



SANOFI 

# Q1 2018 Results

April 27, 2018

# Forward Looking Statements

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This presentation 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, 2017. Other than as required by applicable law, Sanofi does not undertake any obligation to update or revise any forward-looking information or statements.

# Agenda

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## Key Highlights

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- Olivier Brandicourt - Chief Executive Officer

## Financial Results

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- Jérôme Contamine - Executive Vice President, Chief Financial Officer

## Q&A Session

- Olivier Charmeil - Executive Vice President, General Medicines & Emerging Markets
- Karen Linehan - Executive Vice President, Legal Affairs and General Counsel
- David Loew - Executive Vice President, Sanofi Pasteur
- Alan Main - Executive Vice President, Consumer Healthcare
- Stefan Oelrich - Executive Vice President, Diabetes & Cardiovascular
- Bill Sibold - Executive Vice President, Sanofi Genzyme
- Elias Zerhouni - President, Global R&D



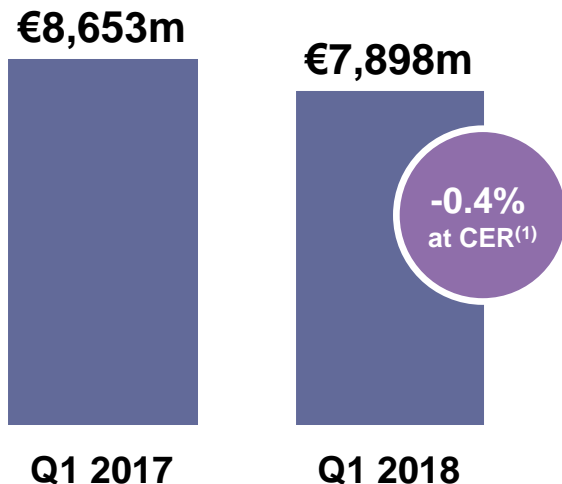
Olivier Brandicourt  
Chief Executive Officer



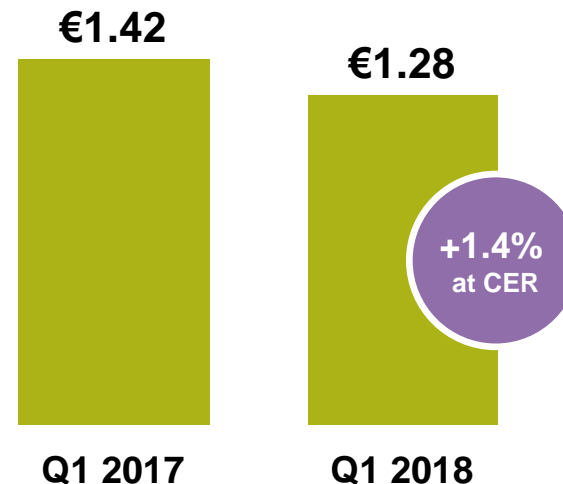
**KEY HIGHLIGHTS**

# Q1 Performance Reflects Anticipated Headwinds While Executing on Key Drivers for Growth Recovery in H2 2018

## Company Sales

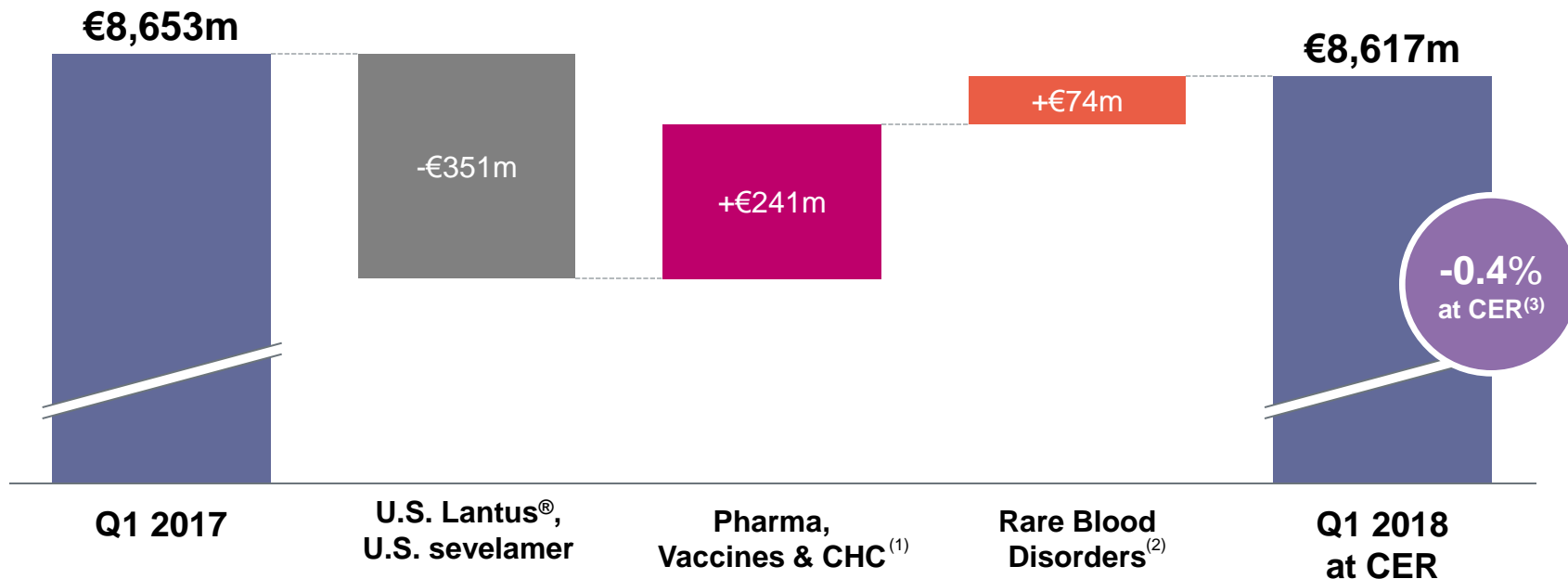


## Business EPS






# Contributions from Growth Drivers Anticipated to Increase in H2 2018 as Headwinds Expected to Subside

## Q1 2018 Company Sales



# Sanofi Genzyme Sales Continue to Grow Strongly and Surpassed Diabetes & Cardiovascular GBU in Q1 2018

## Q1 2018 Sales by Global Business Unit

		Growth at CER/CS <sup>(1)</sup>
<b>Company Sales</b>	<b>€7,898m</b>	<b>-1.1%</b>
 <b>Sanofi Genzyme (Specialty Care)<sup>(2)</sup></b>	<b>€1,460m</b>	<b>+11.2%<sup>(7)</sup></b>
 <b>Sanofi Pasteur (Vaccines)</b>	<b>€711m</b>	<b>-0.9%</b>
 <b>Diabetes &amp; Cardiovascular<sup>(2)</sup></b>	<b>€1,088m</b>	<b>-15.7%</b>
 <b>Consumer Healthcare<sup>(3)</sup></b>	<b>€1,238m</b>	<b>+2.0%</b>
 <b>General Medicines &amp; Emerging Markets<sup>(4,5,6)</sup></b>	<b>€3,401m</b>	<b>-1.5%</b>

(1) Growth at Constant Exchange Rates and Constant Structure adjusting for Bioerativ acquisition (consolidated from March 9, 2018)

(2) Does not include Emerging Markets sales

(3) Consumer Healthcare includes sales in Emerging Markets

(4) Includes Emerging Markets sales for Diabetes & Cardiovascular and Specialty Care







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

(6) Excluding global Consumer Healthcare sales and Vaccines

(7) Of which €64m in sales from Rare Blood Disorders. At CER growth was +16.2%

# Double Digit Growth in Specialty Care and Performance in EM Largely Offset Impact from LoE and Vaccines in Q1

## Q1 2018 Sales by Franchise

	Total Sales	Growth at CER/CS <sup>(1)</sup>	Developed Markets		Emerging Markets <sup>(3)</sup>	
			Sales	Growth at CER/CS <sup>(1)</sup>	Sales	Growth at CER/CS <sup>(1)</sup>
 Specialty Care	€1,710m	+12.0% <sup>(2)</sup>	€1,460m	+11.2% <sup>(2)</sup>	€250m	+16.9% <sup>(2)</sup>
 Vaccines	€711m	-0.9%	€471m	+10.9%	€240m	-18.4%
 Diabetes & Cardiovascular	€1,484m	-8.7%	€1,088m	-15.7%	€396m	+17.9%
 Consumer Healthcare	€1,238m	+2.0%	€829m	-3.5%	€409m	+14.4%
 Established Rx Products	€2,320m	-6.4%	€1,327m	-16.1%	€993m	+9.7%
 Generics	€435m	+0.9%	€256m	-0.8%	€179m	+3.0%

EM = Emerging Markets; LoE = Losses of Exclusivity

(1) Growth at Constant Exchange Rates and Constant Structure adjusting for Bioerativ acquisition (consolidated from March 9, 2018)

(2) At CER, growth was +16.3% for Total, +16.2% for Developed Markets and +16.9% for Emerging Markets

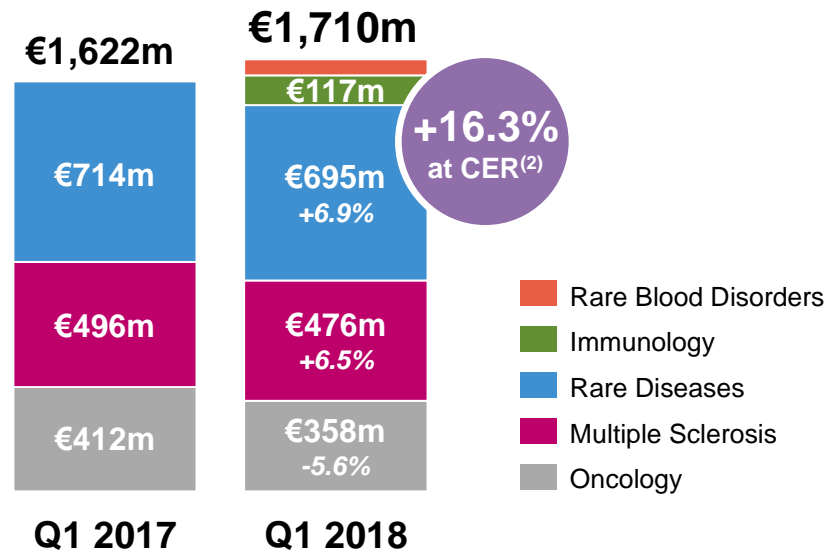
(3) Pharmaceutical sales were up +11.6% at CER in Emerging Markets in Q1 2018



# New Rare Blood Disorder and Immunology Franchises Expand Rapidly Growing Specialty Care Business

- Rare Blood Disorder franchise contributed €64m
  - Bioverativ sales consolidated as of March 9, 2018
- Dupixent® sales reached €107m
  - Strong underlying demand with TRx sequentially up 25%<sup>(1)</sup>
  - U.S. sales evolution affected by inventory movement and usual higher patient assistance program costs at start of the year
- Rare Disease franchise up +6.9% driven by double-digit growth in Gaucher and Pompe
- Multiple Sclerosis franchise up +6.5%
  - Aubagio® up +12% to €371m
  - Lemtrada® down -8.8% to €105m due to increased U.S. competition as well as unique dosing and durable effect

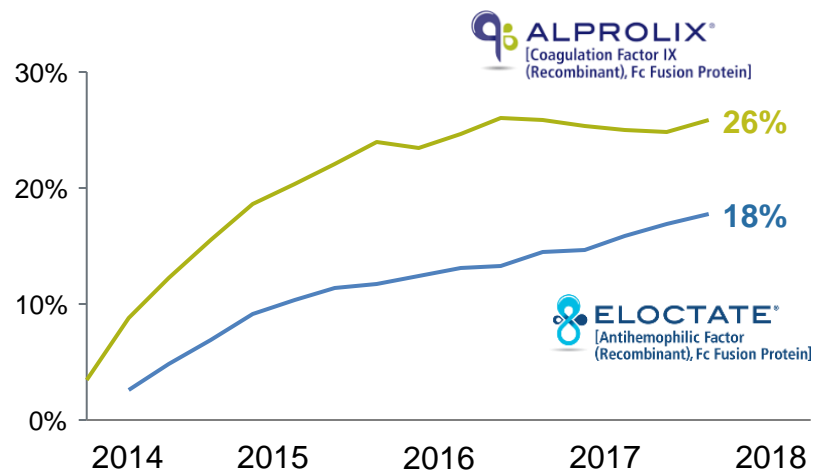
## Global Specialty Care Franchise Sales



# Strong Performance of Our Innovative Hemophilia Portfolio Positions Sanofi as a Leader in Rare Blood Disorders

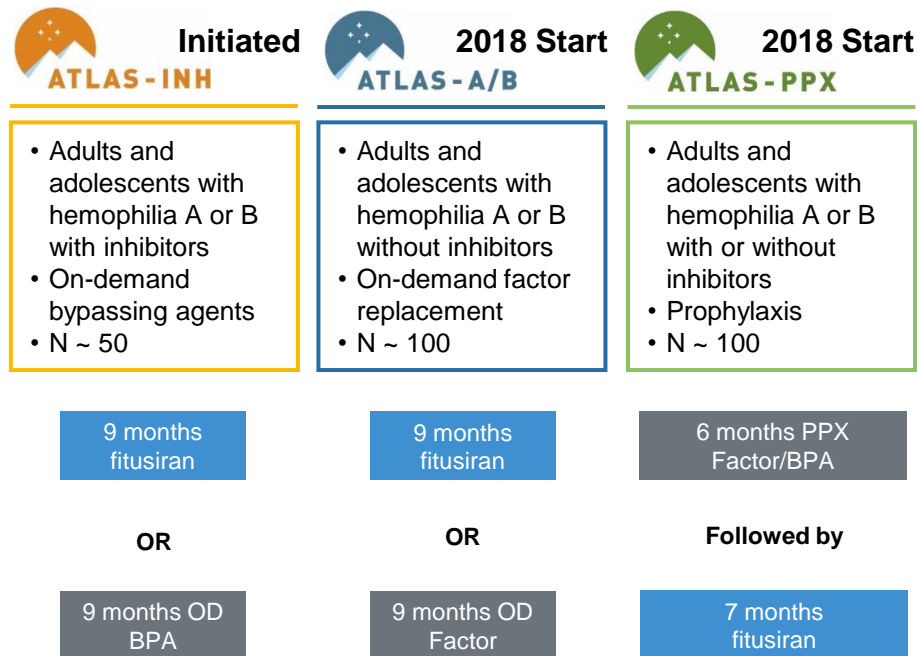
- Eloctate® and Alprolix® continue to change the hemophilia treatment paradigm
  - Eloctate® pro-forma growth: +27% at CER<sup>(1)</sup>
  - Alprolix® pro-forma growth: +12% at CER<sup>(1)</sup>
- Working towards roll-out in Emerging Markets
  - Launched in Colombia in March
- BIVV009 in CAgD<sup>(2)</sup> first patient dosed in Phase 3
- Tender offer to acquire Ablynx ongoing with initial acceptance period ending May 4, 2018

## Eloctate® and Alprolix® U.S. Patient Share Tracker<sup>(3)</sup>



# Advancing the Next Generation of Hemophilia Treatment Options with Fitusiran and BIVV001

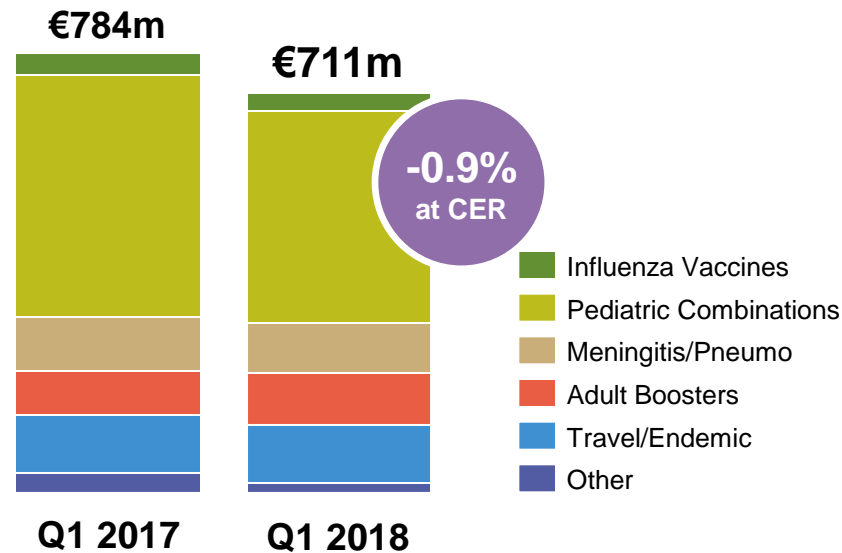
- Fitusiran Phase 3 reinitiated in hemophilia A and B patients
  - ATLAS-INH: 1<sup>st</sup> patient dosed
  - ATLAS-A/B and ATLAS-PPX: on-track for 2018 initiation
  - First Phase 3 read-out expected in H2 2019
- Bioverativ's hemophilia expertise and platform to be leveraged to support fitusiran development and launch
- New Phase 1 data on BIVV001, a next-generation EHL<sup>(1)</sup> Factor VIII therapy, to be presented at upcoming medical congress



# Strong Performance in Europe Nearly Offset Pentaxim® Supply Constraint in China

- Sanofi Pasteur sales of €711m (-0.9% at CER)
- European business delivers 38% growth supported by Repevax® recovery
  - Pediatric vaccines up 26% to €71m
- Pediatric combination franchise down -4.6% due to previously communicated impact from China supply constraint

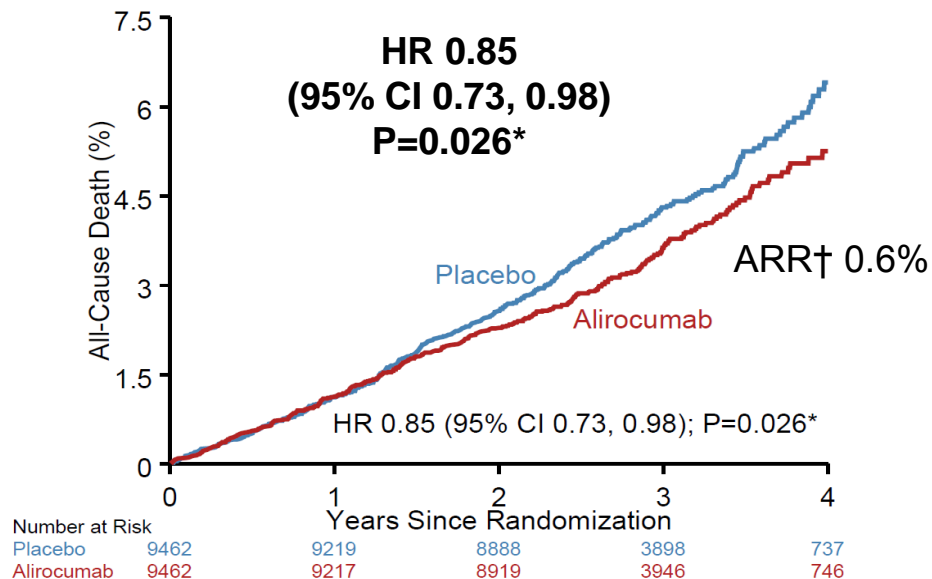
## Sanofi Pasteur Sales



# DCV Building on Positive Praluent® ODYSSEY OUTCOMES Results<sup>(1)</sup> while Managing Challenges in U.S. Diabetes

- Praluent® ODYSSEY OUTCOMES study
  - 15% reduction in MACE<sup>(2)</sup> vs placebo, p=0.0003
  - Associated with 15% reduction in all-cause death, nominal p=0.026
  - Safety profile consistent with previous findings
- Praluent® payer discussions ongoing
- Global Diabetes sales declined in line with guidance
  - Strong growth in Emerging Markets, up +18%
  - U.S. sales down -27%
  - Europe sales broadly stable

## Praluent® (alirocumab) All-Cause Death<sup>(1,3)</sup>



DCV = Diabetes and Cardiovascular Global Business Unit

\*Nominal P-value †Based on cumulative incidence

(1) ODYSSEY OUTCOMES data have not been reviewed by any regulatory authorities

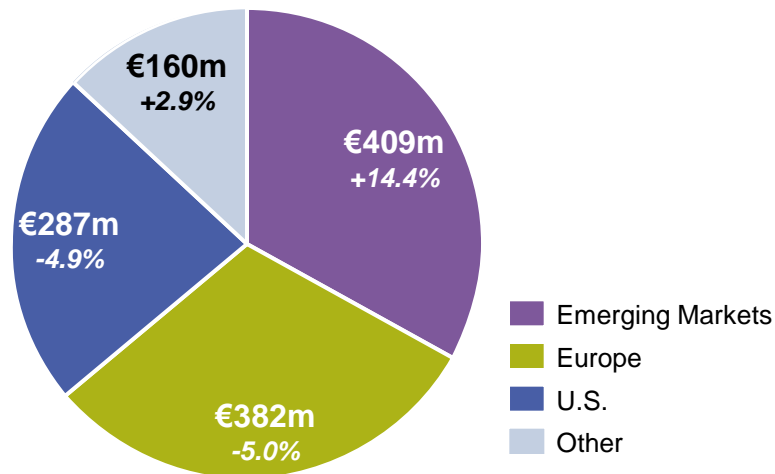
(2) MACE: Major Adverse Cardiovascular Events

(3) Data from Praluent ODYSSEY OUTCOMES Study presented at American College of Cardiology – 67<sup>th</sup> Annual Meeting – Orlando, U.S.

# Consumer Healthcare Franchise Delivers Growth Supported by Strong Performance in Emerging Markets

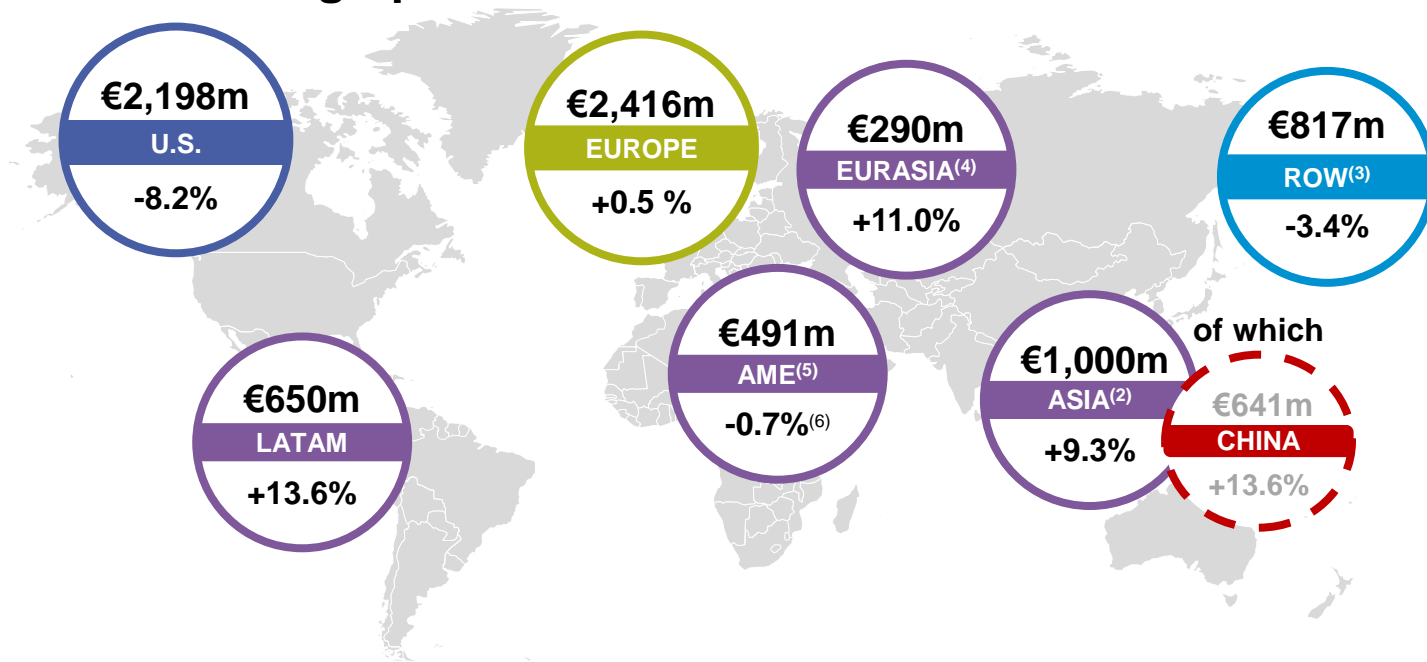
- CHC franchise sales up +2.0% to €1,238m
- Emerging Markets +14% growth primarily driven by sales Latin America
- Developed Markets declined -3.5% on high base of comparison
  - Xyzal® 24H inventory build-up for Q1 2017 U.S. launch
  - European sales down -5.0% due to strong and early Cough and Cold season in Q1 2017

## Q1 2018 CHC Sales by Geography



# Leadership in Emerging Markets<sup>(1)</sup> Drives 8.3% Growth in Q1 2018

## Geographic Breakdown of Q1 2018 Sales



All growth at CER unless specified otherwise

(1) World excluding U.S., Canada, Europe, Japan, South Korea, Australia, New Zealand and Puerto Rico

(2) Includes China

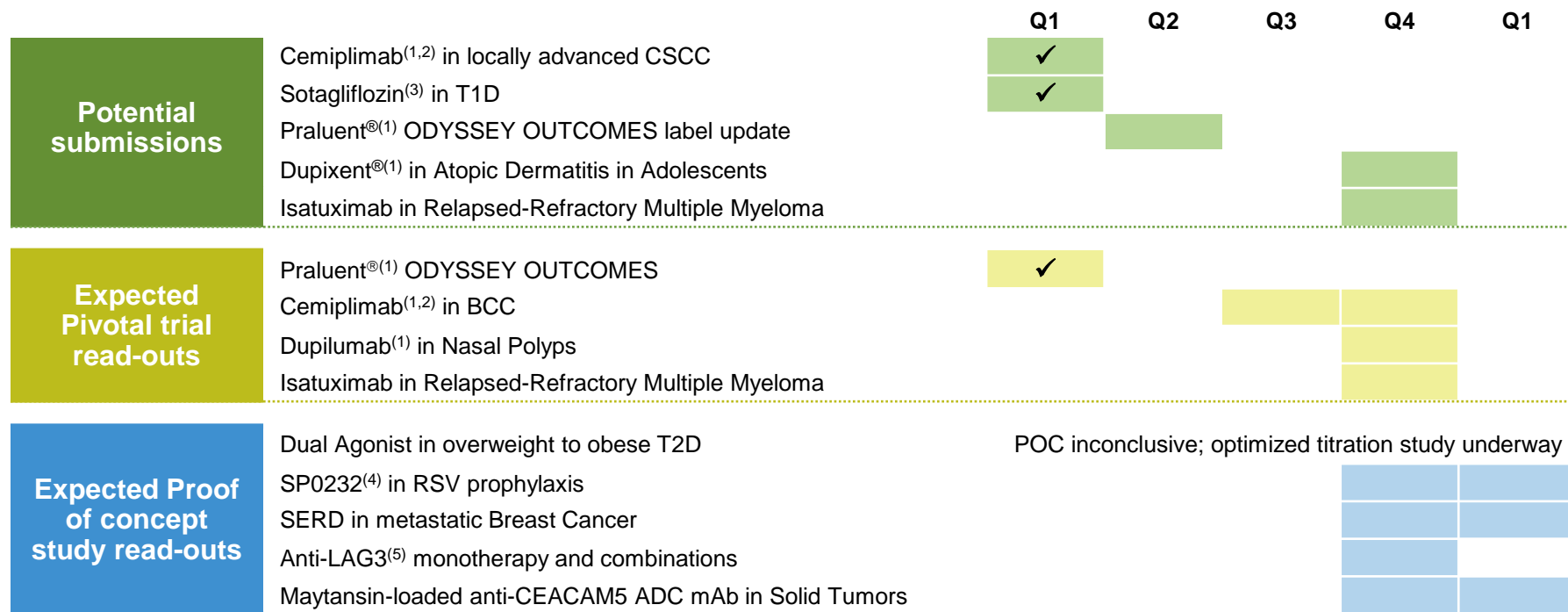
(3) RoW: Japan, South Korea, Canada, Australia, New Zealand and Puerto Rico

(4) Eurasia: Russia, Ukraine, Georgia, Belarus, Armenia and Turkey

(5) AME: Africa and Middle East

(6) Excluding Maphar deconsolidation in Morocco, AME Q1 2018 growth was +4%

# Key R&D Milestones Over Next 12 Months







Jérôme Contamine  
Executive Vice President,  
Chief Financial Officer

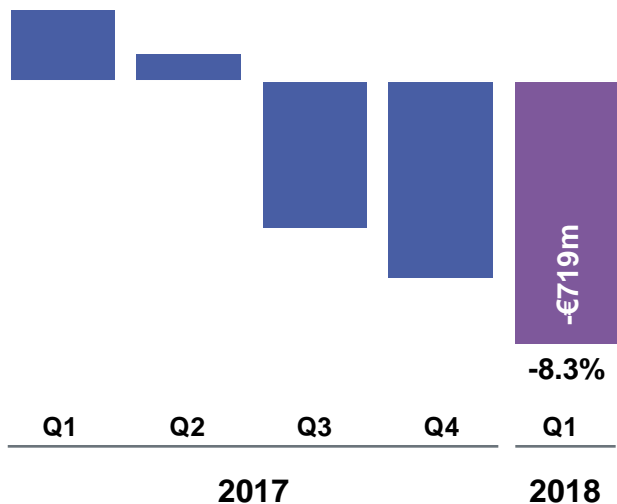


**FINANCIAL RESULTS**

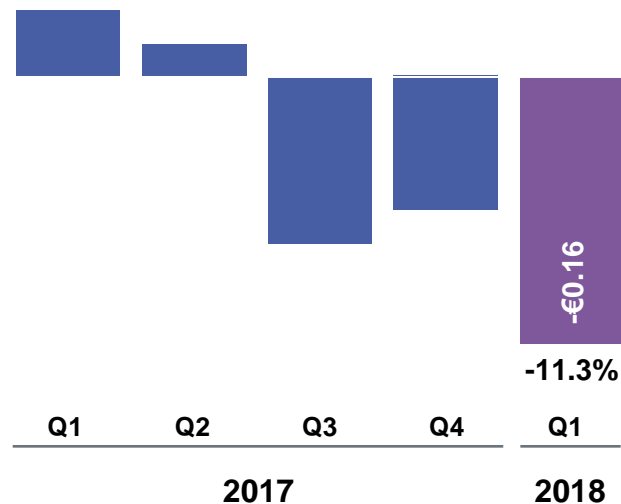
# Currency Impact on Sales and EPS Intensified in Q1 but Expected to Progressively Ease Over the Course of 2018

## Currency Impact

### Company Sales<sup>(1)</sup>



### Business EPS

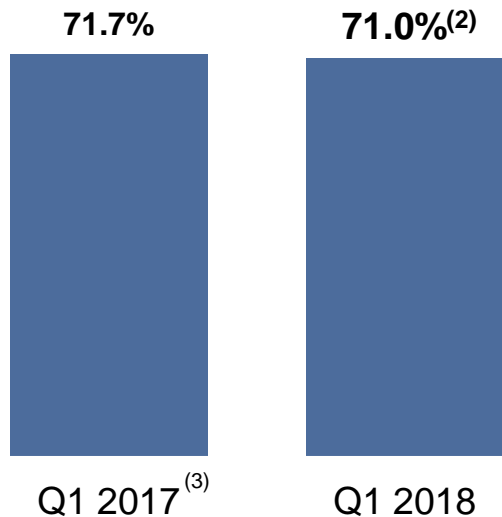


# BOI Reflects U.S. LoEs and Investments in R&D and SG&A to Drive Anticipated Growth Phase Starting in H2 2018

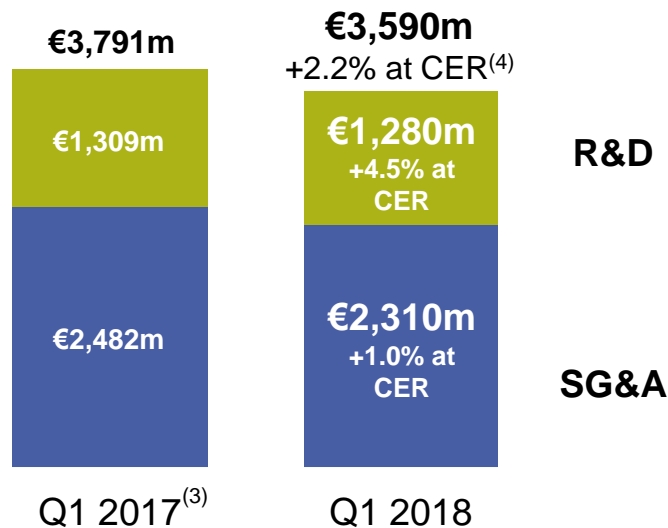
€m	Q1 2018	Q1 2017 <sup>(1)</sup>	% Change (CER)
<b>Net Sales</b>	<b>7,898</b>	<b>8,653</b>	<b>-0.4%</b>
Other revenues	228	249	+4.4%
Gross Profit	5,611	6,205	-0.8%
<i>Gross margin %</i>	<i>71.0%</i>	<i>71.7%</i>	
R&D	(1,280)	(1,309)	+4.5%
SG&A	(2,310)	(2,482)	+1.0%
Other current operating income & expenses	(31)	34	-
Share of profit/loss of associates	74	24	-
Minority interests	(30)	(35)	-
<b>Business Operating Income</b>	<b>2,034</b>	<b>2,437</b>	<b>-6.5%</b>
<i>Business operating margin</i>	<i>25.8%</i>	<i>28.2%</i>	

# Q1 2018 Gross Margin Declined While Disciplined Expense Management Led to Slight Operating Expense Growth

## Gross Margin Ratio<sup>(1)</sup>



## Operating Expenses



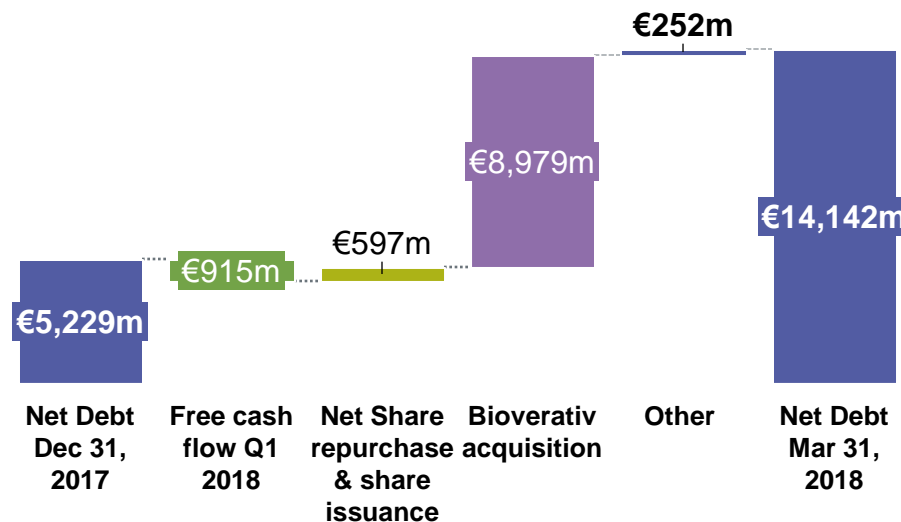
# Business EPS Growth at CER Benefited from Lower Tax Rate and Positive Financial Items in the Quarter

€m	Q1 2018	Q1 2017 <sup>(1)</sup>	% Change (reported €)	% Change (CER)
<b>Net Sales</b>	<b>7,898</b>	<b>8,653</b>	<b>-8.7%</b>	<b>-0.4%</b>
Gross Profit	5,611	6,205	-9.6%	-0.8%
Business Operating Income	2,034	2,437	-16.5%	-6.5%
<i>Business operating margin %</i>	25.8%	28.2%	-	-
<i>Effective tax rate</i>	22.0%	24.5%	-	-
Net Financial Income/(Expense)	2	(63)	-	-
<b>Total Business Net Income</b>	<b>1,598</b>	<b>1,790</b>	<b>-10.7%</b>	<b>+0.4%</b>
Average number of Shares	1,248.2	1,262.4	-	-
<b>Business EPS</b>	<b>€1.28</b>	<b>€1.42</b>	<b>-9.9%</b>	<b>+1.4%</b>

# Maintaining Balanced Approach to Capital Allocation

- Net debt increased to €14.1bn following closing of Bioverativ acquisition
  - 0.96% average cost of recently issued debt
- Credit ratings reaffirmed
  - Moody's A1/stable
  - S&P AA/stable
  - Scope AA/stable
- €8bn bond issues successfully priced in March with terms extending up to 20 years

## Net Debt Evolution in Q1 2018



**New €1.5bn share repurchase program expected to be completed by mid-2019<sup>(1)</sup>**

# Reaffirming 2018 Financial Guidance

**FY 2018**

**SANOFI** 

**Business EPS**

**+2% to +5% at CER<sup>(1,2)</sup>**

**FX impact on Business EPS**

**Approximately -7%<sup>(3)</sup>**  
based on April 2018 average exchange rates



Olivier Brandicourt  
Chief Executive Officer



**CLOSING REMARKS**



# Progress in Q1 2018 Supports Transition to a New Growth Phase

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- 1 Q1 consistent with FY18 outlook
- 2 Progress on new products
- 3 Building leadership in rare blood disorders



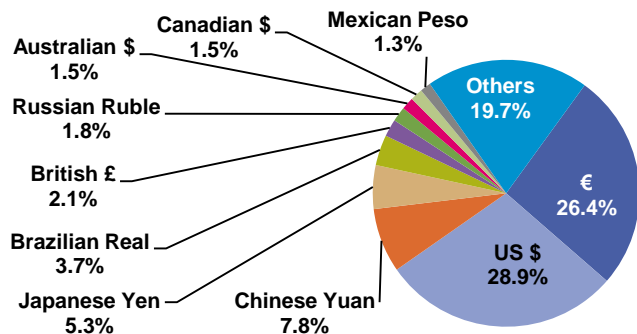
# APPENDICES FINANCE

# 2018 Currency Sensitivity and Q1 2018 Currency Exposure

## 2018 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 0.01
Chinese Yuan	+ 0.2 CNY/EUR	- EUR 0.02
Brazilian Real	+ 0.4 BRL/EUR	- EUR 0.02
Russian Ruble	+ 10 RUB/EUR	- EUR 0.03

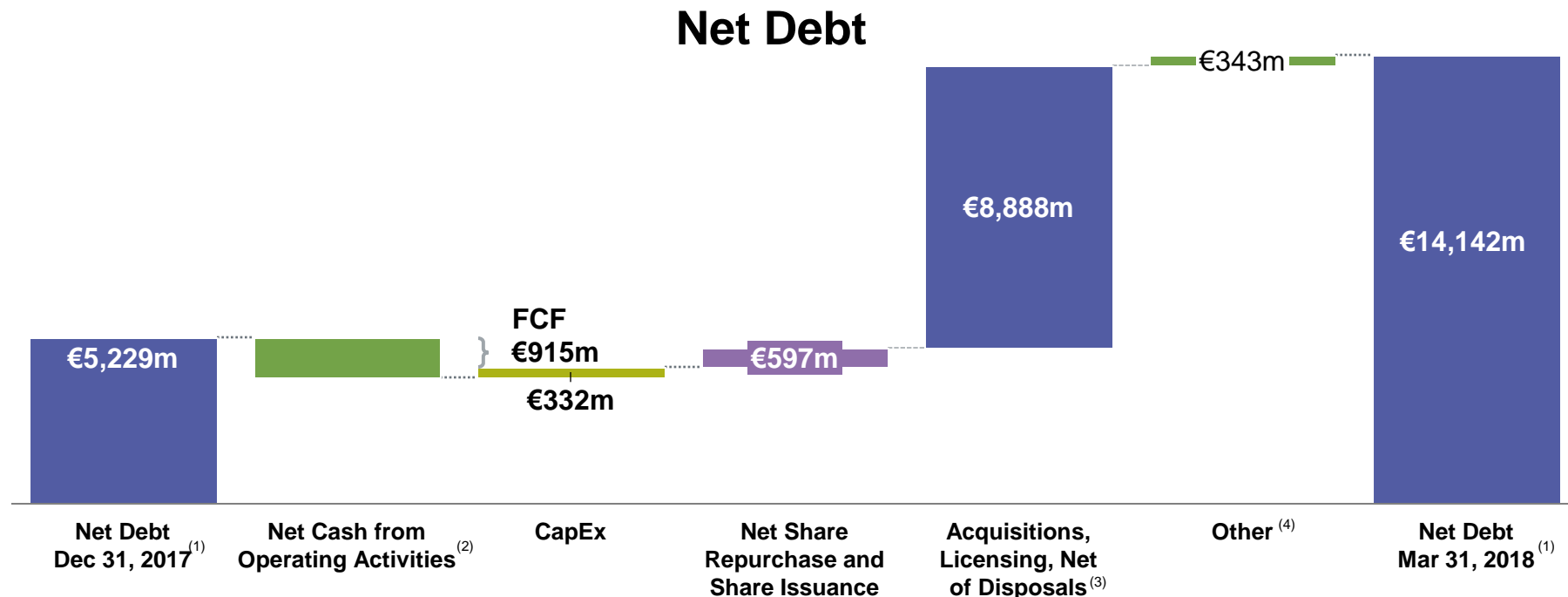
## Currency Exposure on Q1 2018 Sales



## Currency Average Rates

	Q1 2017	Q1 2018	% change
EUR/USD	1.06	1.23	+15.4%
EUR/JPY	121.12	133.16	+9.9%
EUR/CNY	7.32	7.81	+6.8%
EUR/BRL	3.35	3.99	+19.3%
EUR/RUB	62.53	69.93	+11.8%

# Net Debt Evolution in Q1 2018





# Consolidated Income Statements

€ million	Q1 2018	Q1 2017 <sup>(1)</sup>
<b>Net sales</b>	<b>7,898</b>	<b>8,653</b>
Other revenues	228	249
Cost of sales	(2,545)	(2,785)
<b>Gross profit</b>	<b>5,581</b>	<b>6,117</b>
Research and development expenses	(1,280)	(1,309)
Selling and general expenses	(2,312)	(2,482)
Other operating income	25	60
Other operating expenses	(56)	(26)
Amortization of intangible assets	(458)	(503)
Impairment of intangible assets	(3)	-
Fair value remeasurement of contingent consideration	(56)	(36)
Restructuring costs and similar items	(191)	(119)
Other gains and losses and litigation	(49)	-
<b>Operating income</b>	<b>1,201</b>	<b>1,702</b>
Financial expenses	(95)	(111)
Financial income	97	48
<b>Income before tax and associates and joint ventures</b>	<b>1,203</b>	<b>1,639</b>
Income tax expense	(187)	(336)
Share of profit / loss of associates and joint ventures	30	-
<b>Net income excluding the held for exchange Animal Health business</b>	<b>1,046</b>	<b>1,303</b>
Net income from the held for exchange Animal Health Business <sup>(2)</sup>	(1)	4,427
<b>Net income</b>	<b>1,045</b>	<b>5,730</b>
Net income attributable to non-controlling interests	29	34
<b>Net income attributable to equity holders of Sanofi</b>	<b>1,016</b>	<b>5,696</b>
Average number of shares outstanding (million)	1,248.2	1,262.4
<b>Earnings per share excluding the held for exchange Animal Health Business (in euros)</b>	<b>0.81</b>	<b>1.01</b>
<b>IFRS Earnings per share (in euros)</b>	<b>0.81</b>	<b>4.51</b>

# Reconciliation of Consolidated Net Income Attributable to Equity Holders of Sanofi to Business Net Income – Q1 2018

€ million	Q1 2018	Q1 2017 <sup>(1)</sup>	Change
<b>Net income attributable to equity holders of Sanofi</b>	<b>1,016</b>	<b>5,696</b>	<b>(82.2%)</b>
Amortization of intangible assets <sup>(2)</sup>	458	503	
Impairment of intangible assets	3	-	
Fair value remeasurement of contingent consideration	56	36	
Expenses arising from the impact of business combinations on inventories	30	88	
Other expenses related to business combinations	2	-	
Restructuring costs and similar items	191	119	
Other gains and losses, and litigation <sup>(3)</sup>	49	-	
Tax effect of items listed above:	(185)	(248)	
<i>Amortization &amp; impairment of intangible assets</i>	(122)	(182)	
<i>Fair value remeasurement of contingent consideration</i>	(6)	(6)	
<i>Expenses arising from the impact of business combinations on inventories</i>	(6)	(28)	
<i>Other expenses related to business combinations</i>	(1)	-	
<i>Restructuring costs and similar items</i>	(52)	(43)	
<i>Other tax effects</i>	2	11	
Other tax items <sup>(4)</sup>	(66)	-	
Share of items listed above attributable to non-controlling interests	(1)	(1)	
Restructuring costs of associates and joint-ventures, and expenses arising from the impact of acquisitions on associates and joint-ventures	44	24	
Animal Health items <sup>(5)</sup>	1	(4,427)	
<b>Business net income</b>	<b>1,598</b>	<b>1,790</b>	<b>(10.7%)</b>
<b>IFRS earnings per share <sup>(6)</sup> (in euros)</b>	<b>0.81</b>	<b>4.51</b>	

(1) 2017 restated using the new revenue recognition standard IFRS15, effective January 1, 2018.

(2) Of which related to amortization expense generated by the remeasurement of intangible assets as part of business combinations: €425 million in the first quarter of 2018 and €466 million in the first quarter of 2017.

(3) In 2018, separation costs for the European Generics business divestiture.

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

(5) 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.

(6) Based on an average number of shares outstanding of 1,248.2 million in the first quarter of 2018 and 1,262.4 million in the first quarter of 2017.



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**APPENDICES**  
**RESEARCH & DEVELOPMENT**

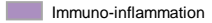

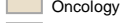
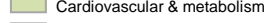
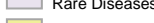
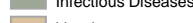
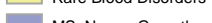




# R&D Pipeline – New Molecular Entities(\*)

Phase 1 (Total:14)		Phase 2 (Total:15)		Phase 3 (Total:6)	Registration (Total:2)
<b>SAR439794</b> TLR4 agonist Peanut Allergy	<b>SAR442168<sup>(3)</sup></b> BTK inhibitor Multiple Sclerosis	<b>SAR440340<sup>(**)</sup></b> Anti-IL33 mAb Asthma	<b>SAR425899</b> GLP-1/GCG dual agonist Obesity/Overweight in T2D	<b>isatuximab</b> Anti-CD38 mAb 3L Relapsing Refractory MM (ICARIA)	<b>cemiplimab<sup>(10)(**)</sup></b> PD-1 inhibitor mAb Advanced CSCC (EU)
<b>SAR408701</b> Maytansin-loaded anti-CEACAM5 mAb Solid Tumors	<b>SAR438335</b> GLP-1/GIP dual agonist Type 2 Diabetes	<b>SAR156597</b> IL4/IL13 bi-specific mAb Systemic Scleroderma	<b>mavacamten<sup>(7)(**)</sup></b> Myosin inhibitor Obstructive Hypertrophic Cardiomyopathy	<b>avalglucosidase alfa</b> Neo GAA Pompe Disease	<b>sotagliflozin<sup>(**)</sup></b> Oral SGLT-1&2 inhibitor Type 1 Diabetes (U.S./EU)
<b>SAR439459</b> anti-TGFβ mAb Advanced Solid Tumors	<b>SAR440181<sup>(4)(**)</sup></b> Myosin activation Dilated Cardiomyopathy	<b>GZ389988</b> TRKA antagonist Osteoarthritis	<b>SAR407899</b> rho kinase Microvascular Angina	<b>fitusiran<sup>(9)</sup></b> siRNA targeting Anti-Thrombin Hemophilia A and B	
<b>REGN3767<sup>(1)</sup></b> Anti LAG-3 mAb Advanced Cancers	<b>SAR247799</b> S1P1 agonist Cardiovascular indication	<b>SAR566658</b> Maytansin-loaded anti-CA6 mAb Triple Negative Breast Cancer	Combination <b>ferroquine / OZ439<sup>(**)</sup></b> Antimalarial	<b>BIVV009</b> Anti Complement C1s mAb Cold Agglutinin Disease	
<b>SAR439859</b> SERD Metastatic Breast Cancer	<b>Herpes Simplex Virus Type 2</b> HSV-2 vaccine	<b>R</b> <b>olipudase alfa</b> rhASM Acid Sphingomyelinase Deficiency <sup>(5)</sup>	<b>Tuberculosis</b> Recombinant subunit vaccine	<b>SAR341402</b> Rapid acting insulin Type 1/2 Diabetes	
<b>BIVV001</b> rFVIII Fc – vWF – XTEN <sup>(2)</sup> Hemophilia A	<b>Respiratory syncytial virus</b> Infants Vaccines	<b>O</b> <b>SAR339375<sup>(6)</sup></b> miRNA-21 Alport Syndrome	<b>HIV</b> Viral vector prime & rgp120 boost vaccine	<b>efpeglenatide<sup>(**)</sup></b> Long-acting GLP-1 agonist Type 2 Diabetes	
<b>UshStat<sup>®</sup></b> Myosin 7A gene therapy Usher Syndrome 1B		<b>venglustat</b> Oral GCS inhibitor Gaucher related Parkinson's Disease	<b>SP0232<sup>(6)</sup> mAb<sup>(**)</sup></b> Respiratory syncytial virus Monoclonal Antibody		
<b>SAR228810</b> Anti-protofibrillar AB mAb Alzheimer's Disease		<b>SAR422459</b> ABCA4 gene therapy Stargardt Disease			

- (1) Regeneron product for which Sanofi has opt-in right  
 (2) Recombinant Coagulation Factor VIII Fc – von Willebrand Factor – XTEN Fusion protein  
 (3) Also known as PRN2246  
 (4) Also known as MYK491  
 (5) Also known as Niemann Pick type B  
 (6) Regulus product for which Sanofi has opt-in right  
 (7) Also known as SAR439152 and MYK461  
 (8) Also known as MEDI8897

- (9) Following the Alnylam/Sanofi strategic restructuring of the RNAi therapeutics rare disease alliance announced in January 2018, Sanofi now has global rights on fitusiran  
 (10) Also known as SAR439684 and REGN2810  
 (\*\*) Data related to all studies published on clinicaltrials.gov  
 (\*\*\*) Partnered and/or in collaboration – Sanofi may have limited or shared rights on some of these products

- R** Registration Study  
**O** Opt-in rights products for which rights have not been exercised yet
- |   |   |
|---|---|
|  Immuno-inflammation       |  Diabetes                    |
|  Oncology                  |  Cardiovascular & metabolism |
|  Rare Diseases             |  Infectious Diseases         |
|  Rare Blood Disorders     |  Vaccines                   |
|  MS, Neuro, Gene therapy |   |

# Additional Indications(\*)

Phase 1 (Total:5)	Phase 2 (Total:12)	Phase 3 (Total:16)	Registration (Total:4)
<b>SAR439459 + cemiplimab</b> <sup>(1)(**)</sup> Anti-TGFβ mAb + PD1 inhibitor mAb Advanced Solid Tumors	<b>dupilumab</b> <sup>(**)</sup> Anti-IL4Rα mAb Eosinophilic Esophagitis	<b>sotagliflozin</b> <sup>(**)</sup> SGLT 1 & 2 inhibitor Worsening Heart Failure in Diabetes	<b>isatuximab</b> Anti-CD38 mAb 1-3L Relapsing Refractory MM (IKEMA)
<b>isatuximab</b> Anti-CD38 mAb + CyBord <sup>(2)</sup> Newly Diagnosed MM	<b>R</b> <b>sarilumab</b> <sup>(**)</sup> Anti-IL6R mAb Polyarticular Juvenile Idiopathic Arthritis	<b>Rabies VRVg</b> Purified vero rabies vaccine	<b>dupilumab</b> <sup>(**)</sup> Anti-IL4Rα mAb Asthma 6 - 11 years old
<b>O</b> <b>cemiplimab</b> <sup>(1)(**)</sup> + <b>REGN3767</b> <sup>(3)</sup> PD-1 inhibitor mAb + anti LAG-3 mAb Advanced Cancers	<b>sarilumab</b> <sup>(**)</sup> Anti-IL6R mAb Systemic Juvenile Arthritis	<b>Adacel+</b> Tdap booster	<b>sotagliflozin</b> <sup>(**)</sup> Oral SGLT-1&2 inhibitor Type 2 Diabetes
<b>SAR439859</b> SERD + Palbociclib Metastatic Breast Cancer	<b>R</b> <b>cemiplimab</b> <sup>(1)(**)</sup> PD-1 inhibitor mAb Advanced Basal Cell Carcinoma	<b>Shan 6</b> DTP-HepB-Polio-Hib Pediatric hexavalent vaccine	<b>Dupixent</b> <sup>(**)</sup> Anti-IL4Rα mAb Atopic Dermatitis 12 – 17 years old
<b>BIVV009</b> Anti Complement C1s mAb Immune Thrombocytopenia	<b>isatuximab + cemiplimab</b> <sup>(1)(**)</sup> Anti-CD38 mAb + PD-1 inhibitor mAb Relapsing Refractory MM	<b>Dupixent</b> <sup>(**)</sup> Anti-IL4Rα mAb Atopic Dermatitis 6 months - 5 years old	<b>Lemtrada</b> <sup>(®)</sup> alemtuzumab Relapsing Remitting Multiple Sclerosis - Pediatric
	<b>isatuximab + cemiplimab</b> <sup>(1)(**)</sup> Anti-CD38 mAb + PD-1 inhibitor mAb Advanced Malignancies	<b>cemiplimab</b> <sup>(1)(**)</sup> PD-1 inhibitor mAb 1L NSCLC	<b>Praluent</b> <sup>(**)</sup> Anti-PCSK9 mAb CV events reduction
	<b>venglustat</b> Oral GCS inhibitor Gaucher Disease Type 3	<b>cemiplimab</b> <sup>(1)(**)</sup> PD-1 inhibitor mAb 2L Cervical Cancer	<b>Fluzone</b> <sup>(®)</sup> QIV HD Quadrivalent inactivated Influenza vaccine - High dose
	<b>venglustat</b> Oral GCS inhibitor Fabry Disease	<b>isatuximab</b> Anti-CD38 mAb 1L Newly Diagnosed MM (IMROZ)	<b>Men Quad TT</b> Advanced generation meningococcal ACYW conjugate vaccine
			<b>Pediatric pentavalent vaccine</b> DTP-Polio-Hib Japan
			<b>VaxiGrip</b> <sup>(®)</sup> QIV IM Quadrivalent inactivated Influenza vaccine 6 - 35 months
			<b>PR5i</b> DTP-HepB-Polio-Hib Pediatric hexavalent vaccines (U.S.)
			<b>Fluzone</b> <sup>(®)</sup> 0,5 mL QIV Quadrivalent inactivated Influenza vaccine 6 months+

- R** Registration Study
- O** Opt-in rights products for which rights have not been exercised yet
- Immuno-inflammation
- Oncology
- Rare Diseases
- Rare Blood Disorders
- MS, Neuro, Gene therapy
- Diabetes
- Cardiovascular & metabolism
- Infectious Diseases
- Vaccines

# Expected Submission Timeline<sup>(1)</sup>

NMES

			<b>avalglucosidase alfa</b> Neo GAA Pompe Disease - U.S./EU			<b>GZ389988</b> TRKA antagonist Osteoarthritis - U.S./EU	<b>SAR422459</b> ABCA4 gene therapy Stargardt Disease -- U.S./EU	Combination <b>ferroquine / OZ439<sup>(**)</sup></b> Antimalarial - U.S./EU
<b>isatuximab</b> anti-CD38 mAb 3L RRM (ICARIA) - U.S.			<b>olipudase alfa</b> rhASM ASD <sup>(8)</sup> - U.S./EU			<b>SAR156597</b> IL4/IL13 bi-specific mAb Systemic Scleroderma - U.S./EU	<b>venglustat</b> Oral GCS inhibitor GrPD <sup>(9)</sup> - U.S./EU	<b>SP0232 mAbs<sup>(10)(**)</sup></b> Respiratory syncytial virus U.S.
<b>cemiplimab<sup>(2)(**)</sup></b> PD-1 inhibitor mAb Advanced CSCC - U.S./EU			<b>fitusiran<sup>(7)</sup></b> siRNA inhibitor Hemophilia A/B - U.S./EU			<b>SAR440340<sup>(**)</sup></b> Anti-IL33 mAb Asthma - U.S./EU	<b>SAR425899</b> GLP-1/GCG dual agonist Obesity/Overweight in T2D U.S./EU	<b>Tuberculosis</b> Recombinant subunit vaccine
<b>sotagliflozin<sup>(**)</sup></b> Oral SGLT-1&2 inhibitor Type 1 Diabetes - U.S./EU	<b>SAR341402</b> Rapid acting insulin Type 1/2 Diabetes - EU <sup>(9)</sup>		<b>BIVV009<sup>(8)</sup></b> Anti Complement C1s mAb Cold Agglutinin Disease - U.S./EU		<b>efpeglenatide<sup>(**)</sup></b> Long acting GLP1-R agonist Type 2 Diabetes - U.S./EU	<b>SAR566658</b> Maytansin-loaded anti-CA6 mAb Triple Negative Breast Cancer	<b>SAR407899</b> rho kinase Microvascular Angina - U.S./EU	<b>HIV</b> Viral vector prime & rgp120 boost vaccine

Additional Indications

2018	2019	2020	2021	2022 and beyond
<b>dupilumab<sup>(3)(**)</sup></b> Anti-IL4Rα mAb Asthma adults & adolesc. - EU	<b>Dupixent<sup>(3)(**)</sup></b> Anti-IL4Rα mAb AD 6 - 11 years old - U.S./EU	<b>sotagliflozin<sup>(**)</sup></b> Oral SGLT-1&2 inhibitor Type 2 Diabetes - EU <sup>(9)</sup>	<b>sarilumab<sup>(**)</sup></b> Anti-IL6R mAb Polyarticular Juvenile Idiopathic Arthritis - U.S./EU	<b>Shan 6</b> DTP-HepB-Polio-Hib Pediatric hexavalent vaccine
<b>Dupixent<sup>(3)(**)</sup></b> Anti-IL4Rα mAb AD 12 - 17 years old - U.S./EU	<b>dupilumab<sup>(3)(**)</sup></b> Anti-IL4Rα mAb Nasal Polyposis Adult - U.S./EU	<b>Fluzone<sup>®</sup> QIV HD</b> Quadrivalent inactivated Influenza vaccine - High dose	<b>cemiplimab<sup>(2)(**)</sup></b> PD-1 inhibitor mAb 2L Cervical Cancer - U.S./EU	<b>Pediatric pentavalent vaccine</b> DTP-Polio-Hib (Japan)
<b>Praluent<sup>(6)(**)</sup></b> Anti-PCSK9 mAb CV events reduction - U.S./EU	<b>cemiplimab<sup>(2)(**)</sup></b> PD-1 inhibitor mAb Advanced BCC - U.S./EU	<b>Men Quad TT</b> Adv. generation meningococcal U.S. & EU - 10 Yrs +	<b>isatuximab</b> Anti-CD38 mAb 1-3L RRM (IKEMA) - U.S./EU	<b>dupilumab<sup>(3)(**)</sup></b> Anti-IL4Rα mAb Asthma 6 - 11 years old U.S./EU
	<b>cemiplimab<sup>(2)(**)</sup></b> PD-1 inhibitor mAb 1L NSCLC - U.S./EU		<b>Aubagio<sup>®</sup></b> teriflunomide Relapsing MS - Ped. - U.S./EU	<b>isatuximab</b> Anti-CD38 mAb (IMROZ) 1L Newly Diagnosed MM U.S./EU
				<b>sotagliflozin<sup>(**)</sup></b> SGLT 1/2 inhibitor Worsening Heart Failure in Diabetes - U.S./EU
				<b>Dupixent<sup>(6)(**)</sup></b> Anti-IL4Rα mAb AD 6 months - 5 years old U.S./EU
				<b>venglustat</b> Oral GCS inhibitor Fabry Disease - U.S./EU
				<b>sarilumab<sup>(**)</sup></b> Anti-IL6R mAb Systemic Juvenile Arthritis U.S./EU
				<b>venglustat</b> Oral GCS inhibitor Gaucher Disease Type 3 U.S./EU
				<b>Adacel+</b> Tdap booster
				<b>Rabies VRVg</b> Purified vero rabies vaccine

(1) Excluding Phase 1 - Data related to all studies published on [clinicaltrials.gov](http://clinicaltrials.gov)

(2) Also known as SAR439684 and REGN2810

(3) Also known as SAR231893

(4) Submission strategy for the U.S. under evaluation

(5) Submission for the U.S. expected in 2020

(6) Acid Sphingomyelinase Deficiency

(7) Following the Alnylam/Sanofi strategic restructuring of the RNAi therapeutics rare disease alliance announced in January 2018, Sanofi now has global rights on fitusiran

(8) Currently operating as separate entities. Reported dates are based on prior Bioverativ disclosure of study completion date

(9) Gaucher Related Parkinson's Disease

(10) Also known as MEDI8897

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

Immuno-inflammation

Oncology

Rare Diseases

Rare Blood Disorders

MS, Neuro, Gene therapy

Diabetes

Cardiovascular & metabolism

Infectious Diseases

Vaccines

# Pipeline Movements Since Q4 2017

## Additions to the pipeline

## Removals from the pipeline

Phase 1

**BIVV001**  
rFVIII/Fc – vWF – XTEN<sup>(1)</sup>  
Hemophilia A

**BIVV009**  
Anti Complement C1s mAb  
Immune Thrombocytopenia

**lumasiran<sup>(3)</sup>**  
Investigational RNAi therapeutic  
Primary Hyperoxaluria Type 1 (PH1)

Phase 2

**SAR440340<sup>(\*\*)</sup>**  
Anti-IL33 mAb  
Asthma

**isatuximab + cemiplimab<sup>(2)(\*\*)</sup>**  
Anti-CD38 mAb + PD-1 inhibitor mAb  
Advanced Malignancies

**isatuximab + cemiplimab<sup>(2)(\*\*)</sup>**  
Anti-CD38 mAb + PD-1 inhibitor mAb  
Relapsing Refractory MM

Phase 3

**BIVV009**  
Anti Complement C1s mAb  
Cold Agglutinin Disease

Registration

**cemiplimab<sup>(2)(\*\*)</sup>**  
PD-1 inhibitor mAb  
Advanced CSCC (EU)

**Fluzone® 0,5 mL QIV**  
Quadrivalent inactivated  
Influenza vaccine 6 months+

**sotagliflozin<sup>(\*\*)</sup>**  
Oral SGLT-1&2 inhibitor  
Type 1 Diabetes (U.S./EU)

(1) Recombinant Coagulation Factor VIII Fc – von Willebrand Factor – XTEN Fusion protein

(2) Also known as SAR439684 and REGN2810

(3) In March 2018 Sanofi Genzyme declined its opt-in for the development and commercialization of lumasiran (ALN-GO1)

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

# R&D Pipeline Summary – Total Projects<sup>(1)</sup>

	Phase 1	Phase 2	Phase 3	Registration	TOTAL
Immuno-inflammation	1	6	5	1	13
Oncology	8	4	5	1	18
Rare Diseases	0	4	2	0	6
Rare Blood Disorders	2	0	1	0	3
Multiple Sclerosis, Neurology, Gene therapy	3	2	2	0	7
Diabetes	1	2	3	1	7
Cardiovascular Diseases	2	2	1	0	5
Infectious Diseases	0	1	0	0	1
Vaccines	2	6	3	3	14
<b>TOTAL</b>	<b>19</b>	<b>27</b>	<b>22</b>	<b>6</b>	

**46**

**28**

**74**

**Total Projects**