







## **Third Quarter 2021**

Financial Results and Business Update

October 20, 2021

Biogen.

## **Non-GAAP** financial information

This presentation and the discussions during this conference call include certain financial measures that were not prepared in accordance with accounting principles generally accepted in the U.S. (GAAP), including adjusted net income, adjusted diluted earnings per share, revenue growth at constant currency, which excludes the impact of changes in foreign exchange rates and hedging gains or losses, and free cash flow, which is defined as net flow from operations less capital expenditures. Additional information regarding the GAAP and Non-GAAP financial measures and a reconciliation of the GAAP to Non-GAAP financial measures can be found on slides 40-43 of this presentation and in the Q3 2021 earnings release and related financial tables posted on the *Investors* section of Biogen.com. We believe that these and other Non-GAAP financial measures provide additional insight into the ongoing economics of our business and reflect how we manage our business internally, set operational goals, and form the basis of our management incentive programs. Non-GAAP financial measures are in addition to, not a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP.

We do not provide guidance for GAAP reported financial measures (other than revenue) or a reconciliation of forward-looking Non-GAAP financial measures to the most directly comparable GAAP reported financial measures because we are unable to predict with reasonable certainty the financial impact of items such as the transaction, integration, and certain other costs related to acquisitions or large business development transactions; unusual gains and losses; potential future asset impairments; gains and losses from our equity security investments; and the ultimate outcome of pending significant litigation without unreasonable effort. These items are uncertain, depend on various factors, and could have a material impact on GAAP reported results for the guidance period. For the same reasons, we are unable to address the significance of the unavailable information, which could be material to future results.

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## Forward-looking statements

This presentation and the discussions during this conference call contain forward-looking statements, including statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, relating to: our strategy and plans; potential of, and expectations for, our commercial business and pipeline programs; capital allocation and investment strategy; clinical development programs, clinical trials, and data readouts and presentations; risks and uncertainties associated with drug development and commercialization; regulatory discussions, submissions, filings, and approvals and the timing thereof; the potential benefits, safety, and efficacy of our and our collaboration partners' products and investigational therapies; the anticipated benefits and potential of investments, collaborations, and business development activities; our future financial and operating results; 2021 financial guidance; plans relating to share repurchases. These forward-looking statements may be accompanied by such words as "aim," "anticipate," "believe," "could," "estimate," "expect," "forecast," "goal," "intend," "may," "plan," "potential," "possible," "prospect," "will," "would," 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 products; uncertainty of long-term success in developing, licensing, or acquiring other product candidates or additional indications for existing products; failure to compete effectively due to significant product competition in the markets for our products; failure to successfully execute or realize the anticipated benefits of our strategic and growth initiatives; difficulties in obtaining and maintaining adequate coverage, pricing, and reimbursement for our products; our dependence on collaborators, joint venture partners, and other third parties for the development, regulatory approval, and commercialization of products and other aspects of our business, which are outside of our full control; risks associated with current and potential future healthcare reforms; risks related to commercialization of biosimilars; failure to obtain, protect, and enforce our data, intellectual property, and other proprietary rights and the risks and uncertainties relating to intellectual property claims and challenges; 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; the occurrence of adverse safety events, restrictions on use with our products, or product liability claims; risks relating to the distribution and sale by third parties of counterfeit or unfit versions of our products; risks relating to the use of social media for our business; risks relating to technology failures or breaches; risks relating to management and key personnel changes, including attracting and retaining key personnel; failure to comply with legal and regulatory requirements; the risks of doing business internationally, including currency exchange rate fluctuations; risks relating to investment in our manufacturing capacity; problems with our manufacturing processes; fluctuations in our effective tax rate; the direct and indirect impacts of the ongoing COVID-19 pandemic on our business, results of operations, and financial condition; fluctuations in our operating results; risks related to investment in properties; the market, interest, and credit risks associated with our investment portfolio; risks relating to share repurchase programs; risks relating to access to capital and credit markets; risks related to indebtedness; change in control provisions in certain of our collaboration agreements; environmental risks; and any other risks and uncertainties that are described in other reports we have filed with the U.S. Securities and Exchange Commission (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.



## **ADUHELM** indication and safety statement

ADUHELM is indicated for the treatment of Alzheimer's disease. Treatment with ADUHELM should be initiated in patients with mild cognitive impairment or mild dementia stage of disease, the population in which treatment was initiated in clinical trials. There are no safety or effectiveness data on initiating treatment at earlier or later stages of the disease than were studied. This indication is approved under accelerated approval based on reduction in amyloid beta plaques observed in patients treated with ADUHELM. Continued approval for this indication may be contingent upon verification of clinical benefit in a confirmatory trial or trials.

ADUHELM can cause serious side effects including amyloid related imaging abnormalities or ARIA. ARIA is a common side effect that does not usually cause any symptoms but can be serious. ADUHELM can cause serious allergic reactions. The most common side effects include ARIA, headache and fall.

Please see full prescribing information and patient medication guide at ADUHELM.com.



## Q3 2021 earnings call agenda

Introduction

**Michael Hencke** 

**Investor Relations** 

Overview

**Michel Vounatsos** 

Chief Executive Officer

**R&D Update** 

Al Sandrock, M.D., Ph.D.

Head of Research & Development

**Financial Update** 

**Michael McDonnell** 

**Chief Financial Officer** 

**Closing Remarks** 

**Michel Vounatsos** 

Chief Executive Officer

Also available for Q&A

**Alisha Alaimo** 

President, U.S. Organization

**Toby Ferguson, M.D., Ph.D.** 

Head of Neuromuscular Development



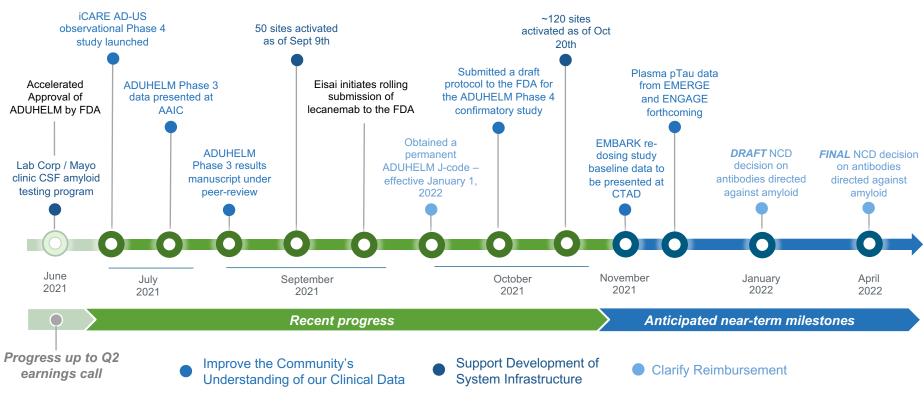
## **Overview**

Michel Vounatsos
Chief Executive Officer





## Progress against strategic priorities for the ADUHELM launch





## Advancing our pipeline in depression and ALS



Positive Phase 2 data of zuranolone in MDD in Japan

NDA submission to the FDA for zuranolone in MDD anticipated to complete in second half of 2022, with PPD filing expected in first half of 2023

#### Pivotal readout for tofersen in SOD1-ALS

VALOR Phase 3 study did not meet the primary endpoint, but signs of slowing disease progression were observed

Biogen is working with key stakeholders on next steps and will expand the tofersen early access program to the broader SOD1-ALS population



## **R&D** Update

Al Sandrock, M.D., Ph.D. Head of Research & Development

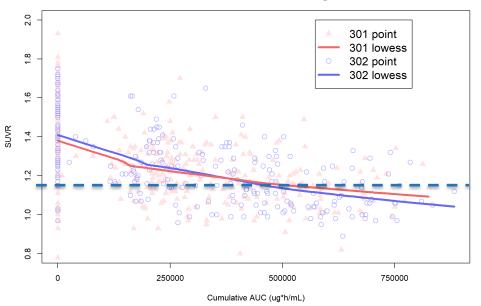




## **Aducanumab - Drug to Biology: PK/PD**

Drug → Biology → Disease

Figure 3: SUVR versus predicted cumulative AUC in Phase 3 Study 301 and 302 at Week 78 for Placebo, Low dose, and High Dose Arms

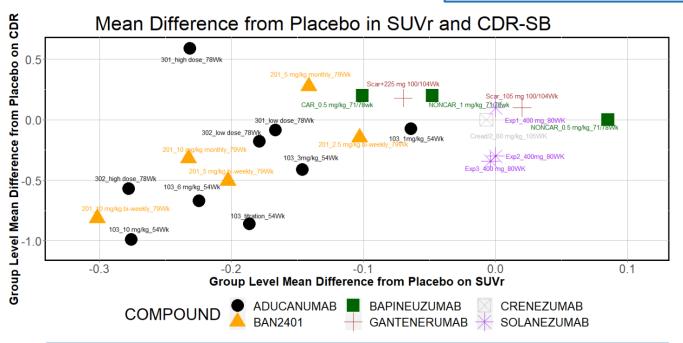


Graphical assessment evaluating the relationship between SUVR (amyloid plaque burden) to cumulative AUC (aducanumab exposure) in ENGAGE and EMERGE at week 78 demonstrates that amyloid plaque burden decreases as cumulative aducanumab exposure increases



# Aducanumab - Biology to Disease: Association between SUVr and CDR-SB supporting surrogate endpoint

Drug → Biology → Disease



This data is not intended to show differences in safety or efficacy between or among products.





# **Building long-term leadership in Alzheimer's disease**

## Presented new data on aducanumab and Alzheimer's disease pipeline at AAIC

- Analyses of data from EMERGE, ENGAGE and PRIME support a relationship between aducanumab-induced changes in biomarkers of Alzheimer's disease pathophysiology and slowing of clinical decline
- Phase 1b study of BIIB080, anti-tau ASO, in patients with mild Alzheimer's disease demonstrated a durable, time- and dosedependent decrease of CSF total tau and phospho-tau

# Submitted a draft protocol of the Phase 4 confirmatory study of aducanumab to the FDA

## Continuing to advance an innovative pipeline in Alzheimer's disease

- Eisai initiated rolling submission for BLA of lecanemab under accelerated approval pathway in the U.S.
- Actively planning the Phase 2 study of BIIB080 in Alzheimer's disease



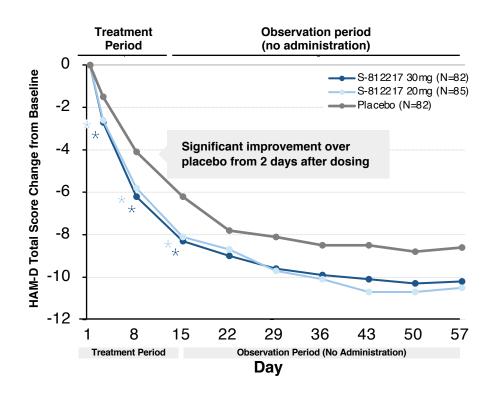
# Continued commitment to MS

## **New MS data presented at ECTRIMS 2021**

- Results from Phase 3b NOVA study show that EID natalizumab dosing provides a high level of efficacy in controlling MS disease activity in patients who switched from the approved every four-week dosing regimen
- Real-world analysis shows significantly lower risk of relapse for patients treated with natalizumab compared to ocrelizumab
- In EVOLVE-MS-2, GI events were less frequent and less severe with VUMERITY vs. TECFIDERA
- MS PATHS data indicate that 100% of people with MS treated with natalizumab, interferons, or fumarates achieved an antibody response following COVID-19 vaccination vs. ~40% for those treated with anti-CD20 and S1P therapies

# **VUMERITY** approval in Switzerland and a Positive CHMP opinion in the E.U.

# Shionogi Phase 2 study conducted in Japan shows consistent profile of zuranolone



#### **Efficacy**

- Achieved the primary endpoints at both 20 mg and 30 mg
  - Significant improvement over placebo from Day 3 (first observation) to Day 15 (end of administration) at 20 mg and 30 mg of change in total HAM-D score from baseline
  - Response rate\*\* was significantly improved on Day 8 and Day 15 compared to placebo
  - ⇒ Confirmed the "Quick onset"
  - Throughout the observation period from Day 15 to Day 57, although there was no significant difference from placebo, trend in continuous therapeutic effect was observed.

#### Safety

- · Confirmed the safety
  - All adverse events were mild or moderate, with no new concerns





# Moving forward in neuromuscular disorders

## Pivotal readout of Phase 3 study of tofersen in *SOD1*-ALS

- The primary endpoint as measured by the ALSFRS-R did not reach statistical significance
- Signs of reduced disease progression across multiple secondary and exploratory endpoints were observed, including motor function, respiratory function, muscle strength and quality of life
- Tofersen administration led to sustained reductions in total CSF SOD1 protein and plasma neurofilament light chain, a potential marker of neuronal degeneration
- Most adverse events in the Phase 3 study were mild to moderate in severity

# Announced the ASCEND Phase 3b study to evaluate a higher dose\* of SPINRAZA in SMA patients treated with risdiplam

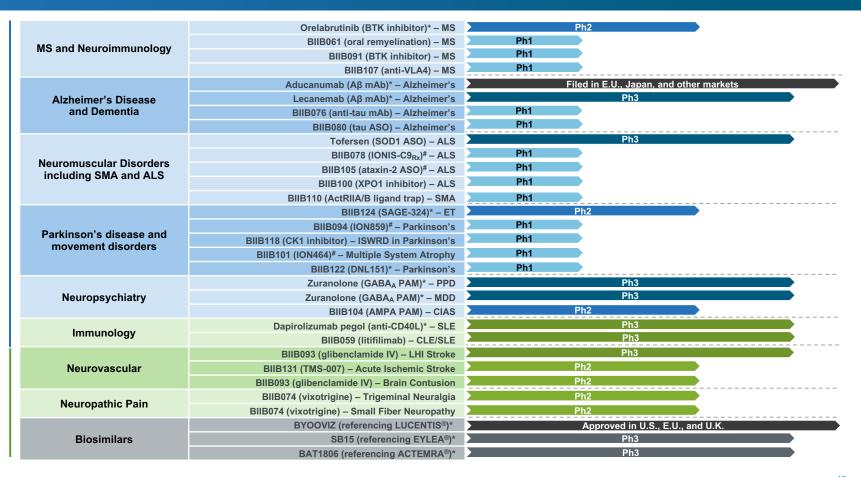
ALS = amyotrophic lateral sclerosis; ALSFRS-R = Revised Amyotrophic Lateral Sclerosis Functional Rating Scale; CSF = cerebrospinal fluid; SMA = spinal muscular atrophy; SOD1 = superoxide dismutase 1

<sup>\*</sup>Individuals enrolled in ASCEND will receive two loading doses of SPINRAZA 50 mg two weeks apart, followed by a maintenance dose of 28 mg every four months during the study period

## Broad neuroscience pipeline to drive multi-franchise strategy

Core Growth Areas

**Emerging** Growth Areas



# Financial Update

Michael McDonnell
Chief Financial Officer

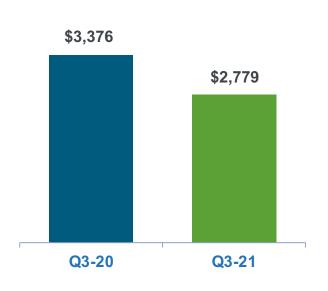




## Q3 2021 financial results



## Non-GAAP Diluted EPS (\$)





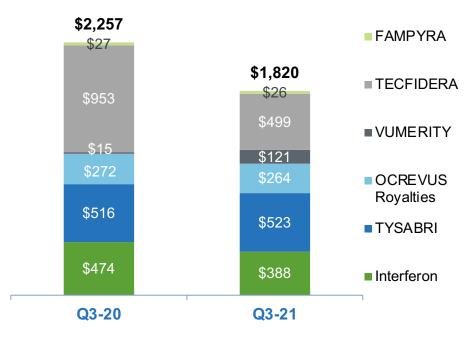


Our GAAP financial measures and a reconciliation of GAAP to Non-GAAP financial results are at the end of this presentation.

\*Beginning in the second quarter of 2021 material upfront payments and premiums paid on the acquisition of common stock associated with significant collaboration and licensing arrangements along with the related transaction costs incurred are no longer excluded from Non-GAAP R&D and SG&A expenses. Non-GAAP financial results for the third quarter of 2020 have been updated to reflect the \$601 million payment related to the collaboration with Denali Therapeutics, Inc. along with the associated transaction costs and income tax effect.

## Global multiple sclerosis revenue

#### MS Revenue (\$M)



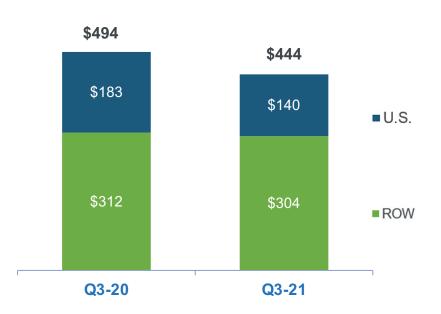
#### **Highlights**

- **TECFIDERA** decreased vs. prior year, impacted by the entrance of multiple generics in the U.S.
- VUMERITY has continued to grow in the U.S.
  - Positive CHMP opinion in E.U.
- TYSABRI increased 1% vs. prior year
  - Subcutaneous administration launched in the E.U.
- Interferon decreased 18% vs. prior year
  - Intramuscular PLEGRIDY launched in the U.S. and E.U.



### Global SPINRAZA revenue

#### SPINRAZA Revenue (\$M)



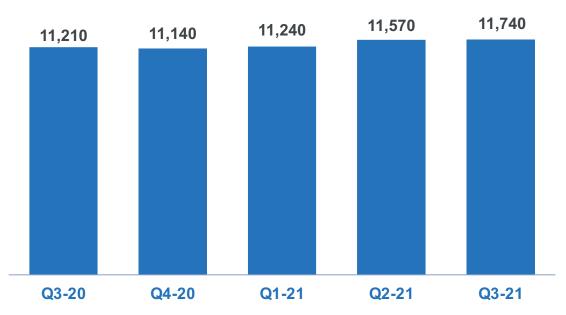
#### **Highlights**

- U.S. SPINRAZA revenue impacted by competition, exacerbated by impacts of COVID-19
- ROW revenue decreased 2% vs. Q3 2020
- Over 11,000 patients\* on therapy, an increase of 5% versus Q3 2020 driven by continued growth outside the U.S.
- Proven efficacy across all patient types and a well characterized safety profile
- Announced plan to initiate ASCEND study to evaluate potential benefit of a higher dose in patients previously treated with risdiplam

## **SPINRAZA** patient dynamics



#### **SPINRAZA Patients\***



<sup>\*</sup> Biogen data on file. Total patients across the post-marketing setting, the Expanded Access Program, and clinical trials.



## U.S. ADUHELM

#### Q3 2021 Financials

- \$0.3 million revenue
- Collaboration profit sharing includes a net reimbursement of \$51 million from Eisai related to the commercialization of ADUHELM in the U.S.

## **Collaboration Economics & Accounting**

	3
Profit Share	Biogen 55% / Eisai 45%
Revenue / Cost of Goods Sold	<ul> <li>Biogen books 100% of revenue and cost of goods sold</li> <li>Eisai's share of gross margin will be reflected in collaboration profit sharing</li> </ul>
Royalties	<ul> <li>Biogen will pay Neurimmune royalties ranging from the high single digits to sub-teens based on annual net sales of ADUHELM</li> </ul>
	<ul> <li>Neurimmune royalties are recorded through non- controlling interest and not cost of goods sold, with Eisai's reimbursement reflected in collaboration profit sharing</li> </ul>
SG&A Expense	Prior to regulatory approval: Eisai's reimbursement is recorded as an offset to SG&A expense
	<ul> <li>After regulatory approval: SG&amp;A expense recorded on a gross basis, with Eisai's reimbursement recognized in collaboration profit sharing</li> </ul>
R&D Expense	<ul> <li>All R&amp;D expenditures are recorded net of Eisai's reimbursement within R&amp;D expense, both before and after regulatory approval</li> </ul>
Commercial	One-time U.S. commercial launch milestone of \$100 million paid to Neurimmune in Q2 2021

~\$45 million in Q2 2021

**Milestones** 



### Biosimilars revenue

### **Biosimilars Revenue (\$M)**



#### **Highlights**

- The market-leading anti-TNF portfolio in E.U.
- ~ 244,000 patients on Biogen biosimilar products at end of Q3 2021\*
- Biogen contributed ~ €2.4 billion of healthcare savings in 2020 across Europe<sup>#</sup>
- Continued impacts of the COVID-19 pandemic along with pricing pressure
- BYOOVIZ (referencing LUCENTIS®) approved in U.S., E.U., and U.K.

<sup>\*</sup> Includes ~113,000 patients on BENEPALI, ~92,000 patients on IMRALDI, and ~39.000 patients on FLIXABI.

<sup>#</sup> Biogen estimate, data on file.

BYOOVIZ is being developed with Samsung Bioepis Co., Ltd.

## Q3 2021 revenue highlights

\$ in Millions	Q3 2021	Q3 2020	Δ Υ/Υ
Total Product Revenue*	\$2,206	\$2,690	(18%)
RITUXAN/GAZYVA Revenue	\$151	\$288	(47%)
OCREVUS Royalties	\$264	\$272	(3%)
Revenue from Anti-CD20 Therapeutic Programs	\$415	\$560	(26%)
Other Revenue	\$158	\$126	26%
Total Revenue*	\$2,779	\$3,376	(18%)



## Q3 2021 financial results highlights

(\$ in Millions except EPS, Shares in Millions)	Q3 2021	Q3 2020*	<b>∆ Y/Y</b>
Total Revenue	\$2,779	\$3,376	(18%)
Cost of Sales	\$512	\$449	(14%)
Gross Profit	\$2,267	\$2,927	(23%)
% of revenue	82%	87%	
R&D Expense	\$702	\$1,141	38%
Non-GAAP SG&A Expense	\$651	\$573	(14%)
Collaboration Profit Sharing	\$21	\$73	71%
Non-GAAP Amortization	\$7	\$0	NMF
Non-GAAP Operating Income	\$885	\$1,140	(22%)
Non-GAAP Other Income (Expense)	(\$79)	(\$46)	(70%)
Non-GAAP Profit Before Taxes and JV Equity	\$806	\$1,093	(26%)
Non-GAAP Taxes	\$117	\$209	44%
Non-GAAP Taxes %	14.5%	19.1%	
Non-GAAP JV Equity Income (Loss)	\$9	(\$3)	(429%)
Non-GAAP Net Income	\$698	\$882	(21%)
Non-GAAP Net Income (Loss) Attributable to Noncontrolling Interests	(\$11)	(\$5)	123%
Non-GAAP Net Income Attributable to Biogen Inc.	\$710	\$887	(20%)
Weighted average diluted shares used in calculating diluted EPS	149	157	5%
Non-GAAP Diluted EPS	\$4.77	\$5.64	(15%)



Numbers may not foot due to rounding. Percent changes represented as favorable/(unfavorable).

Our GAAP financial measures and a reconciliation of GAAP to Non-GAAP financial results are at the end of this presentation.

\*Beginning in the second quarter of 2021 material upfront payments and premiums paid on the acquisition of common stock associated with significant collaboration and licensing arrangements along with the related transaction costs incurred are no longer excluded from Non-GAAP R&D and SG&A expenses. Non-GAAP financial results for the third quarter of 2020 have been updated to reflect the \$601 million payment related to the collaboration with Denali Therapeutics, Inc. along with the associated transaction costs and income tax effect.

## **Deployment of capital in Q3 2021**

\$42 million
Capital Expenditures

Cash Flow from Operations \$805 million

**\$750 million**Share Repurchases

Free Cash Flow\* \$763 million



## **Balance sheet highlights**

\$7.3 billion
Debt at end of Q3 2021

\$3.9 billion

Cash and marketable securities at end of Q3 2021

\$3.3 billion
Net debt at end of Q3 2021

## Cash and Marketable Securities (\$ billions)



## **Updated 2021 full year financial guidance**

	Prior FY 2021 Guidance	Updated FY 2021 Guidance
Revenue	\$10.65 billion to \$10.85 billion	\$10.8 billion to \$10.9 billion
Non-GAAP Diluted EPS	\$17.50 to \$19.00	\$18.85 to \$19.35
Capital Expenditures	\$375 million to \$425 million	\$250 million to \$300 million

Please see Biogen's Q3 2021 earnings release, available at the *Investors* section of Biogen's website at investors.biogen.com, for additional 2021 financial guidance assumptions.

Biogen may incur charges, realize gains or losses, or experience other events or circumstances in 2021 that could cause any of these assumptions to change and/or actual results to vary from this financial guidance.

Please see slide 2 of this presentation for additional information on our use of Non-GAAP measures, including forward-looking Non-GAAP financial measures.



# **Closing Remarks**

Michel Vounatsos
Chief Executive Officer





## **Progress implementing strategy**

## Maximizing the resilience of our MS business

Enhancing our neuromuscular franchise

Unlocking the potential of biosimilars

Advancing our neuroscience portfolio

- ☑ Q3 MS revenue, including OCREVUS royalties, of \$1.8 billion
- ☑ Continued revenue growth for VUMERITY
- ☑ Positive CHMP opinion for VUMERITY in the E.U.
- ☑ Q3 SPINRAZA revenue of \$444 million
- ✓ Over 11,000 patients on therapy globally as of September 30, 2021<sup>^</sup>
- ☑ SPINRAZA discontinuation rate in the U.S. decreased vs. Q2 2021
- ☑ Q3 biosimilars revenue of \$203 million
- ☑ Market-leading anti-TNF portfolio in E.U.
- ☑ BYOOVIZ (ranibizumab-nuna), referencing LUCENTIS®, was approved in the U.S., the E.U., and the U.K.
- ✓ New Phase 2 data of zuranolone in major depressive disorder in Japan<sup>+</sup>
- ☑ Pivotal data readout for tofersen in SOD1-ALS and expansion of early access program

<sup>^</sup> Includes patients on therapy across the post-marketing setting, the Expanded Access Program, and clinical trials.

<sup>+</sup> Zuranolone is being developed in collaboration with Sage Therapeutics, Inc.

CHMP = Committee for Medicinal Products for Human Use: ALS = amvotrophic lateral sclerosis

## Biogen is actively working to support access to ADUHELM



#### Improve the Community's Understanding of Our Clinical Data

- Aducanumab Phase 3 results currently under review at a top-tier journal
- Submitted a draft protocol to the FDA for the Phase 4 confirmatory study of ADUHELM
- Presented ADUHELM data at AAIC, with planned presentation of EMBARK baseline data at CTAD

#### **Support Development of the Necessary Infrastructure**

 Established a program with Labcorp and Mayo Clinic to help patients access CSF amyloid testing to aid in the diagnosis of Alzheimer's disease

#### **Clarify Reimbursement**

 Obtained the permanent ADUHELM J-code ahead of the CMS NCD on antibodies directed against amyloid, expected next year

## **Questions** & Answers





## **Appendix**

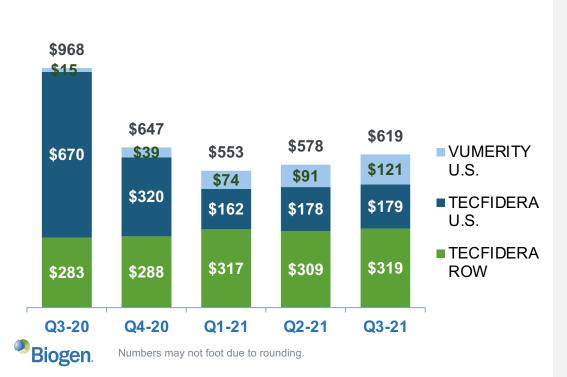




## Global fumarate revenue



#### **Fumarate Revenue (\$M)**



### Q3 2021 Highlights

Revenue vs. Q3 2020 and Q2 2021

	$\Delta Y/Y$		$\Delta Q/Q$
WW	- 36%	and	+ 7%
U.S.	- 56%	and	+11%
ROW	+ 13%	and	+ 3%

 U.S. TECFIDERA volume in Q3 2021 decreased vs Q2 2021 which was offset by lower discounts and allowances

### Global interferon revenue





#### Interferon Revenue (\$M)



#### Q3 2021 Highlights

Revenue vs. Q3 2020 and Q2 2021

	$\Delta Y/Y$		$\Delta Q/Q$
WW	- 18%	and	- 3%
U.S.	- 23%	and	- 2%
ROW	- 8%	and	- 5%

## **Global TYSABRI revenue**



#### TYSABRI Revenue (\$M)



#### Q3 2021 Highlights

Revenue vs. Q3 2020 and Q2 2021

	$\Delta Y/Y$		$\Delta Q/Q$
WW	+ 1%	and	- 0%
U.S.	- 8%	and	- 6%
ROW	+ 14%	and	+ 8%

 Biogen believes that Q3 2021 TYSABRI revenue was negatively impacted by channel dynamics in the U.S.

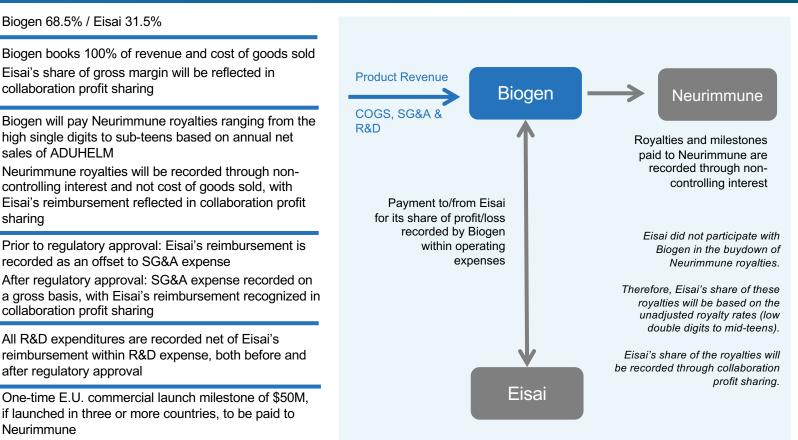
## E.U. ADUHELM economics and accounting

#### of Goods Sold Eisai's share of gross margin will be reflected in collaboration profit sharing Biogen will pay Neurimmune royalties ranging from the **Royalties** high single digits to sub-teens based on annual net sales of ADUHELM Neurimmune royalties will be recorded through noncontrolling interest and not cost of goods sold, with Eisai's reimbursement reflected in collaboration profit sharing Prior to regulatory approval: Eisai's reimbursement is SG&A recorded as an offset to SG&A expense Expense After regulatory approval: SG&A expense recorded on a gross basis, with Eisai's reimbursement recognized in collaboration profit sharing All R&D expenditures are recorded net of Eisai's R&D reimbursement within R&D expense, both before and Expense after regulatory approval One-time E.U. commercial launch milestone of \$50M. Commercial if launched in three or more countries, to be paid to Neurimmune Launch **Milestones** Eisai's reimbursement is reflected in collaboration profit sharing

Biogen 68.5% / Eisai 31.5%

**Profit Share** 

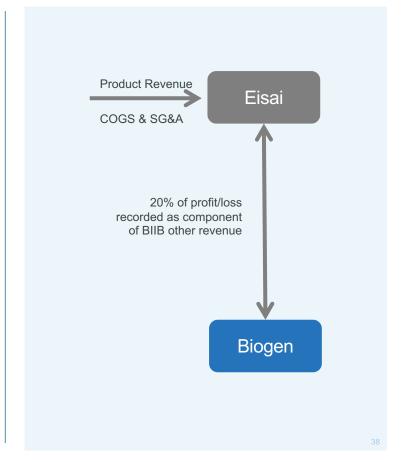
Revenue / Cost



37

## Japan ADUHELM economics and accounting

Profit Share	Biogen 20% / Eisai 80%
Revenue / Cost of Goods Sold	<ul> <li>Eisai books 100% of the revenue and cost of goods sold</li> <li>Biogen books 20% of net collaboration profit/losses as a component of Other Revenue</li> </ul>
Royalties	<ul> <li>Biogen will pay Neurimmune tiered royalties ranging from the high single digits to sub-teens based on annual net sales of ADUHELM</li> <li>Biogen's share of royalty expense nets to zero due to the offsetting effects of BIIB's 20% royalty share and its royalty rates being 20% lower than Eisai's due to the buydown</li> </ul>
SG&A Expense	<ul> <li>Prior to regulatory approval: Biogen's share of expenses is recorded within SG&amp;A</li> <li>After regulatory approval: Biogen's share of expenses is reflected as a component of Other Revenue</li> </ul>
R&D Expense	All R&D expenditures recorded net of reimbursement within R&D expense, both before and after regulatory approval
Commercial Launch Milestones	<ul> <li>One-time commercial launch milestone of \$50M to be paid to Neurimmune</li> <li>Eisai's reimbursement is reflected in collaboration profit sharing</li> </ul>



## **Consolidated Statement of Income**

(unaudited, in millions, except per share amounts)

	Fo	r the Three Septen			F	For the Nine Months End September 30,				
		2021	2020			2021		2020		
Revenue:										
Product, net		2,205.7		2,690.3		6,653.4		8,390.6		
Revenue from anti-CD20 therapeutic programs		415.4		560.1		1,244.4		1,558.8		
Other		157.8		125.7		350.1		642.6		
Total revenue		2,778.9		3,376.1		8,247.9	(15) (3)	10,592.0		
Cost and expense:										
Cost of sales, excluding amortization and impairment of acquired intangible assets		511.8		449.1		1,449.6		1,314.6		
Research and development		702.4		1,140.9		1,801.7		2,264.8		
Selling, general and administrative		654.1		573.1		1,886.4		1,698.3		
Amortization and impairment of acquired intangible assets		111.0		82.6		813.2		215.6		
Collaboration profit sharing		21.2		73.0		74.5		166.5		
(Gain) loss on fair value remeasurement of contingent consideration		(15.6)		(29.0)		(49.1)		(23.5)		
Acquired in-process research and development		-	_	22		18.0		75.0		
Total cost and expense		1,984.9		2,289.7		5,994.3		5,711.3		
Income from operations		794.0		1,086.4		2,253.6		4,880.7		
Other income (expense), net		(502.9)		(128.6)		(913.4)		(186.1)		
Income before income tax expense and equity in loss of investee, net of $\ensuremath{tax}$		291.1		957.8		1,340.2		4,694.6		
Income tax (benefit) expense		(25.9)		240.8		(390.7)		979.0		
Equity in (income) loss of investee, net of tax		(1.1)		13.1		(17.2)		(17.2)		12.7
Net income		318.1		703.9		1,748.1		3,702.9		
Net income (loss) attributable to noncontrolling interests, net of tax		(11.1)		2.4		560.2		60.2		
Net income attributable to Biogen Inc.	\$	329.2	\$	701.5	\$	1,187.9	\$	3,642.7		
Net income per share:										
Basic earnings per share attributable to Biogen Inc.	\$	2.22	\$	4.47	\$	7.93	\$	22.29		
Diluted earnings per share attributable to Biogen Inc.	\$	2.22	\$	4.46	\$	7.90	\$	22.25		
Weighted-average shares used in calculating:										
Basic earnings per share attributable to Biogen Inc.		148.0		156.9		149.9		163.4		
Diluted earnings per share attributable to Biogen Inc.		148.6		157.2		150.3		163.7		



### **GAAP to Non-GAAP Reconciliation**

Operating Expense, Other Income (Expense), net and Income Tax (unaudited, in millions, except per share amounts)

	F	For the Three Months Ended For t September 30,				or the Nine Months Ende September 30,			
		2021*		2020**		2021*		2020**	
Selling, General and Administrative Expense:						10000	100		
Total selling, general and administrative, GAAP	\$	654.1	\$	573.1	\$	1,886.4	\$	1,698.3	
Less: other		3.0				5.2		(0.1)	
Total selling, general and administrative, Non-GAAP	\$	651.1	\$	573.1	\$	1,881.2	\$	1,698.4	
Amortization and Impairment of Acquired Intangible Assets:									
Total amortization and impairment of acquired intangible assets, GAAP	\$	111.0	\$	82.6	\$	813.2	\$	215.6	
Less: impairment charges A		44.3		19.3		629.3		19.3	
Less: amortization of acquired intangible assets		59.4		63.3		176.6		196.3	
Total amortization and impairment of acquired intangible assets, Non-GAAP	\$	7.3	\$		\$	7.3	\$	-	
(Gain) Loss on Fair Value Remeasurement of Contingent Consideration:									
Total (gain) loss on fair value remeasurement of contingent consideration, GAAP	\$	(15.6)	\$	(29.0)	\$	(49.1)	\$	(23.5)	
Less: (gain) loss on fair value remeasurement of contingent consideration		(15.6)		(29.0)		(49.1)		(23.5)	
Total (gain) loss on fair value remeasurement of contingent consideration, Non-GAAP	\$	_	\$		\$		\$	8_3	
Other Income (Expense), net:			_						
Total other income (expense), net, GAAP	\$	(502.9)	\$	(128.6)	\$	(913.4)	\$	(186.1)	
Less: gain (loss) on equity security investments		(424.2)		(82.2)		(705.9)		(40.2)	
Plus: premium paid on debt exchange or early debt redemption		_		_		9.5		9.4	
Total other income (expense), net, Non-GAAP	\$	(78.7)	\$	(46.4)	\$	(198.0)	\$	(136.5)	
Income Tax (Benefit) Expense:									
Total income tax (benefit) expense, GAAP	\$	(25.9)	\$	240.8	\$	(390.7)	\$	979.0	
Less: Neurimmune step-up tax basis <sup>в</sup>		_		_		(492.0)		_	
Less: valuation allowance associated with deferred tax assets				33.3		_		89.3	
Less: income tax effect related to Non-GAAP reconciling items		(142.7)		(1.0)		(335.3)		(29.7)	
Total income tax expense, Non-GAAP	\$	116.8	\$	208.5	\$	436.6	\$	919.4	
Effective Tax Rate:									
Total effective tax rate, GAAP		(8.9)%		25.1 %		(29.2)%		20.9 %	
Less: Neurimmune step-up tax basis <sup>8</sup>				-		(36.7)		-	
Less: valuation allowance associated with deferred tax assets		<u> </u>		3.5		_		1.9	
Less: impact of GAAP to Non-GAAP adjustments		(23.4)		2.5		(7.9)		0.7	
Total effective tax rate, Non-GAAP		14.5 %		19.1 %		15.4 %		18.3 %	

#### **Use of Non-GAAP Financial Measures**

We supplement our GAAP consolidated financial statements and GAAP financial measures with other financial measures, such as adjusted net income, adjusted diluted earnings per share, revenue growth at constant currency, which excludes the impact of changes in foreign exchange rates and hedging gains or losses, and free cash flow, which is defined as net flow from operations less capital expenditures. We believe that these and other Non-GAAP financial measures provide additional insight into the ongoing economics of our business and reflect how we manage our business internally, set operational goals and form the basis of our management incentive programs. Non-GAAP financial measures are in addition to, not a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP.

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. Acquisitions and divestitures

We exclude transaction, integration and certain other costs related to the acquisition and divestiture of businesses, the acquisitions of assets and items associated with the initial consolidation or deconsolidation of variable interest entities. These adjustments include, but are not limited to, charges for in-process research and development and certain milestones, the amortization and impairment of intangible assets, charges or credits from the fair value remeasurement of our contingent consideration obligations and losses on assets and liabilities held for sale.

#### 2. Restructuring, business transformation and other cost saving initiatives

We exclude costs associated with our execution of certain strategies and initiatives to streamline operations, achieve targeted cost reductions, rationalize manufacturing facilities or refocus research and development 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.

#### 3. (Gain) loss on equity security investments

We exclude unrealized and realized gains and losses and discounts or premiums on our equity security investments as we do not believe that these components of income or expense have a direct correlation to our ongoing or future business operations.

#### 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 earnings per share - diluted.



Footnotes referenced in the tables above are included at the end of this presentation.

## **GAAP to Non-GAAP Reconciliation**

Equity Income/Loss of Investee, Noncontrolling Interests, Net Income & Diluted EPS (unaudited, in millions, except per share amounts)

	For the Three Months Ended September 30, September 30,							
		2021*	2	2020**		2021*		2020**
Equity in (Income) Loss of Investee, Net of Tax:	,0		650		-81		0.00	
Total equity in (income) loss of investee, GAAP	\$	(1.1)	\$	13.1	\$	(17.2)	\$	12.7
Less: amortization of equity in (income) loss of investee	10	7.8	33	10.3		31.0		33.2
Total equity in (income) loss of investee, Non-GAAP	\$	(8.9)	\$	2.8	\$	(48.2)	\$	(20.5)
Net Income (Loss) Attributable to Noncontrolling Interests, Net of Tax:								
Total net income (loss) attributable to noncontrolling interests, GAAP	\$	(11.1)	\$	2.4	\$	560.2	\$	60.2
Less: Neurimmune step-up tax basis <sup>8</sup>		_		_		492.0		_
Less: net distribution to noncontrolling interests and other		_		7.4		(4.4)		0.3
Total net income (loss) attributable to noncontrolling interests, Non-GAAP	\$	(11.1)	\$	(5.0)	\$	72.6	\$	59.9
Net Income Attributable to Biogen Inc.:								
Total net income attributable to Biogen Inc., GAAP	\$	329.2	\$	701.5	\$	1,187.9	\$	3,642.7
Plus: impairment charges <sup>4</sup>		44.3		19.3		629.3		19.3
Plus: amortization of acquired intangible assets		59.4		63.3		176.6		196.3
Plus: acquired in-process research and development		_		_		18.0		75.0
Plus: (gain) loss on fair value remeasurement of contingent consideration		(15.6)		(29.0)		(49.1)		(23.5)
Plus: (gain) loss on equity security investments		424.2		82.2		705.9		40.2
Plus: net distribution to noncontrolling interests & amortization of equity in loss of investee		7.8		17.7		26.6		33.5
Plus: premium paid on debt exchange or early debt redemption		_		_		9.5		9.4
Plus: other		3.0		-		5.2		(0.1)
Plus: valuation allowance associated with deferred tax assets		_		33.3		_		89.3
Plus: income tax effect related to Non-GAAP reconciling items		(142.7)		(1.0)		(335.3)		(29.7)
Total net income attributable to Biogen Inc., Non-GAAP	\$	709.6	\$	887.3	\$	2,374.6	\$	4,052.4
Diluted Earnings Per Share					T			
Total diluted earnings per share, GAAP	\$	2.22	\$	4.46	\$	7.90	\$	22.25
Plus: adjustments to GAAP net income attributable to Biogen Inc. (as detailed above)		2.55		1.18		7.89		2.50
Total diluted earnings per share, Non-GAAP	\$	4.77	\$	5.64	\$	15.79	\$	24.75

<sup>\*</sup>Beginning in the third quarter of 2021 amortization expense recorded related to intangible assets that arose from collaboration and licensing arrangements are no longer excluded from our Non-GAAP results on a prospective basis. Non-GAAP financial results for 2020 have not been updated to reflect this change.



<sup>\*\*</sup>Beginning in the second quarter of 2021 material upfront payments and premiums paid on the acquisition of common stock associated with significant collaboration and licensing arrangements along with the related transaction costs incurred are no longer excluded from Non-GAAP R&D and SG&A expenses. Non-GAAP financial results for 2020 have been updated to include the \$601 million payment related to the collaboration with Denali Therapeutics, Inc. recorded in the third quarter of 2020 and the \$208 million payment related to the collaboration with Sangamo Therapeutics, Inc. recorded in the second quarter of 2020 along with the associated transaction costs and income set effect.

## **GAAP** to Non-GAAP Reconciliation

Constant Currency & Free Cash Flow (unaudited, in millions)

#### Revenue growth at constant currency

Total Revenue
Revenue growth, as reported
Less: impact of foreign currency translation and hedging (gains) losses
Revenue growth at constant currency
Total MS Revenue (including OCREVUS royalties)
Revenue growth, as reported
Less: impact of foreign currency translation and hedging (gains) losses
Revenue growth at constant currency
Total SPINRAZA Revenue
Revenue growth, as reported
Less: impact of foreign currency translation and hedging (gains) losses
Revenue growth at constant currency
Total Biosimilars Revenue
Revenue growth, as reported
Less: impact of foreign currency translation and hedging (gains) losses
Revenue growth at constant currency
Total Other Revenue
Revenue growth, as reported
Less: impact of foreign currency translation and hedging (gains) losses
Revenue growth at constant currency

For the Three Months Ended September 30, 2021	For the Nine Months Ended September 30, 2021					
(17.7)%	(22.1)%					
0.5	1.0					
(18.2)%	(23.1)%					
(40.40%	(00.00)					
(19.4)%	(22.9)%					
0.5	0.4					
(19.9)%	(23.3)%					
(10.2)%	(5.8)%					
0.4	2.7					
(10.6)%	(8.5)%					
(2.4)%	2.0 %					
1.1	5.4					
(3.5)%	(3.4)%					
25.6 %	(45.5)%					
_	0.1					
25.6 %	(45.6)%					

#### Free cash flow

	For the Three Months Ended September 30,				For the Nine Months Ended September 30,				
		2021		2020		2021		2020	
Cash Flow:									
Net cash provided by (used in) operating activities	\$	805.3	\$	1,181.1	\$	2,801.6	\$	4,596.9	
Net cash provided by (used in) investing activities		(233.6)		(52.4)		(451.0)		(442.2)	
Net cash provided by (used in) financing activities		(746.5)		(1,312.9)		(2,096.0)		(4,871.6)	
Net increase (decrease) in cash and cash equivalents	\$	(174.8)	\$	(184.2)	\$	254.6	\$	(716.9)	
Net cash provided by (used in) operating activities	\$	805.3	\$	1,181.1	\$	2,801.6	\$	4,596.9	
Less: Purchases of property, plant and equipment		42.0		84.1	. <u> </u>	206.5		338.8	
Free cash flow	\$	763.3	\$	1,097.0	\$	2,595.1	\$	4,258.1	



## **Notes to GAAP to Non-GAAP Reconciliation**

Operating Expense & Net Income Attributable to Biogen Inc.

A For the three and nine months ended September 30, 2021, amortization and impairment of acquired intangible assets totaled \$111.0 million and \$813.2 million, respectively, compared to \$82.6 million and \$215.6 million, respectively, in the prior year comparative periods.

During the second quarter of 2021 we announced that our Phase 3 STAR study of BIIB111 and our Phase 2/3 XIRIUS study of BIIB112 did not meet their primary endpoints. In the third quarter of 2021 we suspended further development on these programs based on the decision by management as part of its strategic review process. For the three and nine months ended September 30, 2021, we recorded impairment charges of \$15.0 million and \$365.0 million, respectively, related to BIIB111, and impairment charges of \$28.4 million and \$220.0 million, respectively, related to BIIB112. As a result, the remaining book values associated with these programs were reduced to zero.

For the three and nine months ended September 30, 2020, amortization and impairment of acquired intangible assets reflects the impact of a \$19.3 million impairment charge related to one of our IPR&D intangible assets.

<sup>B</sup> For the nine months ended September 30, 2021, compared to the same period in 2020, we recorded a current year deferred tax benefit associated with the accelerated approval of ADUHELM by the U.S. Food and Drug Administration in the U.S. We recorded approximately \$500.0 million in a deferred tax asset related to Neurimmune SubOne AG's tax basis in ADUHELM, the realization of which is dependent on future sales of ADUHELM and approval of the Swiss cantonal tax authorities, with an equal and offsetting amount assigned to noncontrolling interest, resulting in zero net impact to net income attributable to Biogen Inc.

