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First Quarter 2023

Financial Results and Business Update

April 25, 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 33-36 of this presentation and in the Q1 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, optimization of the cost structure, 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, 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; the potential impact of the conflict in Ukraine; 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 ongoing 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.

First quarter 2023 earnings call agenda

Introduction	**Chuck Triano** Head of Investor Relations
Business Priorities	**Christopher A. Viehbacher** President and Chief Executive Officer
R&D Update	**Priya Singhal, M.D., M.P.H.** Head of Development *Interim Head of Research*
Financial Update	**Michael McDonnell** Chief Financial Officer

Business Priorities

Christopher A. Viehbacher

President and Chief Executive Officer

Biogen

Working to establish a sustainable growth trajectory

Execute on potential growth drivers in LEQEMBI and zuranolone

Improve the risk profile and productivity of the R&D pipeline

Align Biogen's cost base with revenue

Capitalize on opportunities for existing products

Evaluate external growth opportunities

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; Zuranolone is being developed in collaboration with Sage Therapeutics, Inc.

Strong progress toward three potential launches in ‘23

LEQEMBI in Early AD

- *Received Accelerated Approval in the U.S.*
- *Regulatory filings for traditional approval submitted in the U.S., E.U. and Japan*
- *Received Priority Review in the U.S., Japan and China*
- *VHA decision to provide coverage*

Potential to be the first anti-amyloid antibody to receive traditional approval globally

Zuranolone in MDD / PPD

Regulatory filing accepted in the U.S. with Priority Review

Launch preparations on track

Potential 14-day rapid-acting, once-daily oral treatment for MDD and PDD

Tofersen in SOD1-ALS

FDA Advisory Committee endorsement of NfL as a surrogate biomarker of efficacy in SOD1–ALS

Expected FDA decision on approval today

First potential treatment to target a genetic cause of ALS

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; Zuranolone is being developed in collaboration with Sage Therapeutics, Inc.; Tofersen is licensed from Ionis Pharmaceuticals
AD = Alzheimer’s disease; ALS = amyotrophic lateral sclerosis; MDD = Major Depressive Disorder; NfL = neurofilament light chain; PDUFA = Prescription Drug User Fee Act; PPD = Postpartum depression; SOD1 = superoxide dismutase; VHA = Veteran's Health Administration

Upcoming milestones expected to build the foundation for potential long-term growth

By Q2 2023 Earnings Call

- **April 25th:** FDA PDUFA action date for tofersen in *SOD1*-ALS
- **June 9th:** FDA Advisory Committee Meeting for LEQEMBI in Early Alzheimer's disease
- **July 6th:** FDA PDUFA action date for traditional approval of LEQEMBI in Early Alzheimer's disease
- **July 6th:** Expected broader CMS coverage for LEQEMBI under existing NCD if granted traditional approval*
- Further information on program to align Biogen's cost base with expected revenue

By End of 2023

- **August 5th:** FDA PDUFA action date for zuranolone in MDD and PPD
- **H2:** DEA scheduling for zuranolone and commercial launch in the U.S.^
- **H2:** PMDA decision on LEQEMBI in Early Alzheimer's Disease in Japan

By End of Q1 2024

- Regulatory filings expected for LEQEMBI subcutaneous formulation and maintenance dosing
- Expected EMA decision on LEQEMBI in Early Alzheimer's Disease in the E.U.
- Expected NMPA decision on LEQEMBI in Early Alzheimer's Disease in China

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; Zuranolone is being developed in collaboration with Sage Therapeutics, Inc; Tofersen is licensed from Ionis Pharmaceuticals; *Based on CMS statement from February 22, 2023 (https://www.cms.gov/newsroom/press-releases/cms-statement-response-alzheimers-associations-request-reconsider-final-national-coverage); ^Potential launch window and DEA scheduling period assume no review extensions

ALS = amyotrophic lateral sclerosis; CMS = Centers for Medicare & Medicaid Service; DEA = Drug Enforcement Agency; EMA = European Medicines Agency; MDD = major depressive disorder; NMPA = National Medical Products Administration; NCD = national coverage determination; PDUFA = Prescription Drug User Fee Act; PMDA = Pharmaceuticals and Medical Devices Agency; PPD = postpartum depression; SOD1 = superoxide dismutase 1

R&D Update

Priya Singhal, M.D., M.P.H.

Head of Development

Interim Head of Research

Biogen

Advancing key late-stage assets while reprioritizing the pipeline

☆ 3 potential drug launches in 2023 across Alzheimer's, depression, and SOD1-ALS

Note: Q1 2023 update includes removal of BIIB093 programs in large hemispheric infarction and brain contusion; removal of BIIB132 in spinal cerebellar ataxia type 3

* Collaboration program; # Option agreement; ^ Licensed from Ionis Pharmaceuticals, Inc.; AIS = acute ischemic stroke; ALS = amyotrophic lateral sclerosis; ASO = antisense oligonucleotide; CLE = cutaneous lupus erythematosus; 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

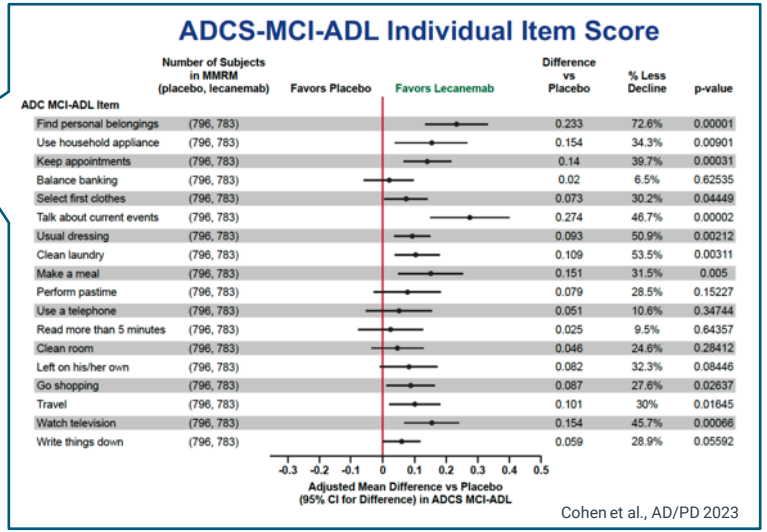
New analyses of LEQEMBI data reinforce benefit–risk profile and potential societal value

Benefit–Risk

Societal Value

Presentations at AD/PD Conference

- LEQEMBI treatment resulted in a 37% slowing vs. placebo on ADCS-MCI-ADL at 18 months and across all ADCS-MCI-ADL domains
- LEQEMBI was associated with a relative preservation of health-related quality of life and caregiver burden, as evidenced by EQ-5D-5L, QOL-AD and Zarit Burden interview
- Updated analyses of ARIA, including incidence of ARIA with use of antiplatelets or anticoagulants



Cohen et al., AD/PD 2023

Newly published analysis of Phase 2b Study highlight effect of LEQEMBI on multiple aspects of Alzheimer's and return of disease biology following treatment discontinuation[1]

Newly published long-term health outcomes updated using Clarity AD data suggests treatment with LEQEMBI resulted in a delay of 2 – 3 years in mean time to progression to mild, moderate and severe AD dementia vs. standard of care alone[2]

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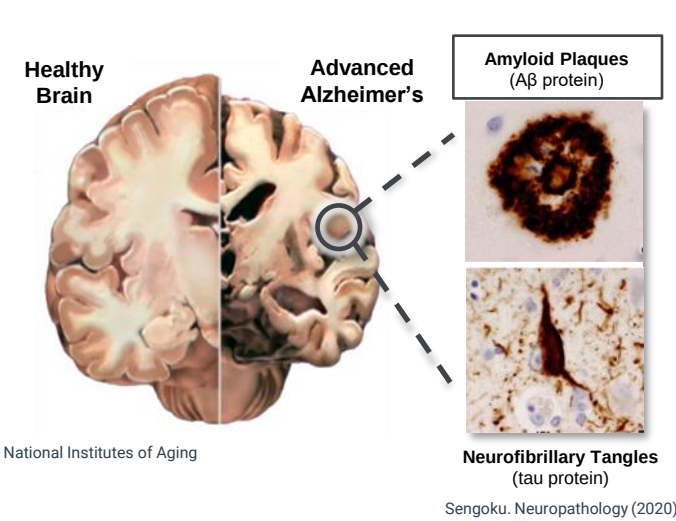
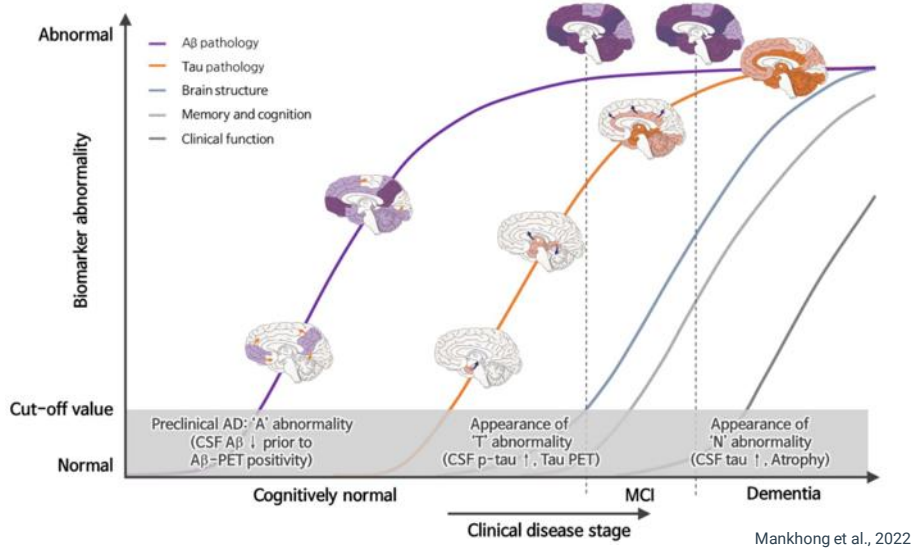
LEQEMBI (lecanemab-irmb) is being developed in collaboration with Eisai Co., Ltd; Eisai serves as the lead for lecanemab development and regulatory submissions globally; See LEQEMBI USPI for full prescribing information; 1. McDade, *et al. Alz Res Therapy*; 2. Monfared, et al. *Neurol Ther* (2023); AD = Alzheimer's disease; ADCS-MCI-ADL = Alzheimer's Disease Cooperative Study – Activities of Daily Living Scale for use in Mild Cognitive Impairment; MMRM = mixed models of repeated measures; ARIA = amyloid-related imaging abnormalities; EQ-5D-5L = European Quality of Life 5 Dimensions 5 Level Version; QOL-AD = Quality of Life in Alzheimer's disease

Poised for Alzheimer's leadership beyond amyloid with tau ASO





- Tau tangles correlate with neuronal loss and clinical symptoms in Alzheimer's disease
- **BIIB080** is a tau mRNA-directed ASO that suppresses *de novo* production of tau and is hypothesized to slow disease progression in Alzheimer's disease and other tauopathies
- In transgenic mice with pre-existing tau pathology, treatment with a tau-directed ASO has resulted in reversal of tau pathology, reduced neuronal loss, and extended survival *(DeVos S., et al. Sci. Transl. Med. 2017)*

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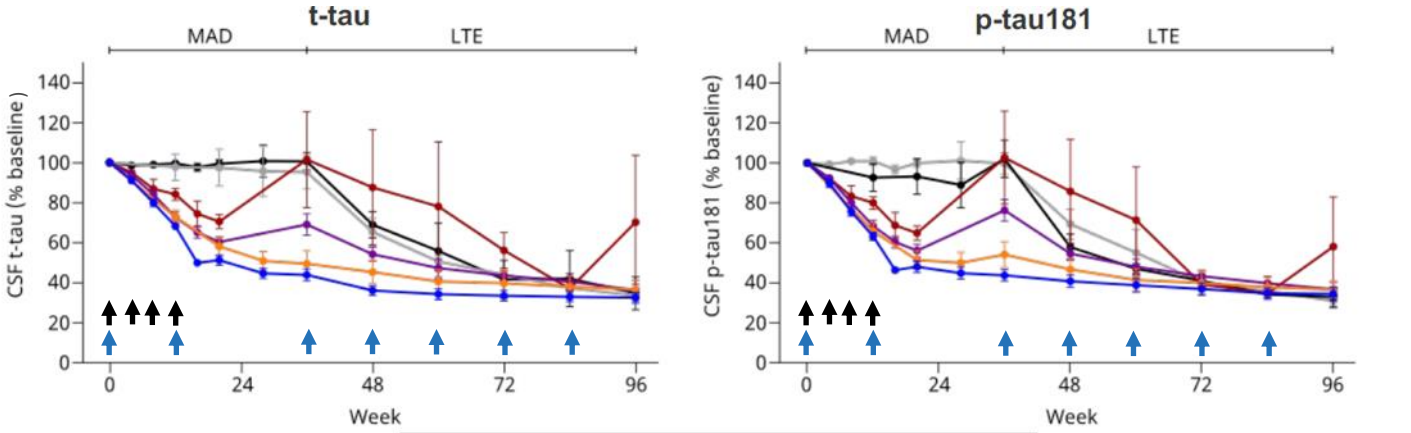
Note: BIIB080 is licensed from Ionis Pharmaceuticals
Aβ = amyloid beta; ASO = antisense oligonucleotide; MCI = Mild Cognitive Impairment: PET = Positron Emission Tomography

BIIB080 Phase 1b delivered the first clinical demonstration of antisense-mediated suppression of CSF tau protein in AD

- BIIB080 was generally well tolerated in mild AD participants
- Total tau in the CSF continued to decline 16 weeks post-last dose in participants treated with BIIB080 (High-dose 4- and 12-week cohorts)



Study Week, N per group	0	36	96
Cohort A 10mg Q4W → 60mg Q12W	6	3	3
Cohort B 30mg Q4W → 60mg Q12W	6	5	4
Cohort C 60mg Q4W → 60mg Q12W	9	7	7
Cohort D 115mg Q12W → 115mg Q12W	13	10	11
Cohort A+B+C Placebo → 60mg Q12W	7	5	2
Cohort D Placebo → 115mg Q12W	5	4	2

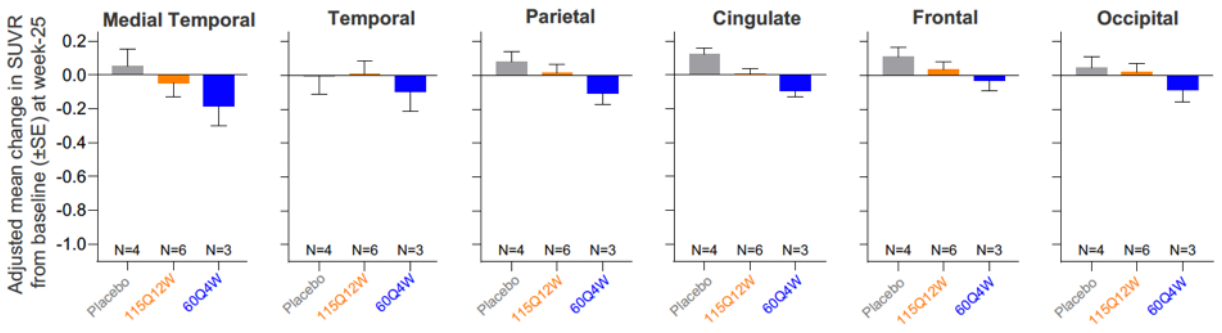
BIIB080 Dosing
- Monthly dosing
- Quarterly dosing

Source: Collins et al., AD/PD 2023

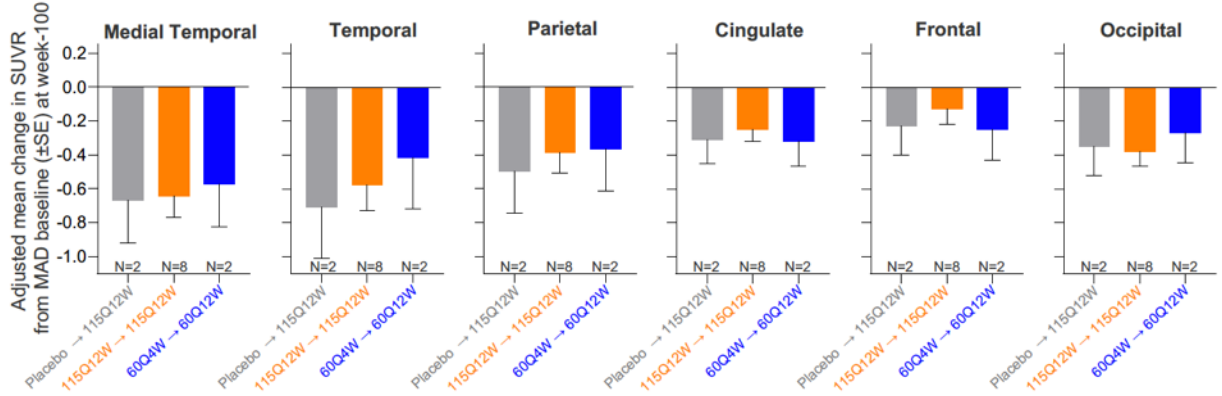
AD = Alzheimer's disease; CSF = cerebrospinal fluid; LTE = long-term extension; MAD = multiple ascending dose; Q4W = every 4-week dosing; Q12W = every 12-week dosing; t-tau = total tau; p-tau = phosphorylated tau

BIIB080 resulted in consistent reduction in tau burden across all brain regions

MAD (wk 25)



LTE (wk 100)



Tau PET Results:

- BIIB080 impacted tau burden as early as 25 weeks
- BIIB080 reduced tau burden at the end of the LTE following drug administration in all treatment groups

The Phase 2 CEILA Study evaluating BIIB080 in Early Alzheimer's is currently enrolling

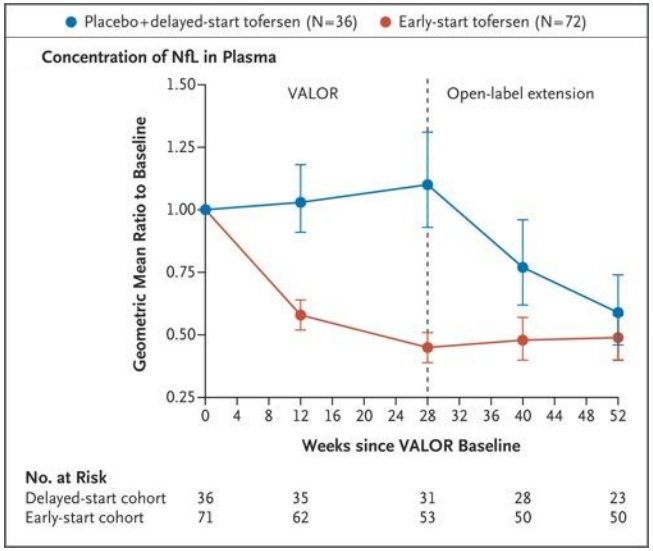
Source: Collins et al., AD/PD 2023

[18F]-MK6240 SUVRs were calculated with inferior cerebellum as the reference region. Adjusted mean change from MAD baseline based on ANCOVA model with fixed effects of categorical treatment and baseline tau PET SUVR, Error bars reflect SE of the mean

LTE = long term extension; MAD = multiple ascending dose; PET = positron emission tomograph; SE = standard error; SUVR = standardized uptake value ratio; wk = week

Advancing groundbreaking science in ALS

Tofersen in SOD1-ALS (ultra-rare genetic form of ALS)



Miller et al., *N Engl J Med 2022*

- FDA AdComm unanimously agreed that reduction in plasma NfL is reasonably likely to predict clinical benefit of tofersen for treatment of *SOD1*-ALS
- FDA PDUFA action date of April 25, 2023

Tofersen represents the first potential treatment to target a genetic cause of ALS

BIIB105 (ATXN2 lowering ASO) in broad ALS

- In preclinical studies reduction of ATXN2 levels reduced TDP-43 pathology and improved survival[1]
- Phase 1/2 study readout expected by early 2024

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Note: tofersen is licensed from Ionis Pharmaceuticals; BIIB105 is an option agreement with Ionis Pharmaceuticals

1. Becker et al. *Nature*. 2017;544(7650):367-371. AdComm = advisory committee; ALS = amyotrophic lateral sclerosis; ASO = antisense oligonucleotide; ATXN2 = ataxin-2 gene; NfL = neurofilament light chain; PDUFA = Prescription Drug User Fee Act; SOD1 = superoxide dismutase 1

Aiming to enable growth by optimizing R&D value

Investing in areas where we have strong conviction in disease biology

- Continuing to invest in further data generation for LEQEMBI and zuranolone while focusing on key pipeline programs including BIIB080, litifilimab and BIIB105
- Recently exercised option with Denali Therapeutics to develop and commercialize ATV:Amyloid beta program

Deprioritizing based upon ongoing assessment of probability of success

- Terminating involvement in the development of BIIB093, currently in a Phase 3 study for LHI and a Phase 2 study for brain contusion
- Pausing initiation of Phase 2b Study of BIIB131 in AIS as we reassess whether to initiate study
- Discontinued BIIB132 program in spinocerebellar ataxia type 3
- Re-focusing investment in gene therapy to advance fundamental technology
- Exited ophthalmology research

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AIS = acute ischemic stroke; ATV = antibody transport vehicle; LHI = large hemispheric infarction

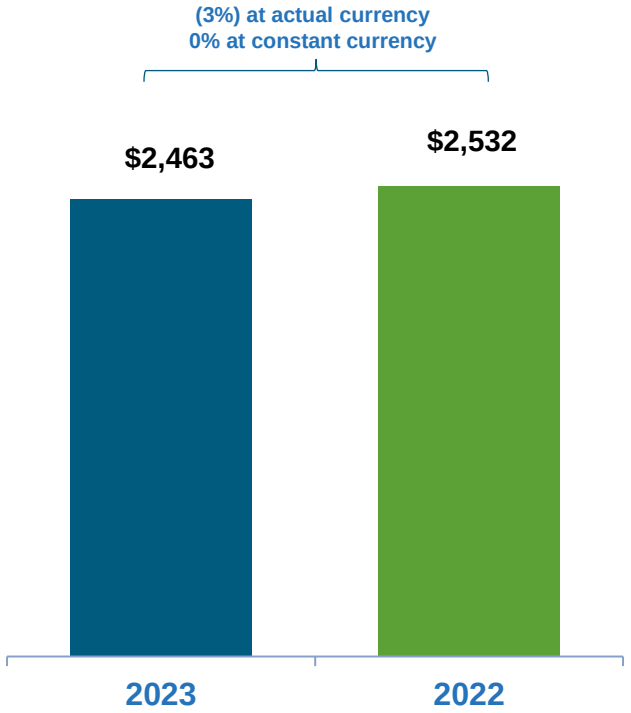
Financial Update

Michael McDonnell

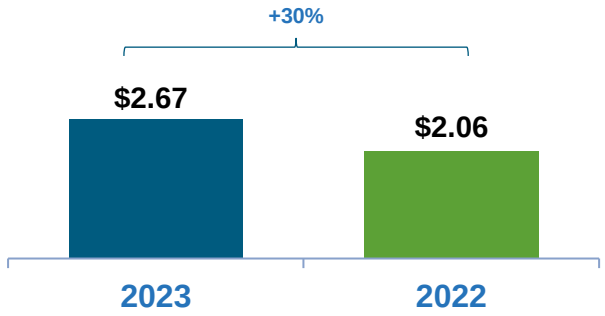
Chief Financial Officer

First quarter 2023 financial results

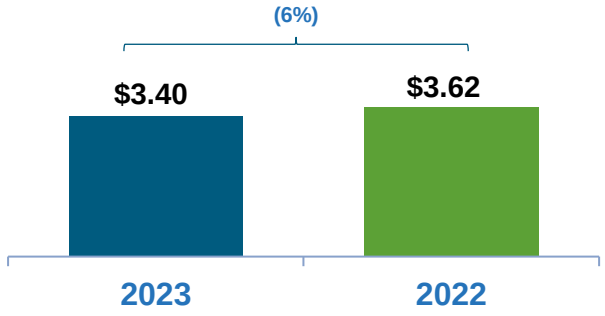
Q1 Total Revenue ($M)



Q1 GAAP Diluted EPS ($)



Q1 Non-GAAP Diluted EPS ($)



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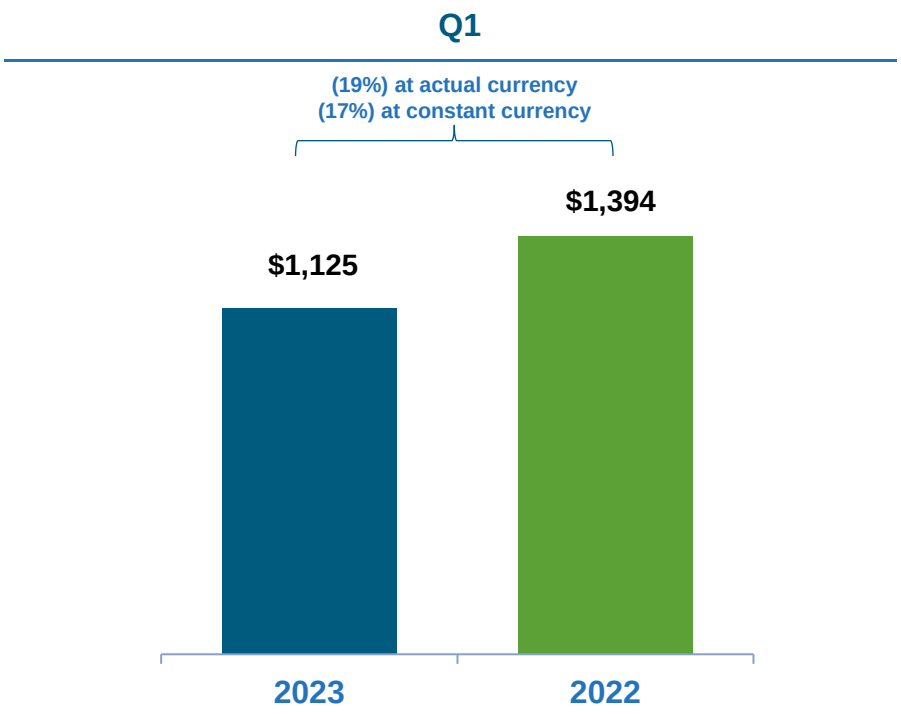
Percentage changes in revenue growth at constant currency are presented excluding the impact of changes in foreign currency exchange rates and hedging gains or losses. The current period's foreign currency revenue values are converted into U.S. dollars using the average exchange rates from the prior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

Global multiple sclerosis product revenue

MS Product Revenue ($M)



Q1 2023 Highlights

- **TECFIDERA** was negatively impacted by generic competition in the U.S. and certain markets outside the U.S.
- **VUMERITY** global patients increased modestly, offset by channel and pricing dynamics in the U.S.
- **TYSABRI** was negatively impacted by pricing pressure, competition, and channel dynamics
- **Interferons** were negatively impacted by the continued shift from injectable platforms to oral or high efficacy therapies as well as channel dynamics in the U.S.

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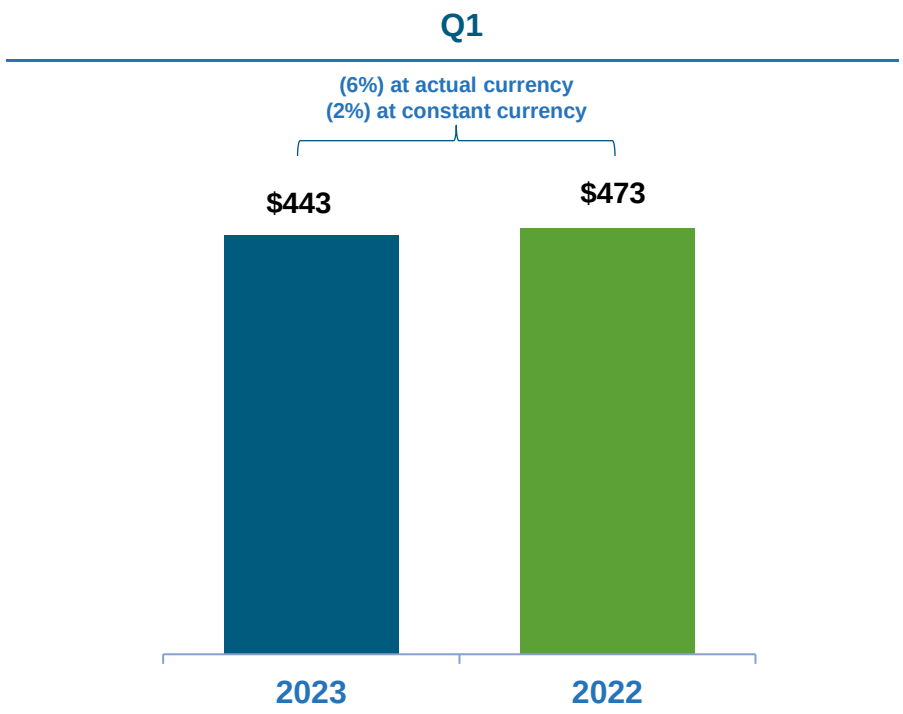
Global SPINRAZA revenue

SPINRAZA Revenue ($M)



Q1 2023 Highlights

- **U.S. SPINRAZA:** Patients increased slightly with revenues pressured by fewer new patient starts and channel dynamics
- **ROW SPINRAZA:** Revenues declined 4% at actual currency and increased 2% at constant currency, with competition more than offset by the timing of shipments in certain markets

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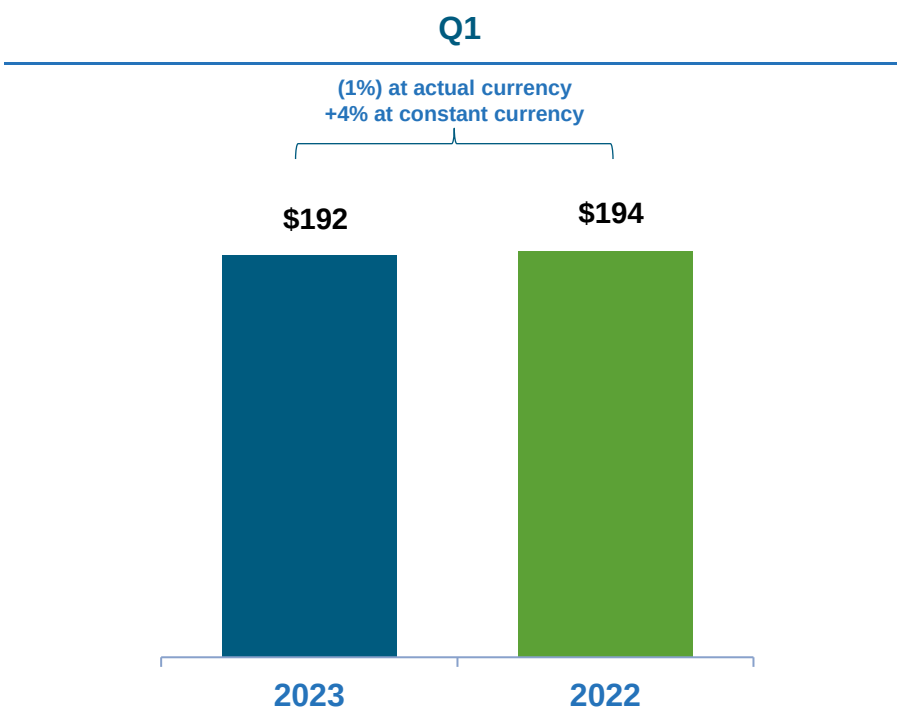
Biosimilars revenue

Biosimilars Revenue ($M)



Q1 2023 Highlights

- **Biosimilars:** Volume growth partially offset by continued pricing pressure for anti-TNFs in Europe
- **BYOOVIZ** (referencing LUCENTIS®) now launched in Canada, Germany, and the U.K.; Launched in the U.S. in June 2022
- **BIIB800**, a biosimilar candidate referencing ACTEMRA®, under regulatory review in the U.S. and E.U.
- Process underway to evaluate strategic options for the biosimilars business

BIIB800 is being developed with Bio-Thera Solutions, Ltd.

First quarter 2023 revenue highlights

($ in Millions)	Q1 2023	Q1 2022	Δ Y/Y	Δ (Constant Currency[#])
Multiple sclerosis product revenue[1]	$1,125	$1,394	(19%)	(17%)
Spinal muscular atrophy revenue	$443	$473	(6%)	(2%)
Alzheimer's disease revenue[2]	($18)	$3	NMF	NMF
Biosimilars revenue	$192	$194	(1%)	4%
Other product revenue[3]	$2	$2	(9%)	(5%)
Subtotal	$1,744	$2,066	(16%)	(13%)
Revenue from anti-CD20 therapeutic programs	**$399**	**$399**	**0%**	**0%**
Contract manufacturing, royalty and other revenue[4]	**$319**	**$66**	**383%**	**383%**
Total revenue[*]	**$2,463**	**$2,532**	**(3%)**	**0%**

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.
Numbers may not foot due to rounding. Percent changes represented as favorable/(unfavorable). NMF = No Meaningful Figure
[1] includes TECFIDERA, VUMERITY, AVONEX, PLEGRIDY, TYSABRI, and FAMPYRA
[2] includes ADUHELM product revenue and revenue from LEQEMBI collaboration. Beginning in the first quarter of 2023, Biogen's 50% share of net commercial profits and losses for LEQEMBI in the U.S, which includes in-market revenue less cost of sales, royalties, and SG&A expense, is reflected as a component of total revenue.
[3] includes FUMADERM
[4] includes revenue from manufacturing of LEQEMBI beginning in the first quarter of 2023.
[*] net of hedge

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First quarter 2023 financial results summary

($ in Millions)	Q1 2023	Q1 2022	Δ Y/Y
Revenue	**$2,463**	**$2,532**	**(3%)**
GAAP and Non-GAAP Cost of Sales	$663	$754	12%
% of revenue	*27%*	*30%*	
GAAP and Non-GAAP R&D Expense	$571	$552	(3%)
GAAP SG&A Expense	$605	$635	5%
Non-GAAP SG&A Expense	$603	$635	5%
GAAP Amortization	$50	$67	25%
Non-GAAP Amortization	$8	$8	(1%)
GAAP and Non-GAAP Collaboration Profit Sharing / (Loss Reimbursement)	$57	($117)	(149%)
GAAP Other Income (Expense)	($69)	($263)	74%
Non-GAAP Other Income (Expense)	$8	($73)	111%
GAAP Taxes %	12%	36%	
Non-GAAP Taxes %	14%	16%	
GAAP Net Income Attributable to Biogen Inc.	**$388**	**$304**	**28%**
Non-GAAP Net Income Attributable to Biogen Inc.	**$493**	**$535**	**(7%)**
Weighted average diluted shares used in calculating diluted EPS	145	148	2%
GAAP Diluted EPS	**$2.67**	**$2.06**	**30%**
Non-GAAP Diluted EPS	**$3.40**	**$3.62**	**(6%)**

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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 March 31, 2023)

$6.0B	Cash and marketable securities
$6.3B	Debt
$0.3B	Net debt

Cash Flow
(Q1 2023)

$455M	Cash flow from operations
$67M	Capital expenditures
$389M	Free cash flow*

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Numbers may not foot due to rounding.

* Free cash flow is defined as net cash flow from operations less capital expenditures.

Reaffirming full year 2023 financial guidance

	Full Year 2023
Revenue	**Mid-single digit percentage decline***
Non-GAAP Diluted EPS	**$15.00 to $16.00**

* Versus reported revenue for full year 2022

Please see Biogen's first 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.

Questions & Answers

Appendix

LEQEMBI collaboration accounting

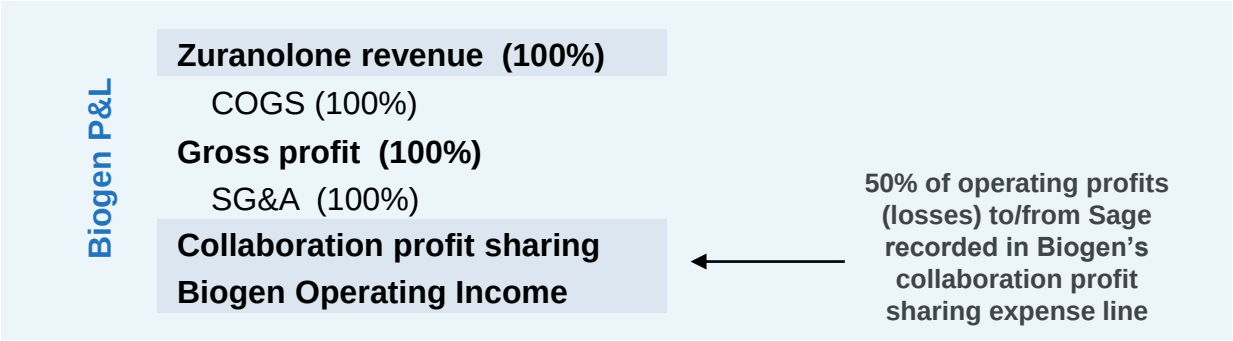
Commercial Economics	• Biogen's 50% share of U.S. revenue, COGS (including royalties), and SG&A will be reflected as a component of total revenue • Expect 2023 commercial expenses to exceed initial revenue, creating a headwind to 2023 revenue • Biogen's 50% share of ex-U.S. commercial expenses will continue to be recorded within SG&A expense until approval on a region-by-region basis
R&D	• Biogen's 50% share of global R&D expenditures will be reflected within R&D expense
Manufacturing	• Biogen will sell inventory to Eisai and recognize contract manufacturing revenue and contract manufacturing cost of goods sold at a minimal gross margin • Biogen will manufacture the LEQEMBI drug substance in its Solothurn, Switzerland facility, and capitalize inventory until it is sold to Eisai

Zuranolone collaboration accounting (U.S.)

Pre-approval

- Biogen will record R&D and SG&A net of reimbursement to or from Sage within their respective line items

Commercial Economics Post-approval



R&D pre- and post-approval

- Biogen's 50% share of R&D expenditures will be reflected within R&D expense

Consolidated Statement of Income

(unaudited, in millions, except per share amounts)

	For the Three Months Ended March 31,	
	2023	2022
Revenue:		
Product, net	$ 1,763.3	$ 2,066.3
Revenue from LEQEMBI Collaboration	(18.9)	—
Revenue from anti-CD20 therapeutic programs	399.5	399.4
Contract manufacturing, royalty and other revenue	319.1	66.1
Total revenue	2,463.0	2,531.8
Cost and expense:		
Cost of sales, excluding amortization and impairment of acquired intangible assets	662.8	753.9
Research and development	570.6	551.7
Selling, general and administrative	605.0	634.9
Amortization and impairment of acquired intangible assets	50.2	66.9
Collaboration profit sharing/(loss reimbursement)	57.1	(117.3)
(Gain) loss on fair value remeasurement of contingent consideration	—	(7.1)
Restructuring charges	9.6	38.1
Other (income) expense, net	69.4	263.3
Total cost and expense	2,024.7	2,184.4
Income before income tax expense and equity in loss of investee, net of tax	438.3	347.4
Income tax (benefit) expense	50.7	125.6
Equity in (income) loss of investee, net of tax	—	3.3
Net income	387.6	218.5
Net income (loss) attributable to noncontrolling interests, net of tax	(0.3)	(85.3)
Net income attributable to Biogen Inc.	$ 387.9	$ 303.8
Net income per share:		
Basic earnings per share attributable to Biogen Inc.	$ 2.69	$ 2.06
Diluted earnings per share attributable to Biogen Inc.	$ 2.67	$ 2.06
Weighted-average shares used in calculating:		
Basic earnings per share attributable to Biogen Inc.	144.4	147.1
Diluted earnings per share attributable to Biogen Inc.	145.2	147.6

Biogen

Consolidated Balance Sheets

(unaudited, in millions)

	As of March 31, 2023	As of December 31, 2022
ASSETS		
Cash and cash equivalents	$ 2,898.2	$ 3,419.3
Marketable securities	2,143.1	1,473.5
Accounts receivable, net	1,634.4	1,705.0
Due from anti-CD20 therapeutic programs, net	393.8	431.4
Inventory	1,281.0	1,344.4
Other current assets	1,412.0	1,417.6
Total current assets	9,762.5	9,791.2
Marketable securities	978.2	705.7
Property, plant and equipment, net	3,300.9	3,298.6
Operating lease assets	399.1	403.9
Intangible assets, net	1,813.3	1,850.1
Goodwill	5,751.8	5,749.0
Deferred tax asset	1,211.8	1,226.4
Investments and other assets	1,380.8	1,529.2
TOTAL ASSETS	$ 24,598.4	$ 24,554.1
LIABILITIES AND EQUITY		
Taxes payable	$ 235.5	$ 259.9
Accounts payable	491.2	491.5
Accrued expenses and other	2,288.2	2,521.4
Total current liabilities	3,014.9	3,272.8
Notes payable	6,282.7	6,281.0
Deferred tax liability	251.3	334.7
Long-term operating lease liabilities	327.0	333.0
Other long-term liabilities	935.5	944.2
Equity	13,787.0	13,388.4
TOTAL LIABILITIES AND EQUITY	$ 24,598.4	$ 24,554.1

Biogen

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

(unaudited, in millions)

Product Revenue

	For the Three Months Ended March 31,					
	2023			2022		
(In millions)	United States	Rest of World	Total	United States	Rest of World	Total
Multiple Sclerosis (MS):						
TECFIDERA	$ 74.7	$ 199.8	$ 274.5	$ 117.1	$ 292.8	$ 409.9
VUMERITY	93.5	14.7	108.2	125.2	2.8	128.0
Total Fumarate	168.2	214.5	382.7	242.3	295.6	537.9
AVONEX	102.6	69.8	172.4	148.0	81.6	229.6
PLEGRIDY	29.9	43.3	73.2	34.3	45.7	80.0
Total Interferon	132.5	113.1	245.6	182.3	127.3	309.6
TYSABRI	245.4	227.4	472.8	284.5	236.3	520.8
FAMPYRA	—	24.1	24.1	—	26.2	26.2
Subtotal: MS	546.1	579.1	1,125.2	709.1	685.4	1,394.5
Spinal Muscular Atrophy:						
SPINRAZA	146.7	296.6	443.3	163.3	309.2	472.5
Biosimilars:						
BENEPALI	—	109.0	109.0	—	114.7	114.7
IMRALDI	—	54.4	54.4	—	57.1	57.1
FLIXABI	—	20.4	20.4	—	22.5	22.5
BYOOVIZ	8.2	0.4	8.6	—	—	—
Subtotal: Biosimilars	8.2	184.2	192.4	—	194.3	194.3
Other[1]	0.4	2.0	2.4	2.8	2.2	5.0
Total product revenue	$ 701.4	$ 1,061.9	$ 1,763.3	$ 875.2	$ 1,191.1	$ 2,066.3

[1] Other includes FUMADERM and ADUHELM.

Total Revenue

	For the Three Months Ended March 31,	
	2023	2022
Product revenue	$ 1,763.3	$ 2,066.3
Revenue from LEQEMBI Collaboration	(18.9)	—
OCREVUS royalties	283.6	252.3
RITUXAN/GAZYVA®/LUNSUMIO™ revenue	112.5	143.2
Other revenues from anti-CD20 programs	3.4	3.9
Contract manufacturing, royalty and other revenue	319.1	66.1
Total revenue	$ 2,463.0	$ 2,531.8

GAAP to Non-GAAP Reconciliation

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

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 cash 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.

	For the Three Months Ended March 31,	
	2023	2022
Research and Development Expense:		
Total research and development expense, GAAP	$ 570.6	$ 551.7
Less: other	0.1	—
Total research and development expense, Non-GAAP	$ 570.5	$ 551.7
Selling, General and Administrative Expense:		
Total selling, general and administrative, GAAP	$ 605.0	$ 634.9
Less: other	2.4	(0.1)
Total selling, general and administrative, Non-GAAP	$ 602.6	$ 635.0
Amortization and Impairment of Acquired Intangible Assets:		
Total amortization and impairment of acquired intangible assets, GAAP	$ 50.2	$ 66.9
Less: amortization of acquired intangible assets	42.6	59.3
Total amortization and impairment of acquired intangible assets, Non-GAAP	$ 7.6	$ 7.6
Other (Income) Expense, net:		
Total other (income) expense, net, GAAP	$ 69.4	$ 263.3
Less: (gain) loss on equity security investments	77.1	190.7
Less: other	—	—
Total other (income) expense, net, Non-GAAP	$ (7.7)	$ 72.6
Income Tax (Benefit) Expense:		
Total income tax (benefit) expense, GAAP	$ 50.7	$ 125.6
Less: Neurimmune step-up tax basis [A]	—	83.9
Less: international reorganization (2022) & income tax effect related to Non-GAAP reconciling items	(26.3)	(55.9)
Total income tax expense, Non-GAAP	$ 77.0	$ 97.6
Effective Tax Rate:		
Total effective tax rate, GAAP	11.6 %	36.2 %
Less: Neurimmune step-up tax basis [A]	—	24.2
Less: impact of GAAP to Non-GAAP adjustments	(1.9)	(3.5)
Total effective tax rate, Non-GAAP	13.5 %	15.5 %

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)

(In millions, except per share amounts)	For the Three Months Ended March 31, 2023	2022
Net Income (Loss) Attributable to Noncontrolling Interests, Net of Tax:		
Total net income (loss) attributable to noncontrolling interests, GAAP	$ (0.3)	$ (85.3)
Less: Neurimmune step-up tax basis [A]	—	(83.9)
Less: net distribution to noncontrolling interests	—	(1.5)
Total net income (loss) attributable to noncontrolling interests, Non-GAAP	$ (0.3)	$ 0.1
Net Income Attributable to Biogen Inc.:		
Total net income attributable to Biogen Inc., GAAP	$ 387.9	$ 303.8
Plus: amortization of acquired intangible assets	42.6	59.3
Plus: restructuring charges	9.6	38.1
Plus: (gain) loss on fair value remeasurement of contingent consideration	—	(7.1)
Plus: (gain) loss on equity security investments	77.1	190.7
Plus: net distribution to noncontrolling interests & amortization of equity in (income) loss of investee	—	5.8
Plus: international reorganization & income tax effect related to Non-GAAP reconciling items	(26.3)	(55.9)
Plus: other	2.5	(0.1)
Total net income attributable to Biogen Inc., Non-GAAP	$ 493.4	$ 534.6
Diluted Earnings Per Share:		
Total diluted earnings per share, GAAP	$ 2.67	$ 2.06
(Less) Plus: adjustments to GAAP net income attributable to Biogen Inc. (as detailed above)	0.73	1.56
Total diluted earnings per share, Non-GAAP	$ 3.40	$ 3.62

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

GAAP to Non-GAAP Reconciliation

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

Revenue growth at constant currency vs. Q1 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.

	Q1 2023 vs. Q1 2022
Total Revenue:	
Revenue change, as reported	(2.7)%
Less: impact of foreign currency translation and hedging gains / losses	(2.3)
Revenue change at constant currency	(0.4)%
Total MS Product Revenue:	
Revenue change, as reported	(19.3)%
Less: impact of foreign currency translation and hedging gains / losses	(2.2)
Revenue change at constant currency	(17.1)%
Total SPINRAZA Product Revenue:	
Revenue change, as reported	(6.2)%
Less: impact of foreign currency translation and hedging gains / losses	(3.7)
Revenue change at constant currency	(2.5)%
Total SPINRAZA Rest of World Revenue	
Revenue change, as reported	(4.1)%
Less: impact of foreign currency translation and hedging gains / losses	(5.8)
Revenue change at constant currency	1.7 %
Total Biosimilars Product Revenue:	
Revenue change, as reported	(1.0)%
Less: impact of foreign currency translation and hedging gains / losses	(5.0)
Revenue change at constant currency	4.0 %
Total Other Product Revenue:	
Revenue change, as reported	(9.1)%
Less: impact of foreign currency translation and hedging gains / losses	(4.2)
Revenue change at constant currency	(4.9)%
Total Contract Manufacturing, Royalty and Other Revenue:	
Revenue change, as reported	382.6 %
Less: impact of foreign currency translation and hedging gains / losses	(0.3)
Revenue change at constant currency	382.9 %

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 March 31,	
	2023	2022
Cash Flow:		
Net cash provided by (used in) operating activities	$ 455.3	$ 161.8
Net cash provided by (used in) investing activities	(953.0)	(648.0)
Net cash provided by (used in) financing activities	(43.4)	(16.5)
Net increase (decrease) in cash and cash equivalents	$ (541.1)	$ (502.7)
Net cash provided by (used in) operating activities	$ 455.3	$ 161.8
Less: Purchases of property, plant and equipment	66.6	57.9
Free cash flow	$ 388.7	$ 103.9

Biogen

Notes to GAAP to Non-GAAP Reconciliation

Operating Expense & Net Income Attributable to Biogen Inc.

[A] During the first quarter of 2022, upon issuance of the final NCD 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.