where science meets humanity™

Third Quarter 2023

Financial Results and Business Update

November 8, 2023

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 cash 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 32-35 of this presentation and in the Q3 2023 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 other costs related to acquisitions or business development transactions; unusual gains and losses; potential future asset impairments; gains and losses from our equity security investments; and the ultimate outcome of litigation. 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.

Forward-looking statements

This presentation and the discussions during this conference call contain forward-looking statements, 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; regulatory discussions, submissions, filings, and approvals; the potential benefits, safety, and efficacy of our and our collaboration partners' products and investigational therapies; the anticipated benefits and potential of investments and acquisitions, optimization of the cost structure including our "Fit for Growth" program, actions to improve risk profile and productivity of R&D pipeline, collaborations, and business development activities; our future financial and operating results; 2023 financial guidance. 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.

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 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 technology failures or breaches; problems with our manufacturing processes; risks relating to management and personnel changes, including attracting and retaining 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; the direct and indirect impacts of the COVID-19 pandemic on our business; 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; 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; fluctuations in our effective tax rate; 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.

These statements speak only as of the date of this presentation. We do not undertake any obligation to publicly update any forward-looking statements.

Third quarter 2023 earnings call agenda

Introduction	**Chuck Triano** Head of Investor Relations
Key Highlights	**Christopher A. Viehbacher** President and Chief Executive Officer
Development Update	**Priya Singhal, M.D., M.P.H.** Head of Development
Financial Update	**Michael McDonnell** Chief Financial Officer
Closing	**Christopher A. Viehbacher** President and Chief Executive Officer

Key Highlights

Christopher A. Viehbacher

President and Chief Executive Officer

Biogen

Executing on potential top and bottom-line growth drivers

3 recent FDA approvals and ongoing/upcoming launches

LEQEMBI is the first anti-amyloid antibody to receive traditional approval for Early AD

ZURZUVAE is the first oral therapy specifically approved for adults with PPD in the U.S.

QALSODY is the first treatment to target a genetic cause of ALS

Acquisition of Reata Pharmaceuticals adds fourth launch opportunity

Acquisition adds a highly complementary and profitable product in ***SKYCLARYS***, the only approved therapy for Friedreich's ataxia

Leveraging Biogen rare disease capabilities to expand access globally

Expected to meaningfully contribute to Biogen's operating profit beginning in 2024

Reengineering the company with Fit For Growth program

Refocusing resources to support in-market growth opportunities, new product launches and R&D in areas of expected future growth

Simplifying the organizational structure to increase agility and accountability

Initiative is expected to result in meaningful cost savings to support sustainable growth

Biogen

Note: LEQEMBI (lecanemab-irmb) is being developed in collaboration with Eisai Co., Ltd; Eisai serves as the lead for lecanemab development and regulatory submissions globally; See LEQEMBI USPI for full prescribing information; ZURZUVAE is being developed in collaboration with Sage Therapeutics, Inc.; See ZURZUVAE USPI for full prescribing information; QALSODY is licensed from Ionis Pharmaceuticals, Inc; See QALSODY USPI for full prescribing information; See SKYCLARYS USPI for full prescribing information
AD = Alzheimer's disease; ALS = amyotrophic lateral sclerosis; PPD = postpartum depression

Building momentum with the LEQEMBI launch

FDA traditional approval and CMS reimbursement has driven increased patient utilization

CMS removed the NCD for amyloid PET on October 13th

Steady progress enabling patient access with ~60% of top 100 targeted IDNs now having P&T approval

- Generating data as we aim to grow and differentiate the opportunity with LEQEMBI including **subcutaneous and maintenance dosing, as well as the potential benefit in earlier stage AD and from longer-term treatment**
- Executing on geographic expansion with recent **approval in Japan** and other global filings under review in E.U., China and 10 other markets

Note: LEQEMBI (lecanemab-irmb) is being developed in collaboration with Eisai Co., Ltd; Eisai serves as the lead for lecanemab development and regulatory submissions globally; See LEQEMBI USPI for full prescribing information
AD = Alzheimer's disease CMS = Centers for Medicare and Medicaid Services; IDN = Integrated Delivery Network; NCD = national coverage determination; PET = positron emission tomography; P&T = Pharmacy and Therapeutics

SKYCLARYS has the potential to benefit from Biogen's global expertise in rare disease

SKYCLARYS® (omaveloxolone) 50 mg capsules

Not actual product picture

SKYCLARYS is the **first therapy approved in FA** in the U.S. offering a clinically meaningful advancement in the treatment of a debilitating disease

U.S. launch underway with approximately **$43 million** in estimated sales for the third quarter#

~1,180 Total start forms to-date*^

~860 Total patients on SKYCLARYS*

Regulatory review currently underway in the E.U. with a **decision on approval expected in early 2024**

See SKYCLARYS USPI for full prescriber information
Estimated Q3 SKYCLARYS revenue not included in Biogen's financial results;
*Numbers as of November 3, 2023; Includes individuals on free drug program
^ Total start forms to-date includes ~860 patients that have gone on to receive therapy
FA = Friedreich's ataxia

Biogen

Development Update

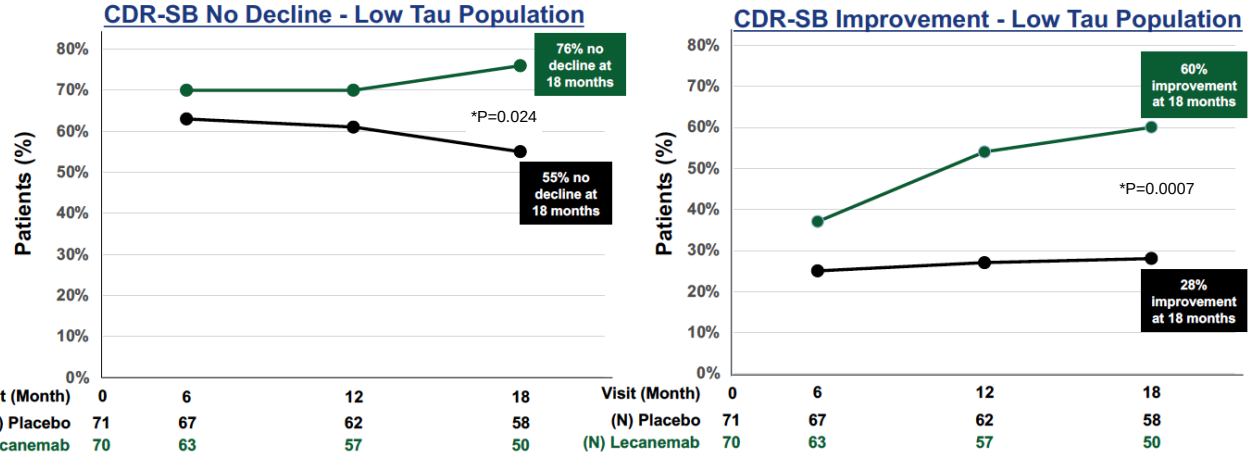
Priya Singhal, M.D., M.P.H.
Head of Development

Building on the distinct clinical profile of LEQEMBI with a new formulation and data suggesting potential for greater benefit in earlier stage of disease

Advancing subcutaneous LEQEMBI with encouraging results

- Weekly subcutaneous lecanemab shows **comparable PK and plaque reduction** to biweekly IV formulation at 6 months with **similar ARIA rates** and **lower systemic adverse reactions**#

Results from the Clarity AD tau PET substudy (n=342) suggest that initiation of LEQEMBI in the early stages of AD can support clinical stability or improvement



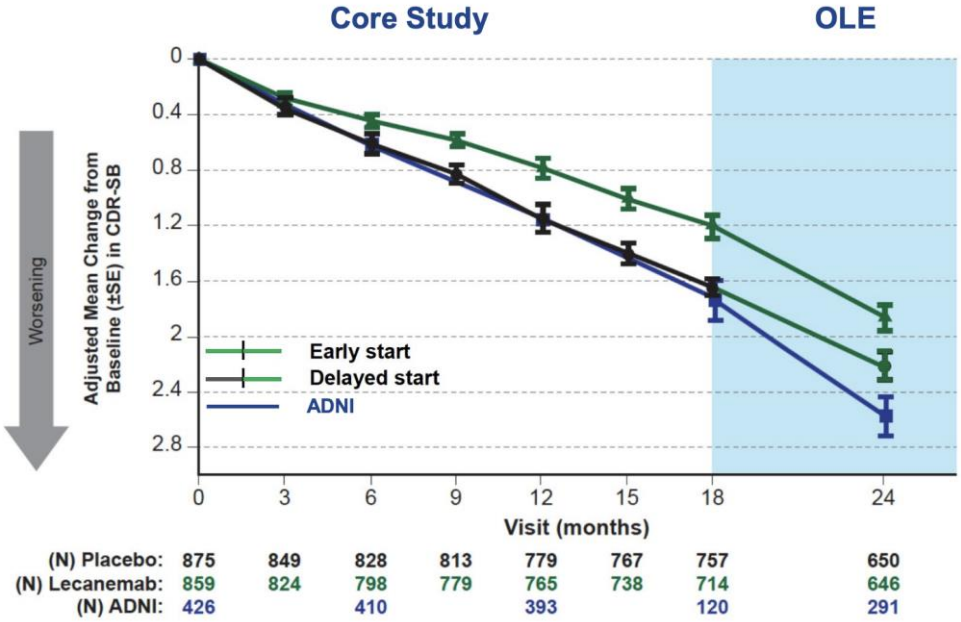
Source: Johnson, CTAD 2023

#Compared to first-time LEQEMBI IV treated patients from the Clarity AD core study; *Post-hoc analysis with nominal p values and no adjustment for multiplicity

AD = Alzheimer's disease; ARIA = amyloid-related imaging abnormalities; CDR-SB = clinical dementia rating scale – sum of boxes; IV = intravenous; PET = positron emission tomography; PK = pharmacokinetics

LEQEMBI-treated patients continued to benefit through 24 months

Maintenance of treatment difference with ongoing lecanemab treatment through 24 months, relative to the newly treated lecanemab participants is consistent with a disease-modifying effect

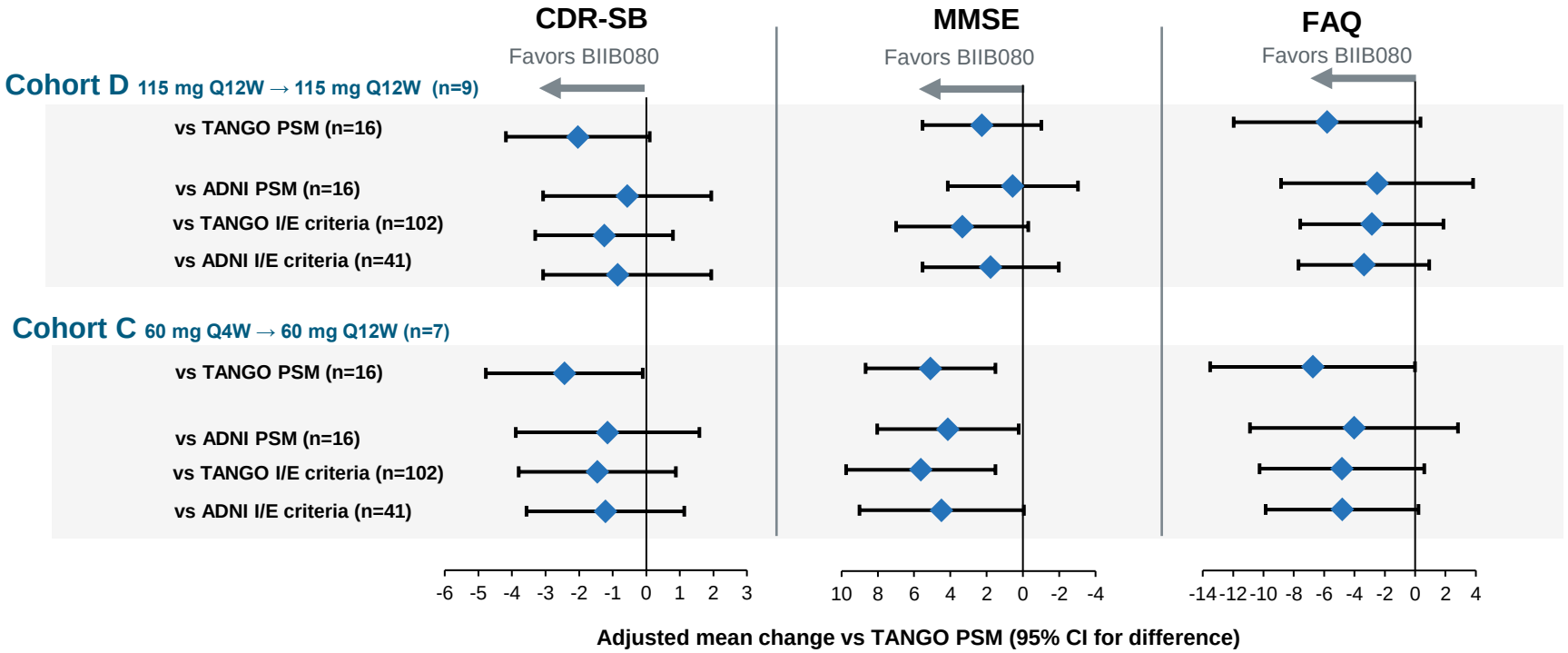


Source: Sperling, CTAD 2023

Post-hoc analysis; Early start lecanemab 10 mg/kg biweekly group are those subjects on lecanemab 10 mg/kg biweekly in the Core. Delayed start LEC10-BW group (those subjects that initiate lecanemab 10 mg/kg biweekly in the OLE). Based on testing the hypothesis that early start arm maintains at least half of the treatment effect seen at the end of 18 months. Based on modified intention-to-treat analysis population. Adjusted mean change from baseline, SE and p-value are derived using mixed model repeat measures with treatment group, visit, treatment group by visit interaction, clinical subgroup, use of Alzheimer's disease symptomatic medication at baseline, ApoE4 carrier status, region, baseline value by visit interaction as fixed effects, and baseline value as covariate. ADNI is an observational cohort; ADNI participants selected to match with Clarity AD population, including baseline demographics and clinical characteristics including randomization strata

ADNI = Alzheimer's disease neuroimaging initiative; CDR-SB = clinical dementia rating scale – sum of boxes; OLE = open label extension

Tau-directed ASO (BIIB080) is the first tau targeting therapy to show convergence of evidence across soluble biomarkers, tau PET and exploratory clinical measures



Source: Ziogas et al., CTAD 2023. TANGO PSM used 1:1 match and adjusted for 7 covariates: CDR-GS (exact match), CDR-SB, MMSE, FAQ, APOE, age, and sex. ADNI PSM used 1:1 match and adjusted for 5 covariates: CDR-GS (exact match), CDR-SB, MMSE, FAQ, APOE. I/E criteria method selected participants by key inclusion criteria of BIIB080 Phase 1b study. Results were based on an ANCOVA model, with treatment group, baseline value and baseline CDR-GS as independent variables.
ADNI = Alzheimer's disease neuroimaging initiative; CDR-SB = Clinical Dementia Rating Scale Sum of Boxes; CI = confidence interval; MMSE = Mini-mental state examination; FAQ = functional activities questionnaire; PSM = propensity score matching; Q4W = every 4-week dosing; Q12W = every 12-week dosing

Aiming to enable growth by optimizing the R&D portfolio

Advancing leadership and continued commitment in Alzheimer's disease

- Developing additional options for patients with LEQEMBI

Planned submission for SC formulation (BLA)

By end of Q1 2024

Planned submission for IV maintenance therapy (label change)

By end of Q1 2024

Potential indication expansion to preclinical AD

Longer-term

- Advancing programs focused on tau to potentially further the standard of care in Alzheimer's
- Generating further insights on Alzheimer's disease biology and long-term treatment effects of anti-amyloid antibodies

Advancing a refocused development pipeline with near-term readouts and long-term potential

BIIB105 in ALS	BIIB121 in AS	Dapirolizumab pegol in SLE
Phase 1/2 readout in ATXN2 and broad ALS expected mid-year 2024	Phase 1b readout expected mid-year 2024	Phase 3 readout expected mid-year 2024

Biogen

Note: LEQEMBI (lecanemab-irmb) is being developed in collaboration with Eisai Co., Ltd; Eisai serves as the lead for lecanemab development and regulatory submissions globally
AD = Alzheimer's disease; ALS = amyotrophic lateral sclerosis; AS = Angelman syndrome; ATXN2 = ataxin-2; BLA = biologics license application; FA = Friedreich's Ataxia; SC = subcutaneous; IV = intravenous; SLE = systemic lupus erythematosus

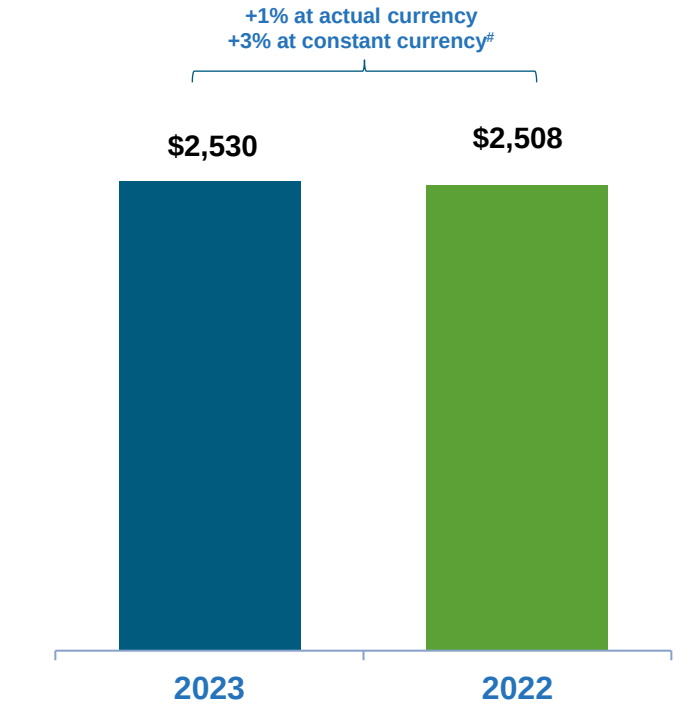
Financial Update

Michael McDonnell

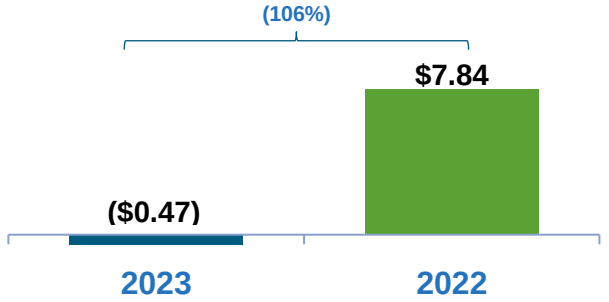
Chief Financial Officer

Third quarter 2023 financial results

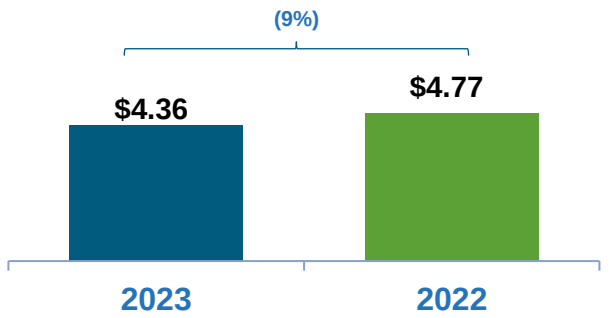
Q3 Total Revenue* ($M)



Q3 GAAP Diluted EPS ($)



Q3 Non-GAAP Diluted EPS ($)

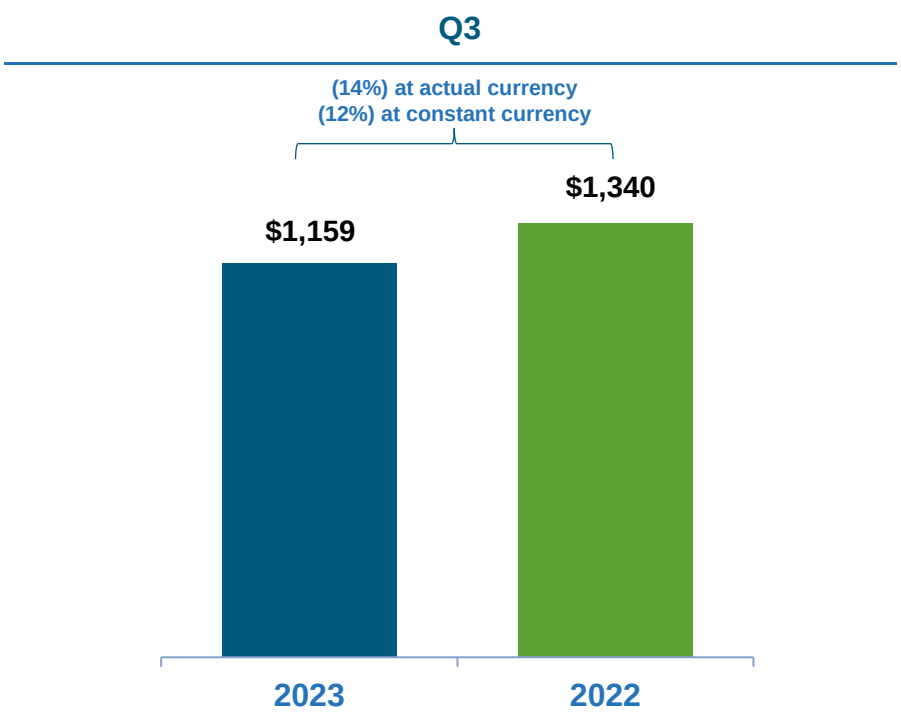


* Beginning in the third quarter of 2023, we modified our presentation of the commercialization expenses incurred within the LEQEMBI Collaboration. Our 50% portion of LEQEMBI product revenue, net and cost of sales, including royalties, will continue to be classified as a component of revenue. We will now present our 50% share of all global pre- and post-commercialization sales & marketing expenses for the LEQEMBI Collaboration within SG&A expense and will no longer present the post-commercialization portion of these expenses as a reduction to revenue. To reflect this modification, during the third quarter of 2023 we reclassified $38.7 million in collaboration costs (from the first and second quarters of 2023) from other revenue to SG&A expense within our condensed consolidated statements of income.

Percentage changes in revenue growth at constant currency are presented excluding the impact of changes in foreign currency exchange rates and hedging gains or losses. The current period's foreign currency revenue values are converted into U.S. dollars using the average exchange rates from the prior period.

Global multiple sclerosis product revenue

MS Product Revenue ($M)



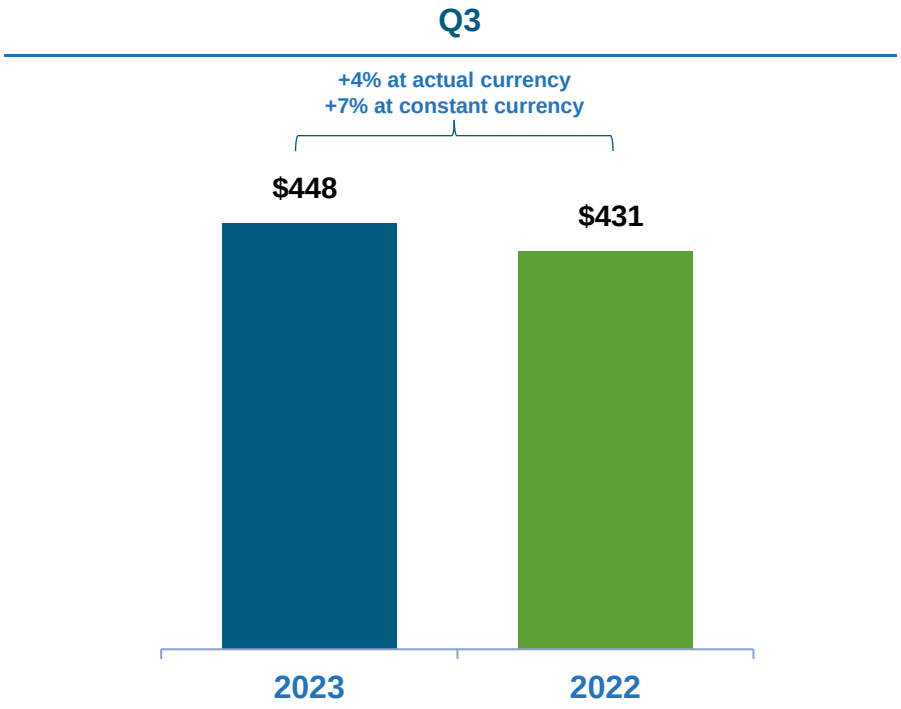
Q3 2023 Highlights

- **TECFIDERA** was negatively impacted by generic competition in the U.S. and certain markets outside the U.S.
  - Some generics have not yet fully exited some E.U. markets
- **VUMERITY** benefited from global patient growth
- **TYSABRI** was negatively impacted by pricing pressure and competition
- **Interferons** were negatively impacted by the continued shift from injectable platforms to higher efficacy therapies

Biogen

Global SPINRAZA revenue

SPINRAZA Revenue ($M)



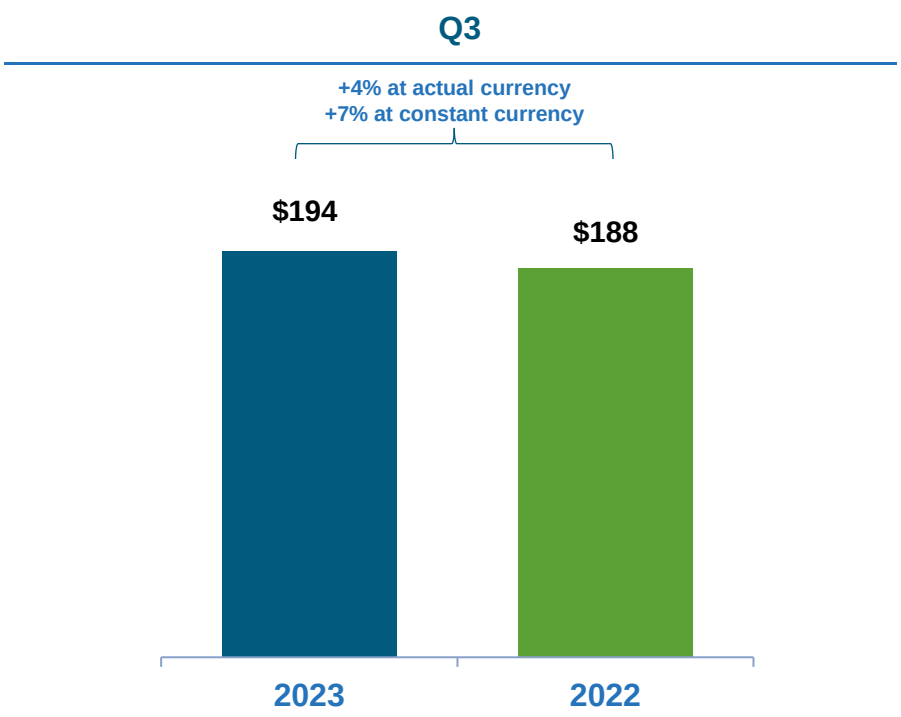
Q3 2023 Highlights

- **U.S. SPINRAZA:** Revenue increased 7% with positive patient growth vs. prior year
- **ROW SPINRAZA:** Revenue increased 2% at actual currency and increased 7% at constant currency, benefiting from the timing of shipments in certain markets

Biogen

Biosimilars revenue

Biosimilars Revenue ($M)



Q3 2023 Highlights

- **Biosimilars:** Volume growth partially offset by pricing pressure and competition
- **TOFIDENCE** (referencing ACTEMRA®): the first tocilizumab biosimilar approved in the United States – launch expected mid-year 2024*
- Process to evaluate strategic options for the biosimilars business ongoing

TOFIDENCE developed with Bio-Thera Solutions, Ltd.

* A settlement has been reached and Biogen has freedom to Market the Intravenous Product in the European Jurisdictions as of the first calendar quarter of 2024 and in the United States as of May 2024.

Third quarter 2023 revenue highlights

($ in Millions)	Q3 2023	Q3 2022	Δ Y/Y	Δ (Constant Currency[#])
Multiple sclerosis product revenue[1]	$1,159	$1,340	(14%)	(12%)
Spinal muscular atrophy revenue[2]	$448	$431	4%	7%
Biosimilars revenue	$194	$188	4%	7%
Other product revenue[3]	$4	$3	25%	23%
Total product revenue	$1,805	$1,962	(8%)	(6%)
Revenue from anti-CD20 therapeutic programs	$421	$417	1%	1%
Contract manufacturing, royalty and other revenue[4]	$304	$130	135%	135%
Total revenue	**$2,530**	**$2,508**	**1%**	**3%**

[#] Percentage changes in revenue growth at constant currency are presented excluding the impact of changes in foreign currency exchange rates and hedging gains or losses. The current period's foreign currency revenue values are converted into U.S. dollars using the average exchange rates from the prior period.
[1] includes TECFIDERA, VUMERITY, AVONEX, PLEGRIDY, TYSABRI, and FAMPYRA.
[2] includes SPINRAZA.
[3] includes ADUHELM, FUMADERM and QALSODY.
[4] also includes Biogen's 50% share of LEQEMBI product revenue, net and cost of sales, including royalties, and revenue from manufacturing of LEQEMBI beginning in the first quarter of 2023. Beginning in the third quarter of 2023, we modified our presentation of the commercialization expenses incurred within the LEQEMBI Collaboration. Our 50% portion of LEQEMBI product revenue, net and cost of sales, including royalties, will continue to be classified as a component of revenue. We will now present our 50% share of all global pre- and post-commercialization sales & marketing expenses for the LEQEMBI Collaboration within SG&A expense and will no longer present the post-commercialization portion of these expenses as a reduction to other revenue. To reflect this modification, during the third quarter of 2023 we reclassified $38.7 million in collaboration costs (from the first and second quarters of 2023) from revenue to SG&A expense within our condensed consolidated statements of income.
Numbers may not foot due to rounding. Percent changes represented as favorable/(unfavorable).

Third quarter 2023 financial results summary

($ in Millions)	Q3 2023	Q3 2022	Δ Y/Y
Revenue	**$2,530**	**$2,508**	**1%**
GAAP and Non-GAAP Cost of Sales	$660	$470	(40%)
% of revenue	*26%*	*19%*	
GAAP R&D Expense	$736	$549	(34%)
Non-GAAP R&D Expense	$539	$549	2%
GAAP SG&A Expense*	$788	$563	(40%)
Non-GAAP SG&A Expense*	$553	$562	2%
GAAP Amortization	$61	$57	(8%)
Non-GAAP Amortization	$9	$8	(18%)
GAAP and Non-GAAP Collaboration Profit Sharing / (Loss Reimbursement)	$51	$45	(12%)
GAAP Other (Income) Expense	$300	($56)	(636%)
Non-GAAP Other (Income) Expense	($26)	$55	148%
GAAP Taxes %	51.6%	17.2%	
Non-GAAP Taxes %	14.7%	15.7%	
GAAP Net Income Attributable to Biogen Inc.	**($68)**	**$1,135**	**(106%)**
Non-GAAP Net Income Attributable to Biogen Inc.	**$635**	**$691**	**(8%)**
GAAP weighted average diluted shares used in calculating diluted EPS[#]	145	145	0%
Non-GAAP weighted average diluted shares used in calculating diluted EPS[#]	146	145	(1%)
GAAP Diluted EPS	**($0.47)**	**$7.84**	**(106%)**
Non-GAAP Diluted EPS	**$4.36**	**$4.77**	**(9%)**

* Beginning in the third quarter of 2023, our 50% share of all global pre- and post-commercialization sales & marketing expenses for the LEQEMBI Collaboration will be presented within SG&A expense and will no longer present the post-commercialization portion of these expenses as a reduction to revenue. During the third quarter of 2023 we reclassified $38.7 million in collaboration costs (from the first and second quarters of 2023) from revenue to SG&A expense within our condensed consolidated statements of income.

All unvested equity-based awards are antidilutive for GAAP due to reporting a net loss for the third quarter of 2023.

The above table is not an income statement. Numbers do not foot. 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.

Balance sheet and cash flow

Balance Sheet
(as of September 30, 2023)

$2.3B	Cash and marketable securities
$7.3B	Debt
$5.0B	Net debt

Cash Flow
(Q3 2023)

$592M	Net cash flow from operations
$74M	Capital expenditures
$518M	Free cash flow[#]

Biogen

Numbers may not foot due to rounding.

[#] Free cash flow is defined as net cash flow from operations less capital expenditures.

Updating full year 2023 financial guidance

	Prior FY 2023 Guidance	Updated FY 2023 Guidance
Revenue	**Mid-single digit percentage decline***	**Low-single digit percentage decline***
Non-GAAP Diluted EPS	**$15.00 to $16.00**	**$14.50 to $15.00** Reflecting ~$0.75 of dilution from Reata acquisition, which closed September 26, 2023

* Versus reported revenue for full year 2022

Please see Biogen's third quarter 2023 earnings release, available at the Investors section of Biogen's website at investors.biogen.com, for additional 2023 financial guidance assumptions.

Biogen may incur charges, realize gains or losses, or experience other events or circumstances in 2023 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.

“Fit for Growth” update

Original Program Goals		Updated Program Goals
~$1B gross savings by 2025	No Change	~$1B gross savings by 2025*
~$300M reinvestment = ~$700M net savings by 2025	Reflects Reata and ZURZUVAE net impact	~$200M reinvestment = **~$800M net savings by 2025***

* Expected savings are based upon Biogen internal estimates vs. projected 2023 full year cost base.

In addition, not included in these numbers are our 50% share of all global pre- and post-commercialization sales & marketing expenses for the LEQEMBI Collaboration which will now be presented within SG&A expense.

Biogen continues to expect total net savings to be split roughly equally in 2024 and 2025.

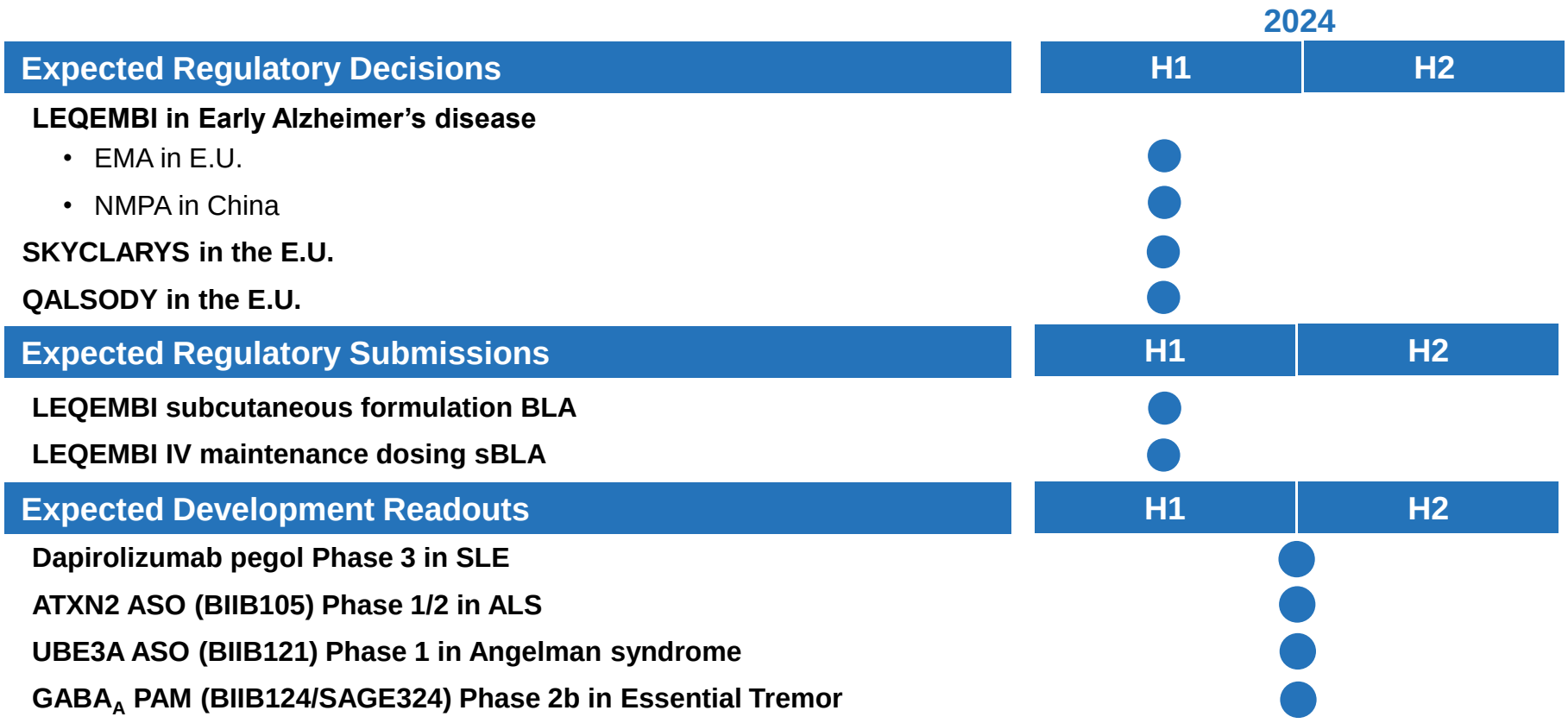
Closing

Christopher A. Viehbacher

President and Chief Executive Officer

Biogen

Expected near-term milestones for 7 programs with potential to support long-term growth

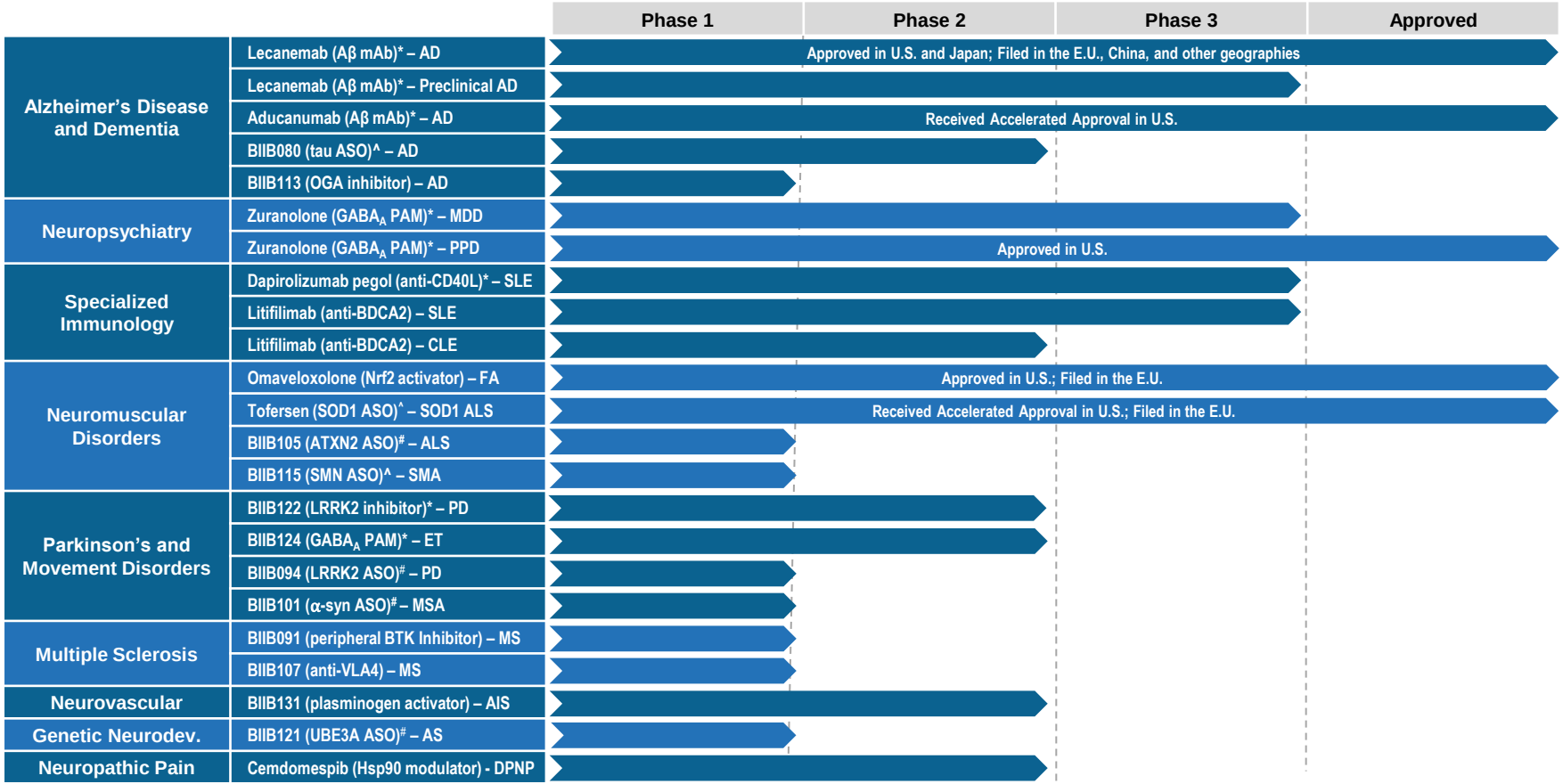


Note: LEQEMBI (lecanemab-irmb) is being developed in collaboration with Eisai Co., Ltd; Eisai serves as the lead for lecanemab development and regulatory submissions globally; See LEQEMBI USPI for full prescribing information; See SKYCLARYS USPI for full prescribing information; See QALSODY USPI for full prescribing information; QALSODY is licensed from Ionis Pharmaceuticals, Inc; BIIB124/SAGE324 is being developed in collaboration with Sage Therapeutics, Inc; Dapirolizumab pegol is being developed in collaboration with UCB. ALS = amyotrophic lateral sclerosis; ASO = antisense oligonucleotide; ATXN2 = ataxin-2; BLA = biologics license application; $GABA_A$ = γ-Aminobutyric acid type A; NMPA = National Medical Products Administration; PAM = positive allosteric modulator; SLE = systemic lupus erythematosus ; UBE3A = ubiquitin protein ligase E3A

Questions & Answers

Appendix

Advancing key late-stage assets with a reprioritized pipeline



Note: Q3 2023 update includes addition of omaveloxolone in FA and cemdomespib in DPNP; Approval of lecanemab in Japan

* Collaboration program; # Option agreement; ^ Licensed from Ionis Pharmaceuticals, Inc.; AIS = acute ischemic stroke; ALS = amyotrophic lateral sclerosis; AS = Angelman syndrome; ASO = antisense oligonucleotide; CLE = cutaneous lupus erythematosus; DPNP = diabetic peripheral neuropathic pain; ET = essential tremor; GABA = γ-Aminobutyric acid; Genetic Neurodev. = genetic neurodevelopmental disorders; LRRK2 = leucine rich repeat kinase 2; MDD = major depressive disorder; MS = multiple sclerosis; MSA = Multiple System Atrophy; OGA = O-GlcNAcase; PAM = positive allosteric modulator; PD = Parkinson's disease; PPD = postpartum depression; SLE = systemic lupus erythematosus; SOD1 = superoxide dismutase type 1; UBE3A = ubiquitin protein ligase E3A

Consolidated Statement of Income

(unaudited, in millions, except per share amounts)

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Revenue:				
Product, net	$ 1,805.2	$ 1,962.1	$ 5,414.3	$ 6,083.3
Revenue from anti-CD20 therapeutic programs	420.9	416.9	1,253.8	1,252.6
Contract manufacturing, royalty and other revenue	304.2	129.5	781.2	293.5
Total revenue	2,530.3	2,508.5	7,449.3	7,629.4
Cost and expense:				
Cost of sales, excluding amortization and impairment of acquired intangible assets	659.6	469.5	1,915.1	1,707.4
Research and development	736.3	549.2	1,891.1	1,629.5
Selling, general and administrative	788.2	563.3	1,941.2	1,770.8
Amortization and impairment of acquired intangible assets	60.9	56.5	164.0	190.9
Collaboration profit sharing/(loss reimbursement)	50.5	45.3	164.5	(42.6)
(Gain) loss on fair value remeasurement of contingent consideration	—	(2.1)	—	(13.7)
Restructuring charges	76.0	15.4	120.0	124.1
Gain on sale of building	—	(503.7)	—	(503.7)
Other (income) expense, net	300.0	(56.0)	248.2	(221.3)
Total cost and expense	2,671.5	1,137.4	6,444.1	4,641.4
Income (loss) before income tax expense and equity in loss of investee, net of tax	(141.2)	1,371.1	1,005.2	2,988.0
Income tax (benefit) expense	(72.9)	236.2	92.6	578.5
Equity in (income) loss of investee, net of tax	—	—	—	(2.6)
Net income (loss)	(68.3)	1,134.9	912.6	2,412.1
Net income (loss) attributable to noncontrolling interests, net of tax	(0.2)	0.2	1.2	(84.4)
Net income (loss) attributable to Biogen Inc.	$ (68.1)	$ 1,134.7	$ 911.4	$ 2,496.5
Net income (loss) per share:				
Basic earnings (loss) per share attributable to Biogen Inc.	$ (0.47)	$ 7.86	$ 6.30	$ 17.12
Diluted earnings (loss) per share attributable to Biogen Inc.	$ (0.47)	$ 7.84	$ 6.26	$ 17.07
Weighted-average shares used in calculating:				
Basic earnings (loss) per share attributable to Biogen Inc.	144.8	144.4	144.7	145.8
Diluted earnings (loss) per share attributable to Biogen Inc.	144.8	144.8	145.5	146.2

Consolidated Balance Sheets

(unaudited, in millions)

	As of September 30, 2023	As of December 31, 2022
ASSETS		
Cash and cash equivalents	$ 2,287.9	$ 3,419.3
Marketable securities	—	1,473.5
Accounts receivable, net	1,781.4	1,705.0
Due from anti-CD20 therapeutic programs, net	428.3	431.4
Inventory	2,982.4	1,344.4
Other current assets	974.1	1,417.6
Total current assets	8,454.1	9,791.2
Marketable securities	0.1	705.7
Property, plant and equipment, net	3,301.6	3,298.6
Operating lease assets	460.9	403.9
Intangible assets, net	7,344.6	1,850.1
Goodwill	6,807.5	5,749.0
Deferred tax asset	1,069.8	1,226.4
Investments and other assets	754.6	1,529.2
TOTAL ASSETS	$ 28,193.2	$ 24,554.1
LIABILITIES AND EQUITY		
Current portion of term loan	$ 500.0	$ —
Taxes payable	243.8	259.9
Accounts payable	440.1	491.5
Accrued expenses and other	3,838.4	2,521.4
Total current liabilities	5,022.3	3,272.8
Notes payable and term loan	6,786.4	6,281.0
Deferred tax liability	728.1	334.7
Long-term operating lease liabilities	428.8	333.0
Other long-term liabilities	747.9	944.2
Equity	14,479.7	13,388.4
TOTAL LIABILITIES AND EQUITY	$ 28,193.2	$ 24,554.1

Biogen

Product Revenue (US and Rest of World) & Total Revenue

(unaudited, in millions)

Product Revenue

	For the Three Months Ended September 30,					
	2023			2022		
	United States	Rest of World	Total	United States	Rest of World	Total
Multiple Sclerosis (MS):						
TECFIDERA	$ 58.1	$ 181.4	$ 239.5	$ 92.5	$ 246.5	$ 339.0
VUMERITY	148.8	16.7	165.5	127.9	9.9	137.8
Total Fumarate	206.9	198.1	405.0	220.4	256.4	476.8
AVONEX	148.7	63.5	212.2	174.8	80.3	255.1
PLEGRIDY	31.4	34.1	65.5	39.7	41.2	80.9
Total Interferon	180.1	97.6	277.7	214.5	121.5	336.0
TYSABRI	244.8	211.5	456.3	273.0	232.5	505.5
FAMPYRA	—	20.0	20.0	—	22.0	22.0
Subtotal: MS	631.8	527.2	1,159.0	707.9	632.4	1,340.3
Spinal Muscular Atrophy (SMA):						
SPINRAZA	150.5	297.7	448.2	140.2	290.9	431.1
Subtotal: SMA	150.5	297.7	448.2	140.2	290.9	431.1
Biosimilars:						
BENEPALI	—	112.8	112.8	—	110.2	110.2
IMRALDI	—	54.4	54.4	—	57.7	57.7
FLIXABI	—	20.2	20.2	—	19.0	19.0
BYOOVIZ[1]	6.1	0.8	6.9	0.7	—	0.7
Subtotal: Biosimilars	6.1	188.2	194.3	0.7	186.9	187.6
Other[2]	2.5	1.2	3.7	1.6	1.5	3.1
Total product revenue	$ 790.9	$ 1,014.3	$ 1,805.2	$ 850.4	$ 1,111.7	$ 1,962.1

	For the Nine Months Ended September 30,					
	2023			2022		
	United States	Rest of World	Total	United States	Rest of World	Total
Multiple Sclerosis (MS):						
TECFIDERA	$ 199.3	$ 568.9	$ 768.2	$ 330.3	$ 816.5	$ 1,146.8
VUMERITY	372.6	47.3	419.9	383.0	19.6	402.6
Total Fumarate	571.9	616.2	1,188.1	713.3	836.1	1,549.4
AVONEX	397.2	207.7	604.9	493.8	249.6	743.4
PLEGRIDY	95.4	125.4	220.8	114.2	138.2	252.4
Total Interferon	492.6	333.1	825.7	608.0	387.8	995.8
TYSABRI	750.1	662.1	1,412.2	849.4	693.1	1,542.5
FAMPYRA	—	67.5	67.5	—	73.7	73.7
Subtotal: MS	1,814.6	1,678.9	3,493.5	2,170.7	1,990.7	4,161.4
Spinal Muscular Atrophy (SMA):						
SPINRAZA	453.0	875.6	1,328.6	443.3	891.4	1,334.7
Subtotal: SMA	453.0	875.6	1,328.6	443.3	891.4	1,334.7
Biosimilars:						
BENEPALI	—	331.0	331.0	—	340.7	340.7
IMRALDI	—	167.6	167.6	—	172.4	172.4
FLIXABI	—	60.7	60.7	—	62.0	62.0
BYOOVIZ[1]	21.3	1.2	22.5	1.2	—	1.2
Subtotal: Biosimilars	21.3	560.5	581.8	1.2	575.1	576.3
Other[2]	4.4	6.0	10.4	4.5	6.4	10.9
Total product revenue	$ 2,293.3	$ 3,121.0	$ 5,414.3	$ 2,619.7	$ 3,463.6	$ 6,083.3

[1] BYOOVIZ became commercially available in the U.S. during the third quarter of 2022 and commercially available in international markets in 2023.
[2] Other includes FUMADERM, ADUHELM and QALSODY, which became commercially available in the U.S. during the second quarter of 2023.

Total Revenue

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Product revenue	$ 1,805.2	$ 1,962.1	$ 5,414.3	$ 6,083.3
OCREVUS royalties	319.1	281.1	928.2	825.2
RITUXAN/GAZYVA®/LUNSUMIO™ revenue	98.9	131.1	315.0	414.2
Other revenues from anti-CD20 programs	2.9	4.7	10.6	13.2
Contract manufacturing, royalty and other revenue	304.2	129.5	781.2	293.5
Total revenue	$ 2,530.3	$ 2,508.5	$ 7,449.3	$ 7,629.4

Biogen

GAAP to Non-GAAP Reconciliation

Operating Expense, Other (Income) Expense, net and Income Tax (unaudited, in millions, except effective tax rate)

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Research and Development Expense:				
Total research and development expense, GAAP	$ 736.3	$ 549.2	$ 1,891.1	$ 1,629.5
Less: acceleration of share-based compensation expense and related taxes [A]	197.0	—	197.0	—
Less: restructuring charges and other cost saving initiatives	0.2	—	0.7	—
Total research and development expense, Non-GAAP	$ 539.1	$ 549.2	$ 1,693.4	$ 1,629.5
Selling, General and Administrative Expense:				
Total selling, general and administrative, GAAP	$ 788.2	$ 563.3	$ 1,941.2	$ 1,770.8
Less: acceleration of share-based compensation expense and related taxes [A]	196.4	—	196.4	—
Less: acquisition-related transaction and integration costs	29.6		29.6	
Less: restructuring charges and other cost saving initiatives	5.9	—	17.4	—
Less: other	3.3	1.5	8.4	3.5
Total selling, general and administrative, Non-GAAP	$ 553.0	$ 561.8	$ 1,689.4	$ 1,767.3
Amortization and Impairment of Acquired Intangible Assets:				
Total amortization and impairment of acquired intangible assets, GAAP	$ 60.9	$ 56.5	$ 164.0	$ 190.9
Less: amortization of acquired intangible assets	51.5	48.6	138.8	168.1
Total amortization and impairment of acquired intangible assets, Non-GAAP	$ 9.4	$ 7.9	$ 25.2	$ 22.8
Other (Income) Expense, net:				
Total other (income) expense, net, GAAP	$ 300.0	$ (56.0)	$ 248.2	$ (221.3)
Less: (gain) loss on equity security investments	302.1	(109.8)	272.7	158.1
Less: (gain) loss on sale of equity interest in Samsung Bioepis and other investments [B]	15.2	—	15.2	(1,505.3)
Less: litigation settlement agreement [C]	—	—	—	900.0
Less: other	9.0	(0.8)	9.0	19.2
Total other (income) expense, net, Non-GAAP	$ (26.3)	$ 54.6	$ (48.7)	$ 206.7
Income Tax (Benefit) Expense:				
Total income tax expense, GAAP	$ (72.9)	$ 236.2	$ 92.6	$ 578.5
Less: Neurimmune step-up tax basis [D]	—	—	—	83.9
Less: international reorganization (2022) & income tax effect related to Non-GAAP reconciling items	(182.7)	107.6	(203.1)	133.1
Total income tax expense, Non-GAAP	$ 109.8	$ 128.6	$ 295.7	$ 361.5

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 and items associated with the initial consolidation or deconsolidation of variable interest entities. These adjustments include, but are not limited to, 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 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.

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 earnings per share - diluted.

Biogen

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,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Effective Tax Rate:				
Total effective tax rate, GAAP	51.6 %	17.2 %	9.2 %	19.4 %
Less: Neurimmune step-up tax basis [D]	—	—	—	2.8
Less: impact of GAAP to Non-GAAP adjustments	36.9	1.5	(5.5)	1.1
Total effective tax rate, Non-GAAP	14.7 %	15.7 %	14.7 %	15.5 %
Equity in (Income) Loss of Investee, Net of Tax:				
Total equity in (income) loss of investee, GAAP	$ —	$ —	$ —	$ (2.6)
Less: amortization of equity in (income) loss of investee	—	—	—	14.4
Total equity in (income) loss of investee, Non-GAAP	$ —	$ —	$ —	$ (17.0)
Net Income (Loss) Attributable to Noncontrolling Interests, Net of Tax:				
Total net income (loss) attributable to noncontrolling interests, GAAP	$ (0.2)	$ 0.2	$ 1.2	$ (84.4)
Less: Neurimmune step-up tax basis [D]	—	—	—	(83.9)
Less: net distribution to noncontrolling interests	—	—	—	(1.5)
Total net income (loss) attributable to noncontrolling interests, Non-GAAP	$ (0.2)	$ 0.2	$ 1.2	$ 1.0
Net Income (loss) Attributable to Biogen Inc.:				
Total net income (loss) attributable to Biogen Inc., GAAP	$ (68.1)	$ 1,134.7	$ 911.4	$ 2,496.5
Plus: acceleration of share-based compensation expense and related taxes [A]	393.4	—	393.4	—
Plus: acquisition-related transaction and integration costs	29.6	—	29.6	—
Plus: amortization of acquired intangible assets	51.5	48.6	138.8	168.1
Plus: restructuring charges and other cost saving initiatives	82.1	15.4	138.1	124.1
Plus: (gain) loss on fair value remeasurement of contingent consideration	—	(2.1)	—	(13.7)
Plus: (gain) loss on equity security investments	302.1	(109.8)	272.7	158.1
Plus: net distribution to noncontrolling interests & amortization of equity in (income) loss of investee	—	—	—	12.9
Plus: (gain) loss on sale of equity interest in Samsung Bioepis and other investments [B]	15.2	—	15.2	(1,505.3)
Plus: litigation settlement agreement [C]	—	—	—	900.0
Plus: (gain) on sale of building [E]	—	(503.7)	—	(503.7)
Plus: international reorganization & income tax effect related to Non-GAAP reconciling items	(182.7)	107.6	(203.1)	133.1
Plus: other	12.4	0.5	17.4	22.6
Total net income (loss) attributable to Biogen Inc., Non-GAAP	$ 635.5	$ 691.2	$ 1,713.5	$ 1,992.7
Diluted Earnings Per Share:				
Total diluted earnings (loss) per share, GAAP	$ (0.47)	$ 7.84	$ 6.26	$ 17.07
(Less) Plus: adjustments to GAAP net income attributable to Biogen Inc. (as detailed above)	4.83	(3.07)	5.52	(3.44)
Total diluted earnings per share, Non-GAAP [1]	$ 4.36	$ 4.77	$ 11.78	$ 13.63

[1] All unvested equity-based awards are antidilutive for GAAP due to reporting a net loss for the third quarter of 2023. Diluted earnings per share for the third quarter of 2023 includes 0.8 million dilutive shares for non-GAAP.

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

Notes to GAAP to Non-GAAP Reconciliation

[A] Share-based compensation expense reflects the accelerated vesting of awards previously granted to Reata Pharmaceuticals Inc. (Reata) employees as a result of our acquisition of Reata in the third quarter of 2023. We paid pay approximately $983.9 million in cash for Reata's outstanding equity awards, inclusive of employer taxes, of which approximately $590.5 million was attributable to pre-acquisition services and is therefore reflected as a component of total purchase price paid. Of the $983.9 million paid to Reata's equity award holders, we recognized approximately $393.4 million as compensation attributable to the post-acquisition service period, of which $196.4 million was recognized as a charge to selling, general and administrative expense with the remaining $197.0 million as a charge to research and development expense in our condensed consolidated statements of income.

[B] In April 2022 we completed the sale of our 49.9% equity interest in Samsung Bioepis to Samsung BioLogics in exchange for total consideration of approximately $2.3 billion. Under the terms of this transaction, we received approximately $1.0 billion in cash at closing, with approximately $1.3 billion in cash to be deferred over two payments. The first deferred payment of $812.5 million was received in April 2023 and the second deferred payment of $437.5 million is due at the second anniversary of the closing of this transaction in April 2024.

During the second quarter of 2022 we recognized a pre-tax gain of approximately $1.5 billion related to this transaction, which was recorded in other (income) expense, net in our condensed consolidated statements of income for the three and nine months ended September 30, 2022.

[C] During the second quarter of 2022 we recorded a pre-tax charge of $900.0 million, plus settlement fees and expenses, related to a litigation settlement agreement to resolve a qui tam litigation relating to conduct prior to 2015. This charge is included within other (income) expense, net in our condensed consolidated statements of income for the three and nine months ended September 30, 2022.

[D] During the first quarter of 2022, upon issuance of the final National Coverage Determination related to ADUHELM, we recorded an increase in a valuation allowance of approximately $85.0 million to reduce the net value of a previously recorded deferred tax asset to zero.

This adjustment to our net deferred tax asset is recorded with an equal and offsetting amount assigned to net income (loss) attributable to noncontrolling interests, net of tax in our condensed consolidated statements of income, resulting in a zero net impact to net income attributable to Biogen Inc.

[E] In September 2022 we completed the sale of our building and land parcel located at 125 Broadway for an aggregate sales price of approximately $603.0 million, which is inclusive of a $10.8 million tenant allowance. This sale resulted in a pre-tax gain on sale of approximately $503.7 million, net of transaction costs, which is reflected within gain on sale of building in our condensed consolidated statements of income for the three and nine months ended September 30, 2022.

GAAP to Non-GAAP Reconciliation

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

Revenue growth at constant currency vs. Q3 2022 and YTD 2022

Percentage changes in revenue growth at constant currency are presented excluding the impact of changes in foreign currency exchange rates and hedging gains or losses. The current period's foreign currency revenue values are converted into U.S. dollars using the average exchange rates from the prior period.

	Q3 2023 vs. Q3 2022	YTD 2023 vs. YTD 2022
Total Revenue:		
Revenue change, as reported	0.9 %	(2.4)%
Less: impact of foreign currency translation and hedging gains / losses	(2.0)	(2.1)
Revenue change at constant currency	2.9 %	(0.3)%
Total Product Revenue:		
Revenue change, as reported	(8.0)%	(11.0)%
Less: impact of foreign currency translation and hedging gains / losses	(2.1)	(2.3)
Revenue change at constant currency	(5.9)%	(8.7)%
Total MS Product Revenue:		
Revenue change, as reported	(13.5)%	(16.0)%
Less: impact of foreign currency translation and hedging gains / losses	(1.8)	(1.8)
Revenue change at constant currency	(11.7)%	(14.2)%
Total SPINRAZA Revenue		
Revenue change, as reported	4.0 %	(0.5)%
Less: impact of foreign currency translation and hedging gains / losses	(2.9)	(3.3)
Revenue change at constant currency	6.9 %	2.8 %
Total SPINRAZA Rest of World Revenue		
Revenue change, as reported	2.3 %	(1.8)%
Less: impact of foreign currency translation and hedging gains / losses	(4.3)	(5.0)
Revenue change at constant currency	6.6 %	3.2 %
Total Biosimilars Product Revenue:		
Revenue change, as reported	3.6 %	1.0 %
Less: impact of foreign currency translation and hedging gains / losses	(3.5)	(3.9)
Revenue change at constant currency	7.1 %	4.9 %
Total Other Product Revenue (ADUHELM, FUMADERM and QALSODY):		
Revenue change, as reported	25.4 %	(4.4)%
Less: impact of foreign currency translation and hedging gains / losses	2.8	0.5
Revenue change at constant currency	22.6 %	(4.9)%
Total Contract Manufacturing, Royalty and Other Revenue:		
Revenue change, as reported	134.7 %	166.1 %
Less: impact of foreign currency translation and hedging gains / losses	0.1	—
Revenue change at constant currency	134.6 %	166.1 %

Free cash flow

We define free cash flow as net cash provided by (used in) operating activities in the period less capital expenditures made in the period. The following table reconciles net cash provided by (used in) operating activities, a GAAP measure, to free cash flow, a Non-GAAP measure.

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2023	2022	2023	2022
Cash Flow:				
Net cash provided by (used in) operating activities	$ 592.4	$ 661.0	$ 1,534.7	$ 1,559.3
Net cash provided by (used in) investing activities	(1,742.2)	1,672.2	(3,448.7)	1,717.7
Net cash provided by (used in) financing activities	848.6	(1,251.9)	795.4	(1,739.9)
Net increase (decrease) in cash and cash equivalents	$ (301.2)	$ 1,081.3	$ (1,118.6)	$ 1,537.1
Net cash provided by (used in) operating activities	$ 592.4	$ 661.0	$ 1,534.7	$ 1,559.3
Less: Purchases of property, plant and equipment	74.2	59.1	211.8	153.9
Free cash flow	$ 518.2	$ 601.9	$ 1,322.9	$ 1,405.4

Biogen