc – von Willebrand Factor – XTEN Fusion protein
- (7) Developed in collaboration with Sangamo
- (8) Developed in collaboration with Denali
- (9) Receptor-interacting serine/threonine-protein kinase 1
- (10) Developed in collaboration with SK
- (11) Developed in collaboration with Lead Pharma
- (12) Developed in collaboration with Regeneron
- (13) Acid Sphingomyelinase Deficiency also known as Niemann Pick type B
- (14) Identification of out-licensing partner ongoing
- (15) Developed in collaboration with Principia
- (16) Autosomal Dominant Polycystic Kidney Disease
- (17) Developed in collaboration with Hanmi
- (18) Developed in collaboration with AstraZeneca

O : Opt-in rights products for which rights have not been exercised yet

R : Registrational Study (other than Phase 3)

(*) 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

Additional Indications^(*)

Phase 1 (Total : 5)	Phase 2 (Total : 17)		Phase 3 (Total : 23)		Registration (Total : 4)
SAR439459 + cemiplimab^{(**)(1)} Anti-TGFB mAb + PD-1 inh mAb Advanced Solid Tumors	dupilumab^{(**)(1)} Anti-IL4Rα mAb Grass Immunotherapy	isatuximab + cemiplimab^{(**)(1)} Anti-CD38 mAb + PD-1 inh mAb Relapsing Refractory MM	Dupixent^{®(**) (1)} Anti-IL4Rα mAb Asthma 6 - 11 years old	isatuximab Anti-CD38 mAb Newly Diag. MM Te ⁽⁹⁾ (GMMG)	Dupixent^{®(**) (1)} dupilumab AD 12 – 17 years old (EU)
cemiplimab^{(**)(1)} + REGN4018^{(2)(**)} PD-1 inh mAb + Anti-MUC16- CD3 bispe mAb - Ovarian Cancer	R sarilumab^{(**)(1)} Anti-IL6R mAb Polyarticular JIA ⁽⁶⁾	isatuximab + cemiplimab^{(**)(1)} Anti-CD38 mAb + PD-1 inh mAb Advanced Malignancies	dupilumab^{(**)(1)} Anti-IL4Rα mAb Eosinophilic Esophagitis	isatuximab Anti-CD38 mAb 1-3L RRMM (IKEMA)	dupilumab^{(**)(1)} Anti-IL4Rα mAb CRSwNP ⁽¹⁰⁾ (EU)
SAR439859 + palbociclib⁽³⁾ SERD + CDK4/6 inh Metastatic Breast Cancer	sarilumab^{(**)(1)} Anti-IL6R mAb Systemic Juvenile Arthritis	isatuximab + cemiplimab^{(**)(1)} Anti-CD38 mAb + PD-1 inh mAb Lymphoma	Dupixent^{®(**) (1)} dupilumab AD 6 – 11 years old	Aubagio[®] teriflunomide RMS – Pediatric	Fluzone[®] QIV HD Quadrivalent inactivated Influenza vaccine - High dose
sutimlimab Anti Complement C1s mAb ImmuneThrombocytopenic Purpura	SAR440340^{(**)(1)} Anti-IL33 mAb COPD	isatuximab + atezolizumab⁽⁷⁾ Anti-CD38 mAb + PD-L1 inh mAb mCRC	Dupixent^{®(**) (1)} dupilumab AD 6 months - 5 years old	Lemtrada[®] alemtuzumab RRMS - Pediatric	MenQuadfi[™] Adv. Gen. Meningococcal ACYW conjugate vaccine, 2y+ (U.S.)
SAR443060⁽⁴⁾ RIPK1 inhibitor ⁽⁵⁾ Multiple sclerosis	dupilumab^{(**)(1)} Anti-IL4Rα mAb Peanut Allergy - Pediatric	isatuximab + atezolizumab⁽⁷⁾ Anti-CD38 mAb + PD-L1 inh mAb Solid Tumors	sarilumab^{(**)(1)} Anti-IL6R mAb Giant Cell Arteritis	Cerdelga[®] eliglustat Gaucher T1, ERT switch Pediatric	
	SAR440340^{(**)(1)} Anti-IL33 mAb Asthma	venglustat Oral GCS inhibitor Fabry Disease	sarilumab^{(**)(1)} Anti-IL6R mAb Polymyalgia Rheumatica	Praluent^{®(**) (1)} alirocumab LDL-C reduction - Pediatric	
	R cemiplimab^{(**)(1)} PD-1 inhibitor mAb 2L Basal Cell Carcinoma	venglustat Oral GCS inhibitor Gaucher Type 3	dupilumab^{(**)(1)} Anti-IL4Rα mAb COPD	MenQuadfi[™] Adv. Gen. Meningococcal ACYW conjugate vaccine, EU 1y+, US/EU 6w+	
	isatuximab Anti-CD38 mAb 1-2L AML / ALL pediatrics	venglustat Oral GCS inhibitor Gaucher related Parkinson's Dis.	cemiplimab^{(**)(1)} PD-1 inh mAb 1L NSCLC	Pediatric pentavalent vaccine DTP-Polio-Hib Japan	
		SP0173 Tdap booster US	cemiplimab^{(**)(1)} + chemotherapy PD-1 inh mAb + chemotherapy 1L NSCLC	Shan 6 DTP-HepB-Polio-Hib Pediatric hexavalent vaccine	
			cemiplimab^{(**)(1)} PD-1 inhibitor mAb 2L Cervical Cancer	VerorabVax[®] (VRVg) Purified vero rabies vaccine	
			cemiplimab^{(**)(1)} PD-1 inhibitor mAb Adjuvant in CSCC	isatuximab Anti-CD38 mAb 1L Newly Diag. MM Ti ⁽⁸⁾ (IMROZ)	
			fitusiran RNAi targeting anti-thrombin Hemophilia A and B pediatric		

- (1) Developed in collaboration with Regeneron
- (2) Regeneron product for which Sanofi has opt-in rights
- (3) Pfizer product (palbociclib)
- (4) Developed in collaboration with Denali
- (5) Receptor-interacting serine/threonine-protein kinase 1
- (6) JIA: Juvenile Idiopathic Arthritis
- (7) Studies in collaboration with Roche (atezolizumab)
- (8) Transplant ineligible
- (9) Transplant eligible
- (10) Chronic rhinosinusitis with nasal polyps
- (*) 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

O : Opt-in rights products for which rights have not been exercised yet
R : Registrational Study (other than Phase 3)

Expected Submission Timeline⁽¹⁾

NMES

ADDITIONAL INDICATIONS

	2019 ⁽²⁾	2020 ⁽²⁾	2021 ⁽²⁾	2022 ⁽²⁾	2023 ⁽²⁾ and beyond			
		fitusiran RNAi anti-thrombin Hemophilia A/B	avalglucosidase alfa NeoGAA Pompe Disease		SAR156597 IL4/IL13 bispecific mAb Systemic Scleroderma	nirsevimab ^{(7)(**)} Respiratory Syncytial Virus mAb		
		sutimlimab Anti Comp C1s mAb Cold Agglutinin Disease	olipudase alfa rhASM ASD ⁽⁴⁾	efpeglenatide ^{(**)(5)} LA GLP1-R agonist Type 2 Diabetes	venglustat Oral GCS inhibitor ADPKD ⁽⁶⁾	SAR440340 ^{(**)(3)} Anti-IL33 mAb Atopic Dermatitis	HIV Viral vector prime & rgp120 boost vaccine	
	MenQuadfi TM Adv. gen. meningococcal EU: 12m+	Dupilumab ^{(**)(3)} dupilumab AD 6 - 11 years old	Aubagio [®] teriflunomide Relapsing MS – Pediatric	isatuximab Anti-CD38 mAb (IMROZ) 1L Newly Diag MM T1	Dupilumab ^{(**)(3)} dupilumab AD 6 m - 5 y old	sarilumab ^{(**)(3)} Anti-IL6R mAb Giant Cell Arteritis	SAR440340 ^{(**)(3)} Anti-IL33 mAb COPD	isatuximab Anti-CD38 mAb Newly Diag MM Te (GMMG)
		isatuximab Anti-CD38 mAb 1-3L RRMM (IKEMA)	Shan 6 DTP-HepB-Polio-Hib Ped hexavalent vaccine	cemiplimab ^{(**)(3)} PD-1 inhibitor mAb 2L Cervical Cancer	Dupilumab ^{(**)(3)} Anti-IL4Rα mAb Asthma 6 - 11 y old	sarilumab ^{(**)(3)} Anti-IL6R mAb Polym.Rheumatica	SAR440340 ^{(**)(3)} Anti-IL33 mAb Asthma	venglustat Oral GCS inhibitor GrPD ⁽⁸⁾
		cemiplimab ^{(**)(3)} PD-1 inhibitor mAb 2L BCC		cemiplimab ^{(**)(3)} PD-1 inhibitor mAb 1L NSCLC	venglustat Oral GCS inhibitor Gaucher Type 3	sarilumab ^{(**)(3)} Anti-IL6R mAb Systemic Juv. Arthritis	dupilumab ^{(**)(3)} Anti-IL4Rα mAb Peanut Allergy - Ped	venglustat Oral GCS inhibitor Fabry Disease
			sarilumab ^{(**)(3)} Anti-IL6R mAb Polyarticular JIA	SP0173 Tdap booster US	Cerdelga [®] Eliglustat, Gaucher T1, ERT switch, Ped	Pediatric pentavalent vaccine DTP-Polio-Hib (Japan)	VerorabVax [®] (VRVg) Purified vero rabies vaccine	
				Praluent [®] ^{(**)(3)} alirocumab LDL-C reduction – Ped	MenQuadfi TM Adv. gen meningococcal U.S. & EU 6w+	dupilumab ^{(**)(3)} Anti-IL4Rα mAb Eosinophilic Esophagitis		
					Lemtrada [®] alemtuzumab RRMS ped	dupilumab ^{(**)(3)} Anti-IL4Rα mAb COPD		
					isatuximab Anti-CD38 mAb 1-2L AML / ALL ped			

- (1) Excluding Phase 1
- (2) Projects within a specified year are not arranged by submission timing
- (3) Developed in collaboration with Regeneron
- (4) Acid Sphingomyelinase Deficiency
- (5) Developed in collaboration with Hanmi
- (6) Autosomal Dominant Polycystic Kidney Disease
- (7) Developed in collaboration with AstraZeneca
- (8) 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 Q1 2019

	Additions & Moves		Removals from Sanofi portfolio	
Registration	isatuximab Anti-CD38 mAb 3L RRMM (ICARIA) (U.S.,EU)	SAR341402, insulin aspart Rapid acting insulin Type 1/2 Diabetes (EU)	Zynquista™^{(**)(3)} (sotagliflozin) Oral SGLT-1&2 inhibitor Type 1 Diabetes (U.S.)	
	MenQuadfi™ Advanced generation meningococcal ACYW conjugate vaccine 2y+ (U.S.)			
Phase 3	dupilumab^{(**)(1)} Anti-IL4R α mAb COPD	cemiplimab^{(**)(1)} PD-1 inhibitor mAb adjuvant in CSCC	sotagliflozin^{(**)(3)} Oral SGLT-1&2 inhibitor Type 2 Diabetes	
	nirsevimab^{(**)(2)} Respiratory syncytial virus Monoclonal Antibody	VerorabVax® (VRVg) Purified vero rabies vaccine	sotagliflozin^{(**)(3)} Oral SGLT-1&2 inhibitor Worsening Heart Failure in Diabetes	
	fitusiran RNAi targeting anti-thrombin Hemophilia A and B pediatric			
Phase 2				
Phase 1	SAR441236 Tri-specific neutralizing mAb HIV	SAR441255 Trigonal GLP1R/GIPR/GCGR agonist Obesity / Type 2 Diabetes		

(1) Developed in collaboration with Regeneron

(2) Developed in collaboration with AstraZeneca

(3) Developed in collaboration with Lexicon

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

Appendix 9: Expected R&D milestones

Products	Expected milestones	Timing
SAR439859 (SERD)	Proof of concept study read-out in metastatic Breast Cancer	Q3 2019
Dupixent [®] (^{**})(¹)	EU regulatory decision in Atopic Dermatitis in Adolescent patients	Q3 2019
sutimlimab	Proof of concept study read-out in refractory ITP ⁽²⁾	Q4 2019
Fluzone [®] QIV HD	U.S. regulatory decision for ≥ 65-year old age group	Q4 2019
sutimlimab	Pivotal trial read-out in Cold Agglutinin Disease	Q4 2019
Dupixent [®] (^{**})(¹)	Pivotal trial read-out in Atopic Dermatitis in 6-11 years	Q4 2019
SAR440340 (anti-IL33 mAb) ^{(**)(1)}	Proof of concept study read-out in Chronic Obstructive Pulmonary Disease	Q4 2019
dupilumab ^(**) (¹)	EU regulatory decision in Chronic Rhinosinusitis with Nasal Polyps	Q1 2020
isatuximab	Pivotal trial read-out in 1-3L RRMM (IKEMA)	Q1 2020
olipudase alfa	Pivotal trial read-out in Acid Sphingomyelinase Deficiency	Q1 2020
isatuximab	U.S. regulatory decision in 3L Relapsed-Refractory Multiple Myeloma	Q2 2020
isatuximab	EU regulatory decision in 3L Relapsed-Refractory Multiple Myeloma	Q2 2020
MenQuadfi [™]	U.S. regulatory decision for > 2 year old age group	Q2 2020
Fluzone [®] QIV HD	EU regulatory decision for ≥ 65-years old age group	Q2 2020
avalglucosidase alfa	Pivotal trial read-out in Pompe Disease	Q2 2020

(1) Developed in collaboration with Regeneron

(2) Immune Thrombocytopenic Purpura

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

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 second quarter and first half 2019

€ million	Q2 2019	H1 2019
Net sales	8,628	17,019
Effect of exchange rates	131	289
Company sales at constant exchange rates	8,497	16,730

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⁾),
- effects of IFRS16 on lease accounting,
- 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 a losses on disposals, and litigation**, which are defined in Notes B.19 and B.20. to our consolidated financial statements.