

Cowen and Company

36th Annual Health Care Conference

George A. Scangos, PhD, CEO

March 7, 2016



Forward-Looking Statements

This presentation contains forward-looking statements, including statements about the prospects of our product portfolio; pipeline potential and progress; anticipated clinical trials and data readouts; anticipated benefits and potential of investments, and collaborations and business development activities; timing and execution of stock repurchases; and other financial matters. These forward-looking statements may be accompanied by such words as “anticipate,” “believe,” “could,” “estimate,” “expect,” “forecast,” “intend,” “may,” “plan,” “potential,” “project,” “target,” “will” and other words and terms of similar meaning. You should not place undue reliance on these statements.

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; failure to protect and enforce our data, intellectual property and other proprietary rights and the risks and uncertainties relating to intellectual property claims; difficulties in obtaining adequate coverage or changes in pricing or the availability of reimbursement for our products; the occurrence of adverse safety events, restrictions on use with our products or product liability claims; uncertainty of long-term success in developing, licensing or acquiring other product candidates or additional indications for existing products; 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; 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; our dependence on collaborators and other third parties for the development and commercialization of products and other aspects of our business, which are outside of our control; failure to manage our growth and execute our growth initiatives; problems with our manufacturing processes; risks relating to investment in and expansion of manufacturing capacity for future clinical and commercial requirements; failure to comply with legal and regulatory requirements; the risks of doing business internationally, including currency exchange rate fluctuations; charges and other costs relating to our properties; fluctuations in our effective tax rate; the market, interest and credit risks associated with our portfolio of marketable securities; risks relating to our ability to repurchase stock, including at favorable prices; environmental risks; 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 SEC.

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: ALPROLIX®, AVONEX®, BENEPALI™, ELOCTATE®, FUMADERM™, PLEGRIDY®, RITUXAN®, TECFIDERA®, TYSABRI®, and ZINBRYTA™ as used in this presentation, are trademarks or registered trademarks of Biogen or its subsidiaries. Other trademarks referenced in this presentation are the property of their respective owners.

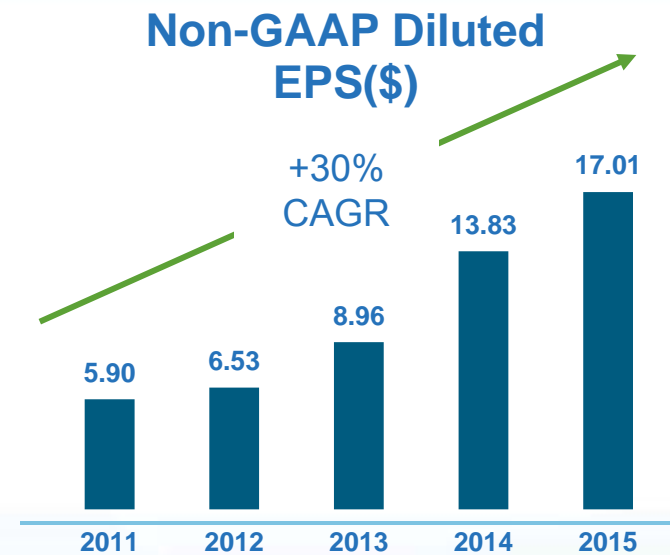
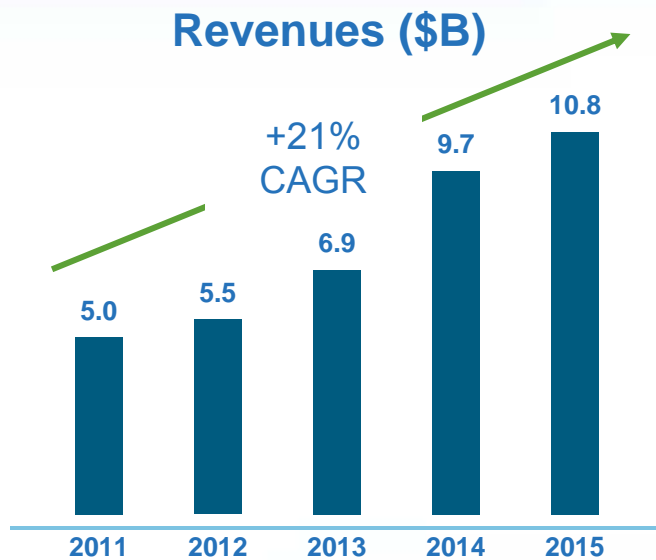
Healthy Commercial Business

Investing to Lead in
Neuroscience

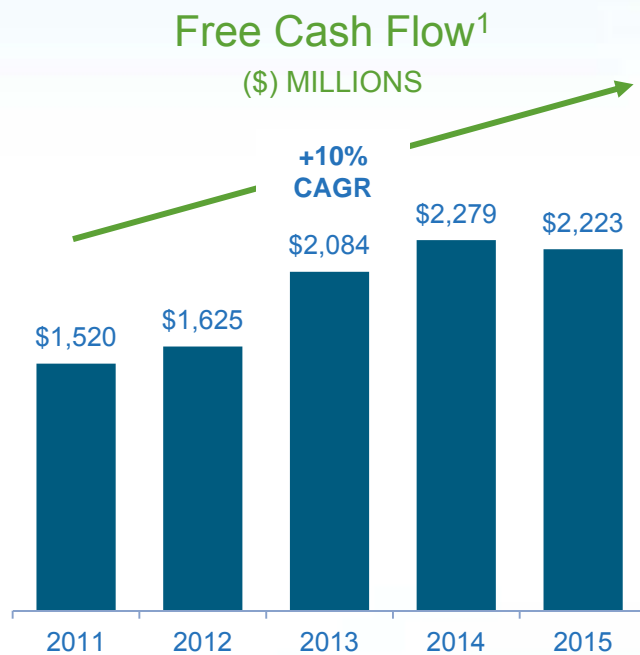
Strategy for
Sustainable Growth

Emerging Pipeline Fuels
Next Wave of Potential
Therapies

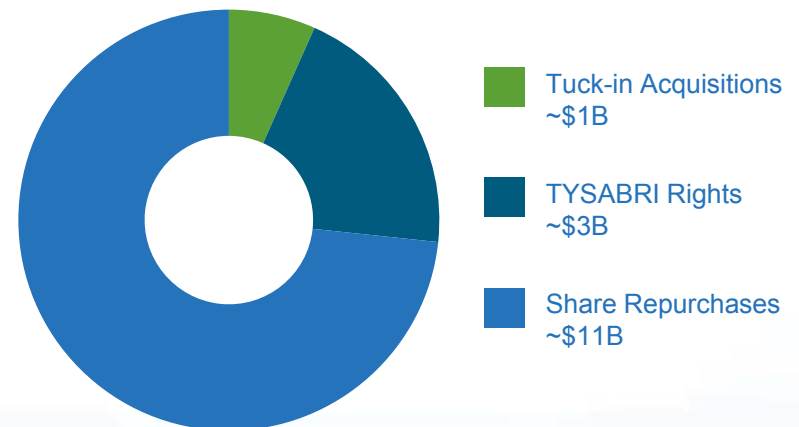
Strong Track Record



Creating Value through Disciplined Capital Allocation









~\$15B Excess Cash Invested
SINCE 2006



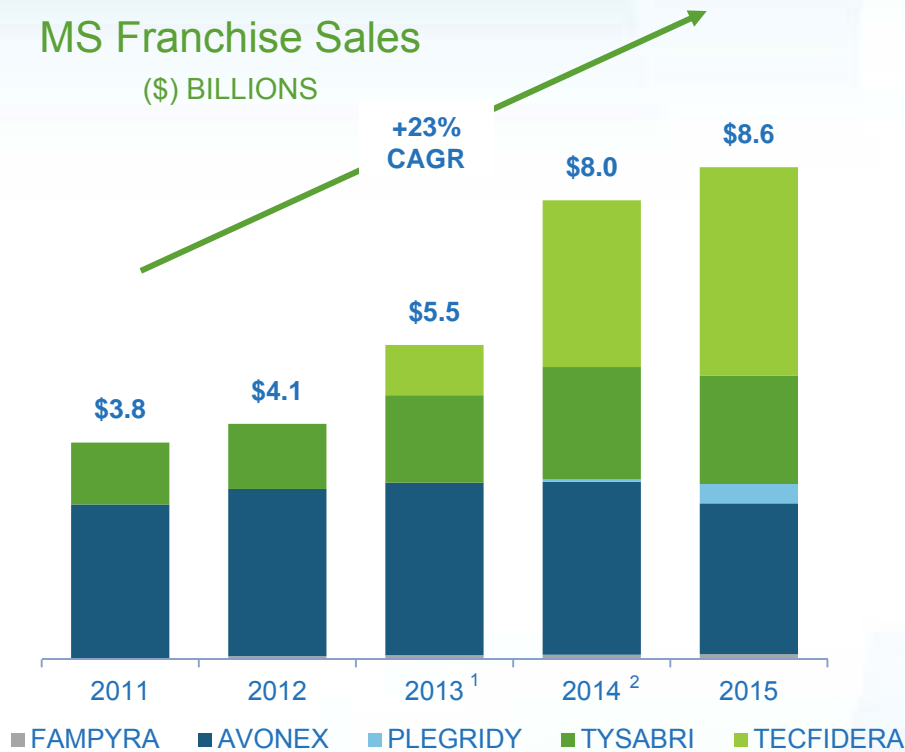
1. Free Cash Flow = Cash Flow from Operations – Capital Expenditures – Contingent Consideration Related to Fumapharm AG Acquisition. A reconciliation of free cash flow is at the end of this presentation.

Healthy Commercial Business

 Tecfidera [®] (dimethyl fumarate) <small>delayed-release capsules 240 mg</small>	MULTIPLE SCLEROSIS	 plegridy [™] (peginterferon beta-1a)
 TYSABRI [®] (natalizumab)	fampyra 10 mg <small>prolonged-release tablets</small> fampridine 	AVONEX [®] (interferon beta-1a)
 ALPROLIX [®] [Coagulation Factor IX (Recombinant), Fc Fusion Protein]	HEMOPHILIA	 ELOCTATE [®] [Antihemophilic Factor (Recombinant), Fc Fusion Protein]
Rituxan [®] <i>Rituximab</i>	ONCOLOGY	GAZYVA [®] obinutuzumab <small>injection</small>

A Global Leader in Multiple Sclerosis

MS Franchise Sales
(\$) BILLIONS



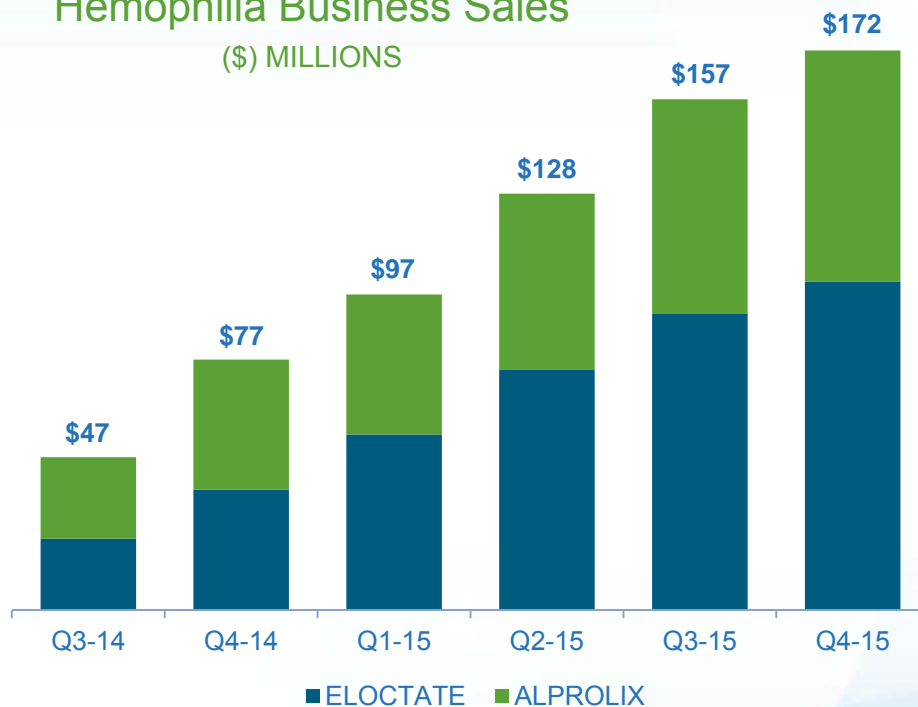
- MS is a **~\$19B market** with **~850K MS patients worldwide³**
- **Leading MS portfolio** that addresses a broad range of patient needs
- Biogen products treat **~ 38%** of all treated MS patients globally³



1. As of Q2 2013, TYSABRI revenue includes 100% of US sales.
 2. 2014 TYSABRI sales outside the U.S. included \$54 million of previously deferred revenue from February 2013 through March 31, 2014, which was recognized during Q2 2014 following an agreement with AIFA. Beginning in the second quarter of 2014, we recorded TYSABRI revenues in Italy at the full reimbursed price.
 3. Biogen data on file.

Transforming the Care of People with Hemophilia

Hemophilia Business Sales
(\$ MILLIONS)



- **~\$7B market** with >150K hemophilia patients worldwide¹
- ALPROLIX and ELOCTATE represent the **first meaningful improvements in hemophilia treatment in ~20 years**
- **Leading switch-to therapies** in both Hemophilia A & B

Potential New Sources of Revenue in 2016

 **Zinbryta™**
(daclizumab)

Relapsing MS

US and EU Approvals Expected
Mid-2016

In collaboration with Abbvie

Biosimilars

Anti-TNF Candidates:

BENEPALI (etanercept) Launching in EU
Infliximab EU Approval Expected Mid-2016

Samsung Bioepis joint venture

Healthy Commercial Business



Strategy for
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Neuroscience

Emerging Pipeline Fuels
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Therapies

Deep Pipeline

PHASE I	PHASE II	PHASE III
Dapirolizumab pegol* SLE†		
BIIB061 Multiple Sclerosis		
IONIS-DMPK_{Rx}* Myotonic Dystrophy		
Anti-BDCA2 SLE†		
Anti-alpha-synuclein (BIIB054) Parkinson's Disease		
BIIB063 Sjogren's Syndrome		
IONIS-SOD1_{Rx} (BIIB067)* SOD1-ALS#		

PHASE I	PHASE II	PHASE III
Anti-LINGO Multiple Sclerosis		
Raxatrigine (CNV1014802) Trigeminal Neuralgia		
Amiselimod (MT-1303)* Inflammatory Bowel Disease		
BAN2401* Alzheimer's Disease		
E2609* Alzheimer's Disease		
TYSABRI Acute Ischemic Stroke		
XLRS Gene Therapy* X-linked Retinoschisis		
BG00011 (STX-100) Idiopathic Pulmonary Fibrosis		

PHASE I	PHASE II	PHASE III
ZINBRYTA* Multiple Sclerosis		<i>Filed in US and EU</i>
GAZYVA* Rituxan-Refractory Indolent NHL‡		<i>Approved in US Feb'16</i>
GAZYVA* Front-Line Indolent NHL‡		
GAZYVA* Front-Line Diffuse Large B-Cell Lymphoma		
Ocrelizumab[^] Primary Progressive & Relapsing MS		
Nusinersen* Spinal Muscular Atrophy		
Aducanumab* Alzheimer's Disease		

PHASE I	PHASE II	PHASE III
BIOSIMILARS		
BENEPALI (etanercept)* Multiple Indications in EU		<i>Approved Jan'16</i>
Infliximab* Multiple Indications in EU		<i>Filed in EU</i>
Adalimumab* Multiple Indications in EU		

* Collaboration programs ^ Royalty from Genentech † Systematic Lupus Erythematosus # Amyotrophic Lateral Sclerosis ‡ Non-Hodgkin's Lymphoma

Emerging Mid- and Late-Stage Pipeline

Aducanumab
BAN2401
E2609
*Alzheimer's
Disease*

Nusinersen
*Spinal Muscular
Atrophy*

Anti-LINGO
BIIB061
Multiple Sclerosis

Raxatrigine
*Neuropathic
Pain*

Amiselimod
(MT-1303)
*Inflammatory
Bowel Disease*

Portfolio of Alzheimer's Disease Candidates

Aducanumab

Phase 3
Anti-amyloid antibody

REMOVE AMYLOID PLAQUE

BAN2401

Phase 2
Anti-amyloid antibody

REMOVE AMYLOID PLAQUE

E2609

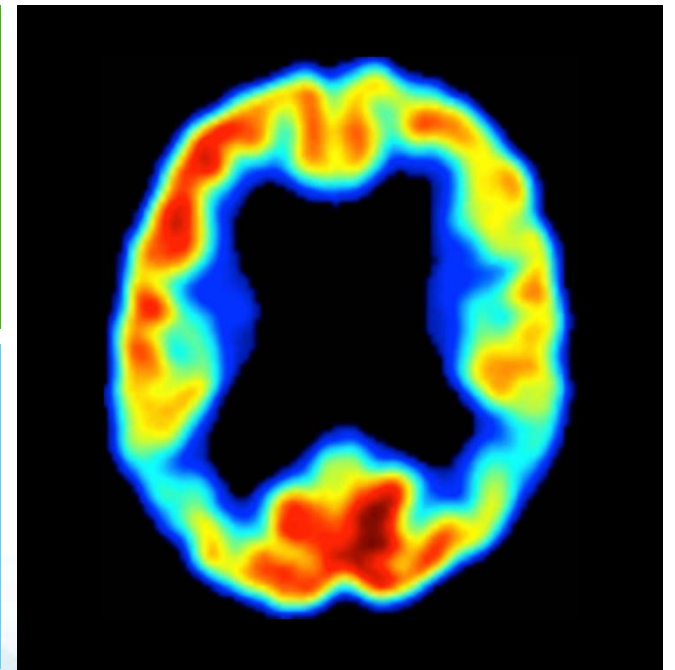
Phase 2
Oral inhibitor of β secretase

REDUCE AMYLOID PRODUCTION

Anti-TAU

Preclinical antibody &
antisense oligonucleotide (ASO)

REDUCE SPREAD OF TAU



Spinal Muscular Atrophy (SMA)

UNMET NEED

- Leading genetic cause of infant mortality
- Progressive neurological disease resulting in muscle atrophy and loss of motor function
- No current treatment
- Rare disease affecting motor neurons, causing muscle weakness and atrophy

ADVANCING A POTENTIAL TREATMENT FOR SMA

- Anti-sense therapeutic that modulates splicing of SMN2 resulting in increased expression of full-length SMN protein
- Phase 2 suggests potential treatment benefit

BIOGEN PIPELINE

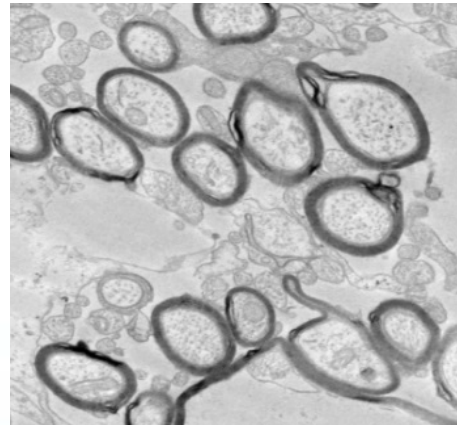
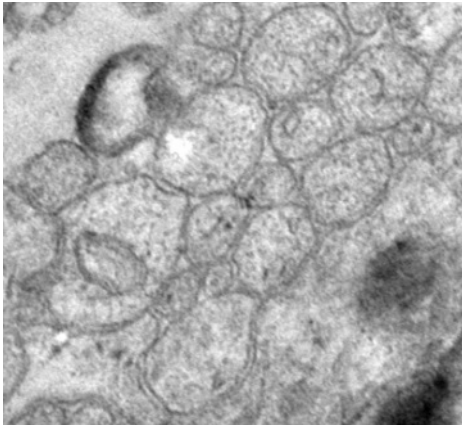
- Nusinersen Phase 3 ongoing; Data anticipated by H1 2017
- Collaboration with Ionis Pharmaceuticals



Repair & Regeneration Programs

Anti-LINGO-1

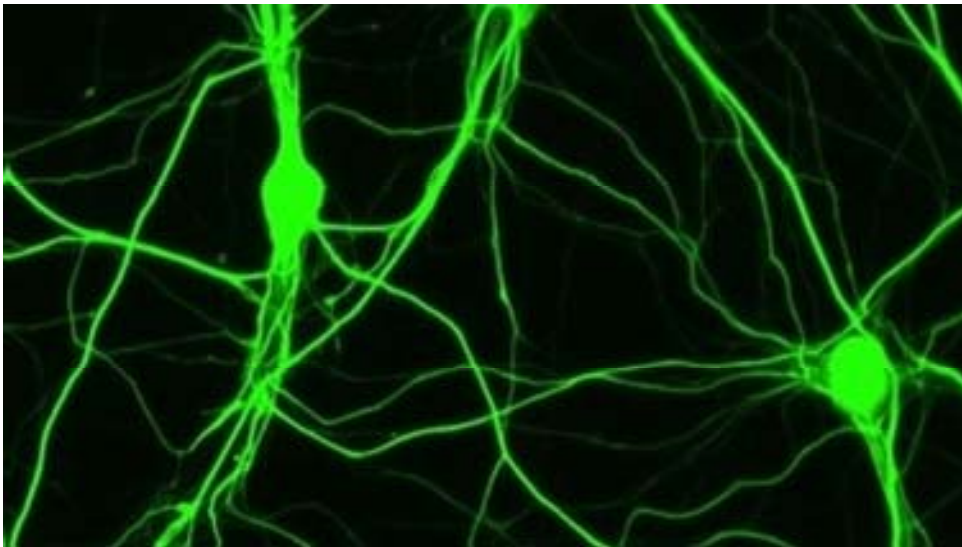
- Monoclonal antibody targeting LINGO-1, an important regulator of myelination
- **Phase 2 RENEW Trial (AON)** – first clinical study to demonstrate biological repair of the CNS via remyelination
- **Phase 2 SYNERGY Trial (MS)** – evaluating clinical benefit of anti-LINGO-1 in people with MS. Data expected mid-2016



BIIB061

- Potential novel oral remyelinating agent for MS
- Small molecule with a different mechanism from anti-LINGO-1
- Phase 2 initiation expected in 2016

Neuropathic Pain Asset



RAXATRIGINE

- Oral small molecule $\text{Na}_v1.7$ blocker with differentiated mechanism of action
- Clinically validated target for neuropathic pain

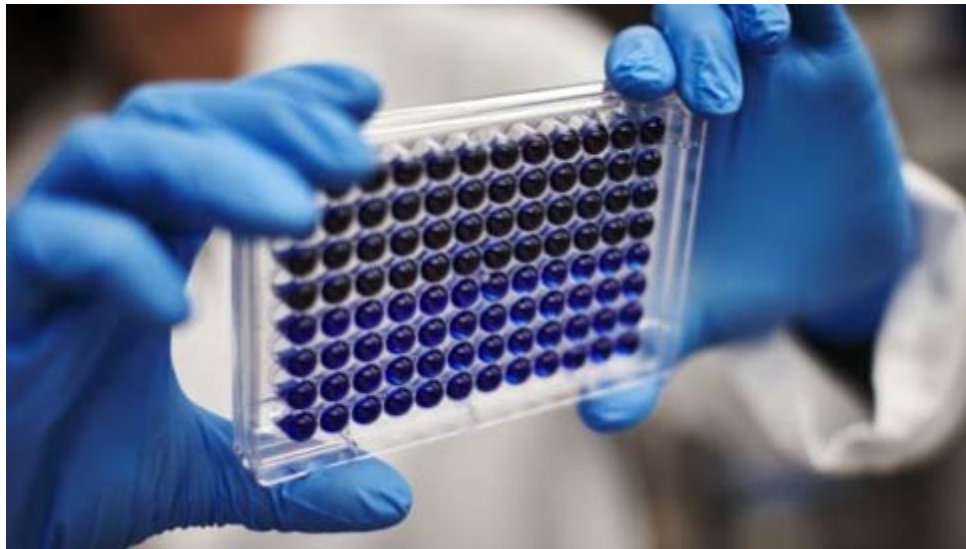
PHASE 3 PLANNED IN TRIGEMINAL NEURALGIA

- Treatment options are limited
- Phase 2 study demonstrated statistically significant and clinically meaningful benefit over placebo
- Phase 3 trial expected to initiate in 2016

PHASE 2B PLANNED IN SCIATICA

- Large unmet need remains in chronic sciatica, affecting ~ 5.5 million patients*
- Phase 2b trial expected to initiate in 2016

Inflammatory Bowel Disease (IBD)



UNMET NEED

- Ulcerative colitis (UC) and Crohn's disease (CD) each affect > 500K moderate-to-severe patients globally
- Large unmet need for safe oral alternative, especially for refractory patients

AMISELIMOD (MT-1303)

- Novel functional antagonist of the S1P1 receptor, a clinically validated target in IBD
- Potential for differentiation due to no dose titration

BIOGEN PIPELINE

- Phase 3 trials planned for UC and CD
- Planned to initiate in H2 2016

Healthy Commercial Business



Strategy for
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Neuroscience

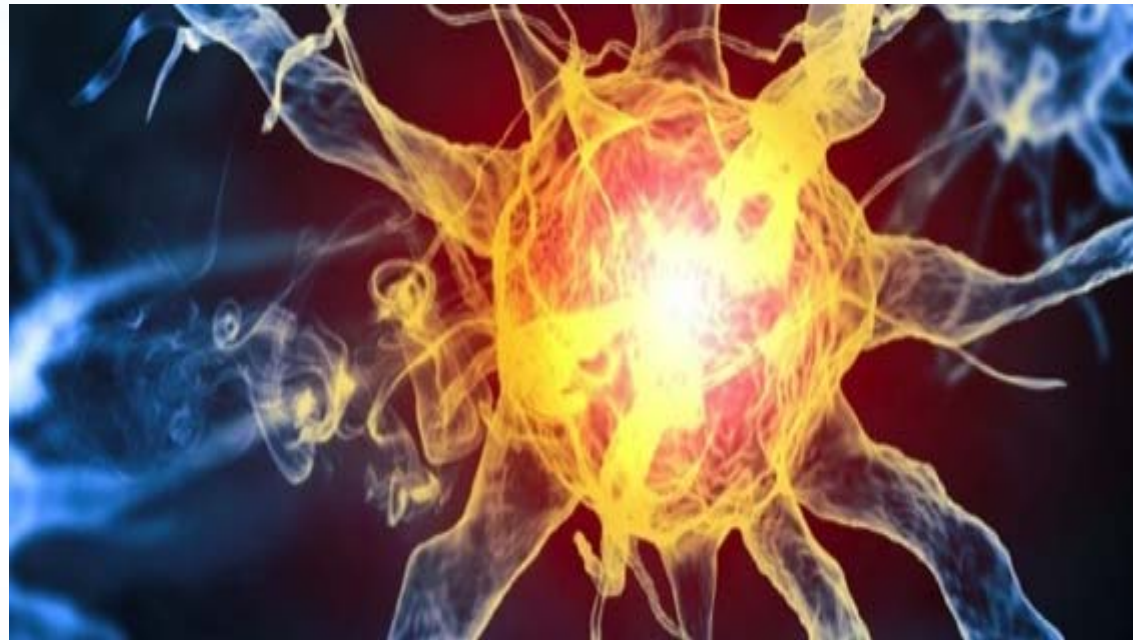
Emerging Pipeline Fuels
Next Wave of Potential
Therapies

A Transformative Era in Neurodegeneration Research

Improved Understanding of
Disease Biology

Novel Therapeutic
Approaches

Tools to Support Smarter
Drug Development



A photograph of two scientists in a laboratory setting. They are wearing white lab coats and safety glasses. One scientist is pointing towards a computer monitor, and the other is looking at it. The background shows various pieces of laboratory equipment.

World-Class Research Engine at Biogen

Fueled by the
Right People

Bolstered by
Strategic
Collaborations

Accelerating
Neurology Drug
Discovery

Strategy for Sustainable Growth

Healthy Commercial Business

Emerging Pipeline Fuels
Next Wave of Potential Therapies

Investing to Lead in Neuroscience

UPCOMING POTENTIAL VALUE DRIVERS:

Anti-LINGO in MS

BAN2401 and E2609 for Alzheimer's

Phase 1b titration data for aducanumab

Nusinersen for SMA

Launches anticipated for BENEPALI,
infiximab biosimilar, and ZINBRYTA

GAAP to Non-GAAP Reconciliation

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

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
GAAP diluted EPS	\$ 5.04	\$ 5.76	\$ 7.81	\$ 12.37	\$ 15.34
Adjustment to net income attributable to Biogen Inc. (see below)	0.86	0.77	1.15	146	167
Non-GAAP diluted EPS	\$ 5.90	\$ 6.53	\$ 8.96	\$ 13.83	\$ 17.01

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
GAAP Net Income Attributable to Biogen Inc.	\$ 1,234	\$ 1,380	\$ 1,862	\$ 2,935	\$ 3,547
Amortization of acquired intangible assets	207	194	331	473	365
(Gain)/ loss on fair value remeasurement of contingent consideration	36	27	(1)	(39)	31
Stock option expense	12	8	10	12	-
R&D – Severance and restructuring	-	9	-	-	-
2010 Restructuring initiatives	19	2	-	-	-
2015 Restructuring initiatives	-	-	-	-	93
Weston exit costs	-	-	27	-	-
Donation to Biogen Foundation	-	-	-	35	-
Income tax effect primarily related to reconciling items	(62)	(53)	(93)	(135)	(104)
Non-GAAP Net Income Attributable to Biogen Inc.	\$ 1,446	\$ 1,567	\$ 2,136	\$ 3,281	\$ 3,932

Free Cash Flow Reconciliation (unaudited, \$ in millions)

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Net cash flows provided by operating activities	\$ 1,728	\$ 1,880	\$ 2,345	\$ 2,942	\$ 3,716
Purchases of property, plant and equipment (Capital Expenditures)	208	255	246	288	643
Contingent Consideration related to Fumapharm AG acquisition	-	-	15	375	850
Free Cash Flow	\$ 1,520	\$ 1,625	\$ 2,084	\$ 2,279	\$ 2,223

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 of variable interest entities for which we are the primary beneficiary. These adjustments include charges for in-process research and development, the amortization of certain acquired intangible assets and fair value remeasurement of our contingent consideration obligations.

2. Stock option expense recorded in accordance with the accounting standard for share-based payments.

3. Weston Exit Costs

As a result of our decision to relocate our headquarters to Cambridge, MA, we vacated a portion of our Weston, MA facility in the fourth quarter of 2013. This charge represents our remaining lease obligation for the vacated portion of our Weston facility, net of sublease income.

4. Other items.

We evaluate other items 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.

Numbers may not foot due to rounding.