

Biogen Business Overview

2018 Annual Meeting of Stockholders

Michel Vounatsos, CEO

June 12, 2018



Forward-Looking Statements

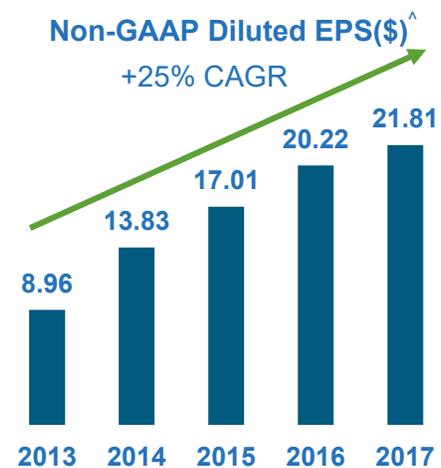
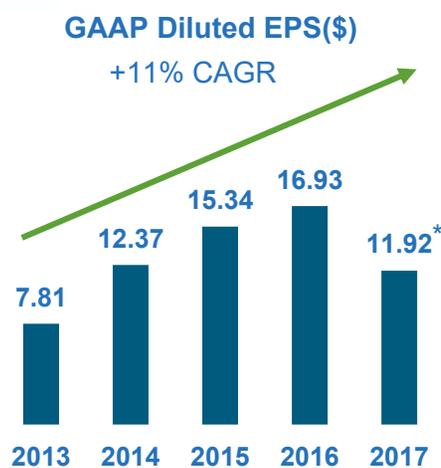
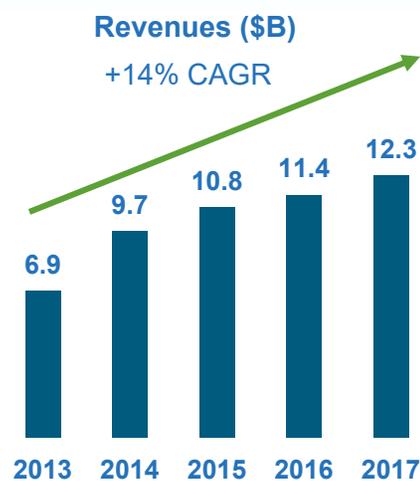
This presentation contains forward-looking statements, including statements relating to: our strategy and plans; potential of our commercial business and pipeline programs; capital allocation and investment strategy; clinical trials and data readouts and presentations; regulatory filings and the timing thereof; financial matters; and anticipated benefits and potential of investments, collaborations and business development activities. These forward-looking statements may be accompanied by such words as “aim,” “anticipate,” “believe,” “could,” “estimate,” “expect,” “forecast,” “intend,” “may,” “plan,” “potential,” “possible,” “will” and other words and terms of similar meaning. Drug development and commercialization involve a high degree of risk, and only a small number of research and development programs result in commercialization of a product. Results in early stage clinical trials may not be indicative of full results or results from later stage or larger scale clinical trials and do not ensure regulatory approval. You should not place undue reliance on these statements or the scientific data presented.

These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements, including: our dependence on sales from our principal products; failure to compete effectively due to significant product competition in the markets for our products; difficulties in obtaining and maintaining adequate coverage, pricing and reimbursement for our products; the occurrence of adverse safety events, restrictions on use with our products or product liability claims; failure to protect and enforce our data, intellectual property and other proprietary rights and the risks and uncertainties relating to intellectual property claims and challenges; uncertainty of long-term success in developing, licensing, or acquiring other product candidates or additional indications for existing products; the risk that positive results in a clinical trial may not be replicated in subsequent or confirmatory trials or success in early stage clinical trials may not be predictive of results in later stage or large scale clinical trials or trials in other potential indications; risks associated with clinical trials, including our ability to adequately manage clinical activities, unexpected concerns that may arise from additional data or analysis obtained during clinical trials, regulatory authorities may require additional information or further studies, or may fail to approve or may delay approval of our drug candidates; risks associated with current and potential future healthcare reforms; problems with our manufacturing processes; risks relating to technology failures or breaches; our dependence on collaborators and other third parties for the development, regulatory approval, and commercialization of products and other aspects of our business, which are outside of our control; failure to successfully execute on our growth initiatives; risks relating to management and key personnel changes, including attracting and retaining key personnel; risks relating to investment in and expansion of manufacturing capacity for future clinical and commercial requirements; failure to comply with legal and regulatory requirements; fluctuations in our effective tax rate; the risks of doing business internationally, including currency exchange rate fluctuations; risks related to commercialization of biosimilars; risks related to investment in properties; the market, interest and credit risks associated with our portfolio of marketable securities; risks relating to stock repurchase programs; risks relating to access to capital and credit markets; risks related to indebtedness; environmental risks; risks relating to the sale and distribution by third parties of counterfeit versions of our products; risks relating to the use of social media for our business; change in control provisions in certain of our collaboration agreements; risks relating to the spin-off of our hemophilia business, including risks of operational difficulties and exposure to claims and liabilities; and the other risks and uncertainties that are described in the Risk Factors section of our most recent annual or quarterly report and in other reports we have filed with the Securities and Exchange Commission.

These statements are based on our current beliefs and expectations and speak only as of the date of this presentation. We do not undertake any obligation to publicly update any forward-looking statements.

Note regarding trademarks: AVONEX®, PLEGRIDY®, SPINRAZA®, TECFIDERA®, TYSABRI® and ZINBRYTA® are registered trademarks of Biogen. BENEPALI™, FLIXABI™ and IMRALDI™ are trademarks of Biogen. Other trademarks referenced in this presentation are the property of their respective owners.

Strong Track Record



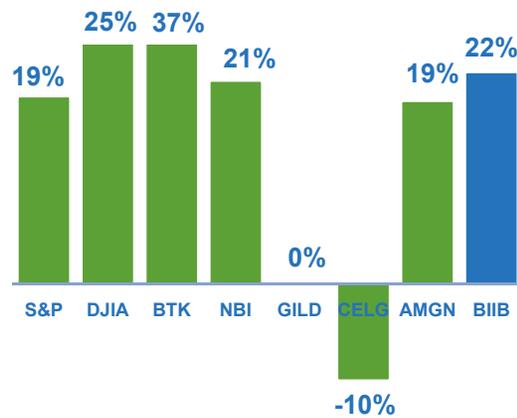
* 2017 GAAP Diluted EPS was negatively impacted by \$5.51 related to the transition toll tax and re-measurement of net deferred tax assets related to the Tax Cuts and Jobs Act of 2017.



[^] Non-GAAP Diluted EPS is a Non-GAAP financial measure. A reconciliation of our GAAP to Non-GAAP financial results is at the end of this presentation.

2017 Stock Price Performance vs. Peers & Indices

1-Year Performance*



5-Year CAGR*



* Adjusted for the impact of the spin-off of our hemophilia business on February 1, 2017. 1-Year Performance = stock price change from 12/31/2016 to 12/31/2017; 5-Year CAGR = compound annual growth rate of stock price from 12/31/2012 to 12/31/2017. Source: Factset

Strategy to Invest for Future Growth

Executing well on the core business



Maximizing the resilience of our MS core business



Accelerating progress in spinal muscular atrophy



Creating a leaner and simpler operating model



Creating new sources of value



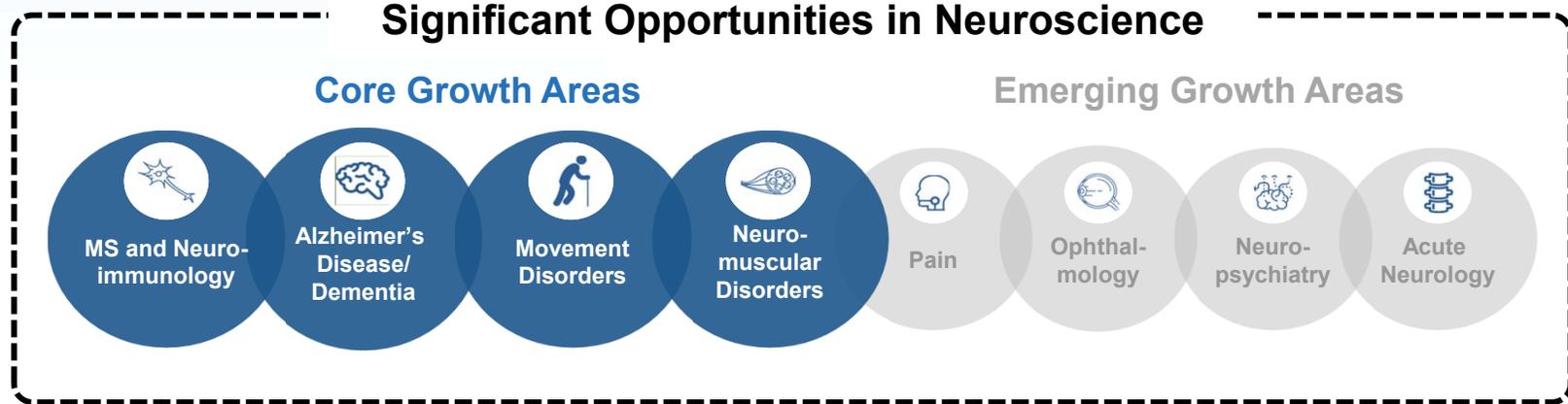
Developing and expanding our neuroscience portfolio



Re-prioritizing our capital allocation efforts

Building An Industry Leading Neuroscience Company

Significant Opportunities in Neuroscience



It is our belief that no other area of medicine holds as much promise with as much need as neuroscience.

Strong Execution in 2017



Maximizing the resilience of our MS core business

- ✓ Global MS revenues* grew 4%
- ✓ Strengthened IP position for TECFIDERA
- ✓ In-licensed BIIB098 as next-generation fumarate



Accelerating progress in spinal muscular atrophy

- ✓ SPINRAZA generated \$884M in global revenues
- ✓ Launched collaboration for new ASOs
- ✓ Executed partnership for delivery device



Creating a leaner and simpler operating model

- ✓ Aim to create an innovative operating model designed for the future to help fund further investment in R&D and commercial opportunities



Developing and expanding our neuroscience portfolio

- ✓ Added 7 new clinical stage programs in 2017; added or advanced 5 more so far in 2018



Re-prioritizing our capital allocation efforts

- ✓ One of our most productive years for BD
- ✓ Repurchased 4.9 million shares in 2017 for ~ \$1.4 billion
- ✓ Improved aducanumab collaboration arrangements with Eisai and Neurimmune

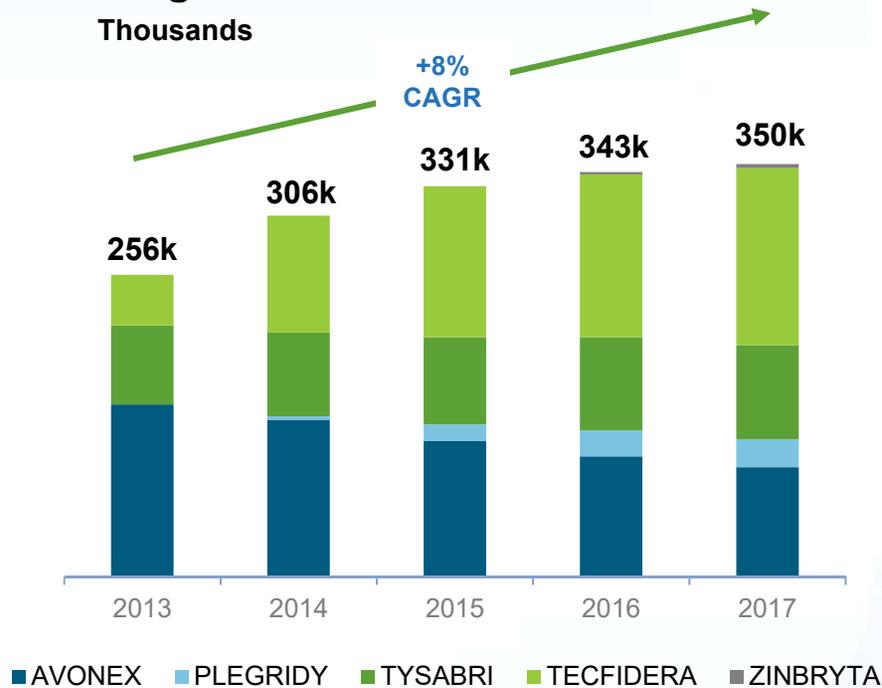


* including OCREVUS® royalties

Demonstrated Resilience in our \$9 Billion MS Franchise

Biogen MS Patients

Thousands



Note: Patient numbers represent estimated ending patient count as of December 31st of each year.
1. Biogen data on file.

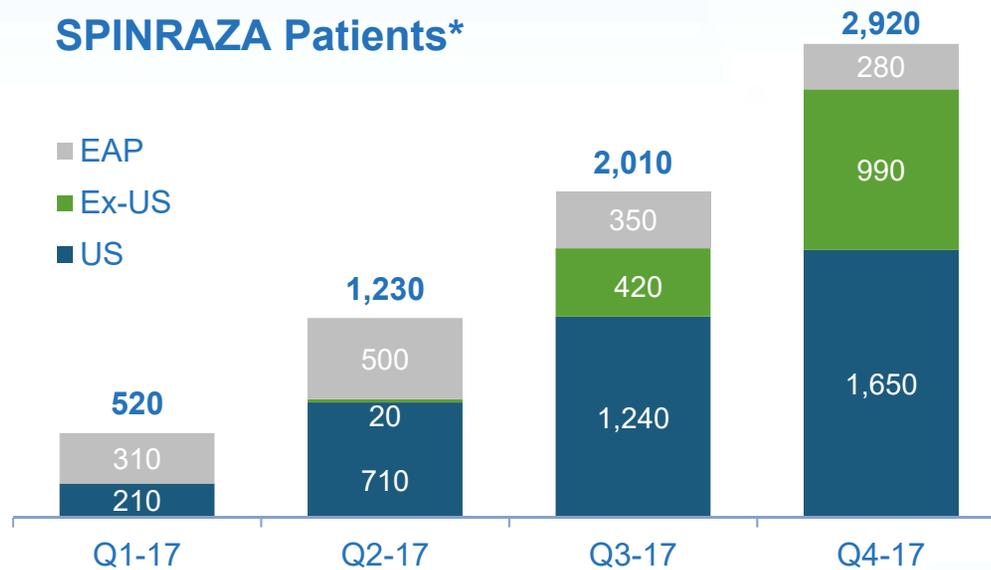
HIGHLIGHTS

- ▶ ~\$20B market with ~950k treated MS patients worldwide¹
- ▶ As of March 31, 2018, Biogen products treated ~36% of all treated MS patients globally¹
- ▶ Bolstered MS pipeline with in-licensing of BIIB098 (MMF prodrug)
- ▶ Pursuing extended interval dosing for TYSABRI
- ▶ Developing intramuscular formulation of PLEGRIDY
- ▶ Advancing opicinumab in Phase 2b for remyelination in MS



Record-Breaking Global Launch for SPINRAZA

SPINRAZA Patients*



HIGHLIGHTS

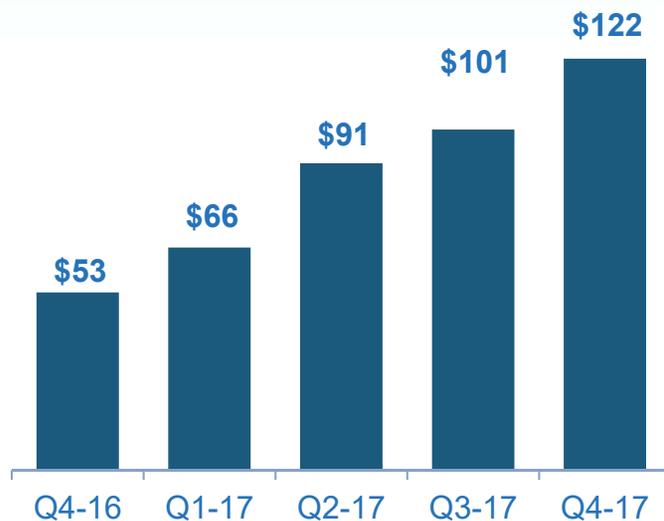
- ▶ ~ 20,000 SMA patients across US, Europe, and Japan with additional opportunity in other markets
 - ▶ Incidence: 1/10,000 live births
- ▶ First and only approved treatment
- ▶ As of December 31, 2017, there were ~ 3,200 patients on therapy across the post marketing setting, the EAP and clinical trials
- ▶ Approved with formal reimbursement across 21 countries**
- ▶ Recent collaboration to identify new ASO drug candidates for SMA
- ▶ Gene therapy program expected to enter Phase 1 by mid-2018



Note: U.S. and Ex-US SPINRAZA patients represent the total number of patients on therapy in the post-marketing setting as of the end of each quarter, including free patients in the U.S. EAP patients represent patients actively enrolled in the Expanded Access Program (EAP) as of the end of each quarter. As of the end of Q4-17, there were an additional ~ 300 patients enrolled in ongoing clinical studies of SPINRAZA.
 ** as of 6/8/2018

Growing Biosimilars Business

Biosimilars Revenue (\$M)



COMMERCIALIZATION IN EUROPE

- ~ 80,000 patients currently on Biogen biosimilars
- We estimate that BENEPAI uptake has led to healthcare savings of up to €800 million annually across Europe¹
- Reached agreement with AbbVie to launch IMRALDI in Europe in Oct. 2018

Benepali[®]
Etanercept

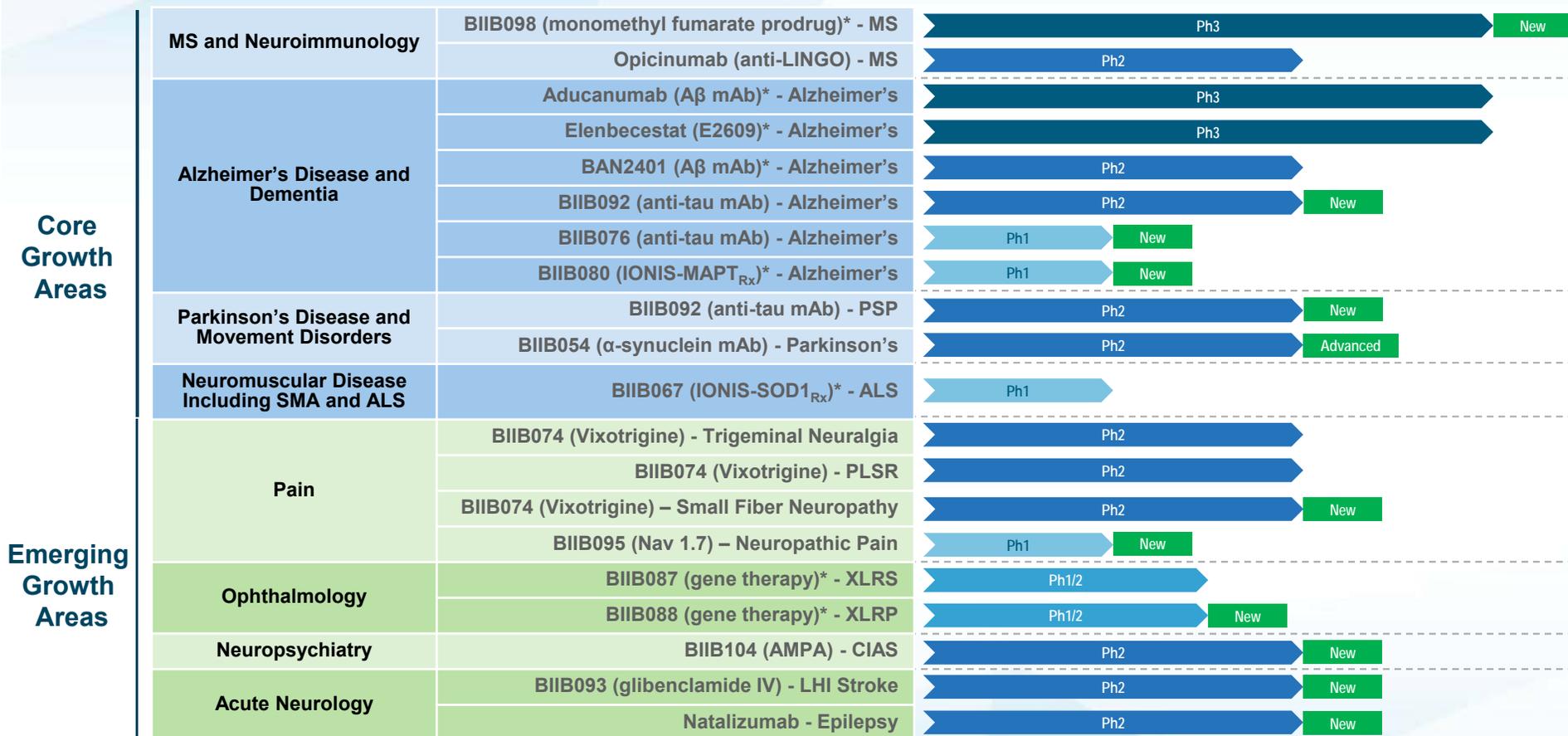
Flixabi[®]
Infliximab

Imraldi[®]
Adalimumab

SAMSUNG BIOEPIS JOINT VENTURE

- Plan to exercise option to acquire up to 49.9% equity stake
- Leveraging expertise in protein engineering and biologics manufacturing
- Advancing biosimilars of insulin glargine, trastuzumab, and bevacizumab

Added or Advanced 12 Clinical Programs Over Past 18 Months



* Collaboration program

Biogen 2017 and Beyond

- Continued Growth in 2017
- Updated Strategy to Invest in Future Growth
- Strong Execution in 2017
- Advancing and Expanding Pipeline
as we aim to be the **Leader in Neuroscience**

GAAP to Non-GAAP Reconciliation

Diluted EPS and Net Income to Biogen Inc.
(Unaudited, \$ in millions, except per share amounts)

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
GAAP EPS - Diluted	\$ 7.81	\$ 12.37	\$ 15.34	\$ 16.93	\$ 11.92
Adjustment to net income attributable to Biogen Inc. (see below)	1.15	146	167	3.29	9.89
Non-GAAP EPS - Diluted	\$ 8.96	\$ 13.83	\$ 17.01	\$ 20.22	\$ 21.81
GAAP Net Income Attributable to Biogen Inc.	\$ 1,862	\$ 2,935	\$ 3,547	\$ 3,703	\$ 2,539
Amortization of acquired intangible assets ^{A,B}	331	473	365	374	815
TECFIDERA litigation settlement charge ^A	-	-	-	455	-
Acquired in-process research and development	-	-	-	-	120
Loss (gain) on fair value remeasurement of contingent consideration	(1)	(39)	31	15	63
Net distribution to noncontrolling interests ^C	-	-	-	-	110
Gain on deconsolidation of variable interest entities	-	-	-	(4)	-
Hemophilia business separation costs	-	-	-	18	19
Restructuring, business transformation and other cost saving initiatives					
2017 corporate strategy implementation ^D	-	-	-	-	18
Restructuring charges ^D	-	-	93	33	1
Cambridge manufacturing facility rationalization costs ^E	-	-	-	55	-
Weston exit costs ^F	27	-	-	-	-
Donation to Biogen Foundation	-	35	-	-	-
Stock option expense and other	10	12	-	-	-
Income tax effect primarily related to reconciling items	(93)	(135)	(104)	(225)	(213)
Tax reform ^G	-	-	-	-	1,174
Non-GAAP Net Income Attributable to Biogen Inc.	\$ 2,136	\$ 3,281	\$ 3,932	\$ 4,423	\$ 4,645

GAAP to Non-GAAP Reconciliation

^A Amortization of acquired intangible assets for 2017 includes \$444 million of impairment and amortization charges related to the intangible assets associated with our U.S. and rest of world licenses to Forward Pharma A/S' (Forward Pharma) intellectual property, including Forward Pharma's intellectual property related to TECFIDERA. In exchange for these licenses, we paid Forward Pharma \$1.25 billion in cash. During the fourth quarter of 2016 we recognized a pre-tax charge of \$455 million and in the first quarter of 2017 we recognized intangible assets of \$795 million related to this agreement.

We have two intellectual property disputes with Forward Pharma, one in the U.S. and one in the European Union, concerning intellectual property related to TECFIDERA. In March 2017 the U.S. intellectual property dispute was decided in our favor. We evaluated the recoverability of the U.S. asset acquired from Forward Pharma and recorded an impairment charge in the first quarter of 2017 to adjust the carrying value of the acquired U.S. asset to fair value reflecting the impact of the developments in the U.S. legal dispute. In March 2018 the European Patent Office issued its decision revoking Forward Pharma's European Patent No. 2 801 355. Based upon our assessment of these rulings, we continue to amortize the remaining net book value of the U.S. and rest of world intangible assets in our consolidated statements of income utilizing an economic consumption model.

The TECFIDERA litigation settlement charge for 2016 represents the portion of the \$1.25 billion cash payment made in the first quarter of 2017 attributable to our sales of TECFIDERA during the period April 2014 through December 31, 2016.

^B Amortization of acquired intangible assets for 2017 includes a \$31 million pre-tax impairment charge related to our acquired and in-licensed rights and patents intangible asset due to the European Medicines Agency's review (referred to as an Article 20 Procedure) of ZINBRYTA.

^C Net distribution to noncontrolling interests for 2017 reflects the after-tax \$150 million upfront payment made to Neurimmune SubOne AG (Neurimmune) in exchange for a 15% reduction in royalty rates payable on potential commercial sales of aducanumab, our anti-amyloid beta antibody candidate for Alzheimer's disease. This upfront payment is in relation to the amendment of terms of our collaboration agreement with Neurimmune.

^D 2017 corporate strategy and restructuring charges for 2017 are related to our efforts to create a leaner and simpler operating model.

Restructuring charges for 2016 include charges of \$18 million incurred in connection with our 2016 restructuring resulting from our decision to spin-off our hemophilia business. Restructuring charges for 2016 also include severance charges of \$7 million related to employee separation costs as a result of our decision to vacate and cease manufacturing in Cambridge, MA and vacate our warehouse in Somerville, MA. Restructuring charges for 2016 further include \$8 million of costs incurred in connection with our 2015 corporate restructuring.

Restructuring charges for 2015 reflect \$93 million of charges incurred in connection with our 2015 corporate restructuring.

^E Cambridge manufacturing facility rationalization costs for 2016 reflects \$46 million of additional depreciation expense included in cost of sales, excluding amortization of acquired intangible assets in our consolidated statements of income. Cambridge manufacturing facility rationalization costs for 2016 also includes charges of \$7 million for the write-down of excess inventory.

^F This charge represents the remaining lease obligation for the vacated portion of our Weston, MA facility, net of sublease income upon relocation of our headquarters to Cambridge, MA.

^G On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the 2017 Tax Act) was signed into law and has resulted in significant changes to the U.S. corporate income tax system. The 2017 Tax Act includes a federal corporate rate reduction from 35% to 21%, the elimination or reduction of certain domestic deductions and credits, the transition of U.S. international taxation from a worldwide tax system towards a territorial tax system, limitations on the deductibility of interest expense and executive compensation and base-erosion prevention measures on future non-U.S. earnings of U.S. entities, which has the effect of subjecting certain of our earnings of foreign subsidiaries to U.S. taxation. These changes became effective beginning in 2018.

The 2017 Tax Act also includes a one-time mandatory deemed repatriation tax on accumulated foreign subsidiaries' previously untaxed foreign earnings (the Transition Toll Tax).

Changes in tax rates and tax laws are accounted for in the period of enactment. Therefore, during 2017 we recorded a charge totaling \$1,174 million related to our current estimate of the provisions of the 2017 Tax Act, including a \$990 million expense under the Transition Toll Tax. The Transition Toll Tax must be paid over an eight-year period, starting in 2018, and will not accrue interest.

Use of Non-GAAP Financial Measures

We supplement our consolidated financial statements presented on a GAAP basis by providing additional measures which may be considered "Non-GAAP" financial measures under applicable SEC rules. We believe that the disclosure of these Non-GAAP financial measures provides additional insight into the ongoing economics of our business and reflects how we manage our business internally, set operational goals and forms the basis of our management incentive programs. These Non-GAAP financial measures are not in accordance with generally accepted accounting principles in the United States and should not be viewed in isolation or as a substitute for reported, or GAAP, net income attributable to Biogen Inc. and diluted earnings per share.

Our "Non-GAAP net income attributable to Biogen Inc." and "Non-GAAP earnings per share - Diluted" financial measures exclude the following items from "GAAP net income attributable to Biogen Inc." and "GAAP earnings per share - Diluted":

1. Purchase accounting and merger-related adjustments

We exclude certain purchase accounting related items associated with the acquisition of businesses, assets and amounts in relation to the consolidation or deconsolidation of variable interest entities for which we are the primary beneficiary. These adjustments include, but are not limited to, charges for in-process research and development, the amortization of certain acquired intangible assets, and charges or credits from the fair value remeasurement of our contingent consideration obligations.

2. Hemophilia business separation costs

We have excluded costs that are directly associated with the set up and spin-off of our hemophilia business into an independent, publicly-traded company on February 1, 2017. These costs represent incremental third party costs attributable solely to hemophilia separation and set up activities.

3. Restructuring, business transformation and other cost saving initiatives

We exclude costs associated with the company's execution of certain strategies and initiatives to streamline operations, achieve targeted cost reductions, rationalize manufacturing facilities or refocus R&D activities. These costs may include employee separation costs, retention bonuses, facility closing and exit costs, asset impairment charges or additional depreciation when the expected useful life of certain assets have been shortened due to changes in anticipated usage, and other costs or credits that management believes do not have a direct correlation to our ongoing or future business operations.

4. Other items

We evaluate other items of income and expense on an individual basis, and consider both the quantitative and qualitative aspects of the item, including (i) its size and nature, (ii) whether or not it relates to our ongoing business operations, and (iii) whether or not we expect it to occur as part of our normal business on a regular basis. We also include an adjustment to reflect the related tax effect of all reconciling items within our reconciliation of our GAAP to Non-GAAP net income attributable to Biogen Inc. and diluted earnings per share.

Numbers may not foot due to rounding.

Questions & Answers

