

where
science meets **humanity**™

Second Quarter 2024

Financial Results and Business Update



August 1, 2024

 **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 38-41 of this presentation and in the Q2 2024 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.

Note regarding trademarks: ADUHELM[®], AVONEX[®], BYOOVIZ[®], PLEGRIDY[®], RITUXAN[®], RITUXAN HYCELA[®], QALSODY[®], SKYCLARYS[®], SPINRAZA[®], TECFIDERA[®], TYSABRI[®], and VUMERITY[®] are registered trademarks of Biogen. BENEPALI[™], FLIXABI[™], FUMADERM[™], IMRALDI[™], and TOFIDENCE[™] are trademarks of Biogen. The following are trademarks of the respective companies listed: LEQEMBI[®] – Eisai Co., Ltd.; ZURZUVAE[™] – Sage Therapeutics Inc.; GAZYVA[®], LUNSUMIO[®], OCREVUS[®] – Genentech, Inc. Other trademarks referenced in this presentation are the property of their respective owners.

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 and 2024 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; 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.

Biogen call participants



**Christopher A.
Viehbacher**

President and Chief
Executive Officer



Alisha A. Alaimo

President and Head
of North America



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

Head of
Development



**Travis Murdoch,
M.D.**

Head of HI-Bio



**Michael
McDonnell**

Chief Financial
Officer

Key Highlights

Christopher A. Viehbacher
President and Chief Executive Officer



Working to deliver a New Biogen with progress across 3 key aims

Grow Product Revenue

Stabilize the business

Q2 core pharmaceutical revenue grew 5% at actual and 6% at constant currency year-over-year*

Execute on product launch opportunities

Continued momentum across LEQEMBI, SKYCLARYS, ZURZUVAE and QALSODY launches

Improve the Margin Profile

Right-size the expense base

Fit for Growth remains on track to achieve \$1 billion gross, \$800 million net cost savings by the end of 2025#

Drive revenue and remain disciplined on costs

Increasing guidance for the remainder of 2024; Non-GAAP EPS expected to grow ~9% vs. 2023 at the mid-point

Build a strong late-stage pipeline

Position Biogen for future growth through R&D productivity

Advancing a reprioritized pipeline and investing to win in key areas

Diversify the portfolio

HI-Bio acquisition added a de-risked late-stage immunology asset with 'pipeline in a product' potential

Continue pursuing additional external opportunities

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; Note: ZURZUVAE is being developed and commercialized in collaboration with Sage Therapeutics, Inc; See ZURZUVAE USPI for full prescriber information; QALSODY is licensed from Ionis Pharmaceuticals, Inc; See QALSODY USPI for full prescribing information; Core pharmaceutical revenue = product revenue plus Biogen's 50% share of net LEQEMBI product revenue and cost of sales, including royalties; *Constant Currency – 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. Foreign currency revenue values are converted into U.S. Dollars using the exchange rates from the end of the previous calendar year; # vs. full year 2023

Commercial Update

Alisha A. Alaimo

President and Head of North America



LEQEMBI launch shows sustained momentum



Sustained rate of new patient growth

- *Nearly 40% of all commercial patients on therapy added in Q2*

Grew the number of prescribing physicians

- *Total prescribers increased by approximately 50% during Q2*

Order volume accelerated at Priority 100 IDNs

- *Depth of order volume at Priority 100 IDNs more than doubled in Q2 compared to Q1**

Growing real-world experience with LEQEMBI's safety and efficacy adds to its unique profile

Advancing the global launch of SKYCLARYS



SKYCLARYS now available in 12 markets outside the U.S.

- *Global launches delivered \$100M in Q2 revenue*

U.S. continuing to exceed rare disease analogs

- *Deploying rare disease capabilities to focus on initiating new patients and community HCPs*

Europe and RoW launches ahead of internal forecasts

- *Reimbursement applications submitted in 20 countries*
- *Expect commercial launch or early access paid mechanism in 10-20 ex-U.S. markets by year-end 2024*

ZURZUVAE launch exceeding expectations



Growth across key launch metrics vs Q1 '24

- *Revenue growth of 19%*
 - *Number of patients nearly doubled*
-

Continuous launch learnings informing next phase

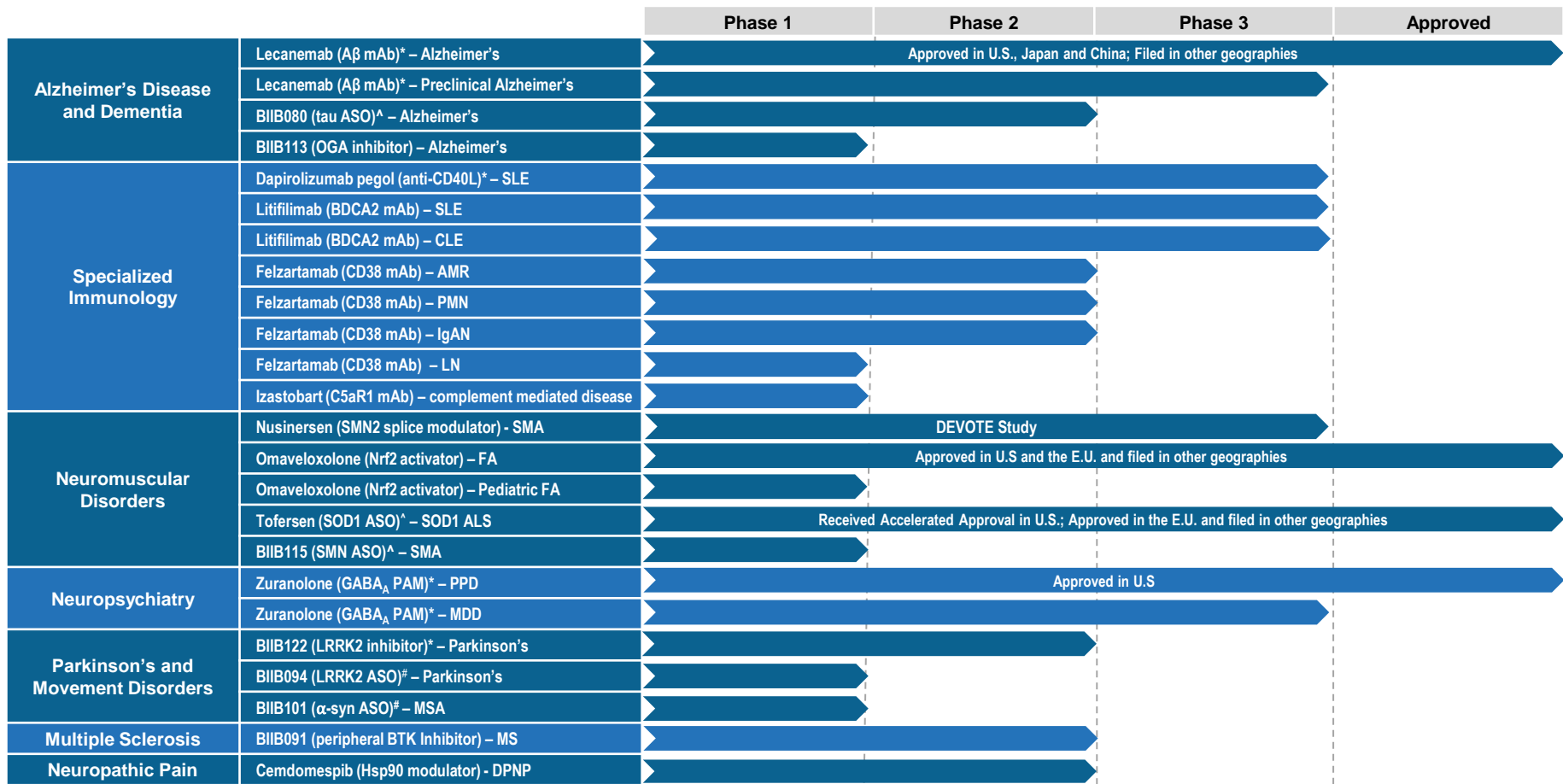
- *OB-GYNs continue to account for the largest percentage of Rx*
- *Higher than average aided awareness of ZURZUVAE among providers*

Launch efforts continue to focus on patient and provider education and urgency to treat

Development Update

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



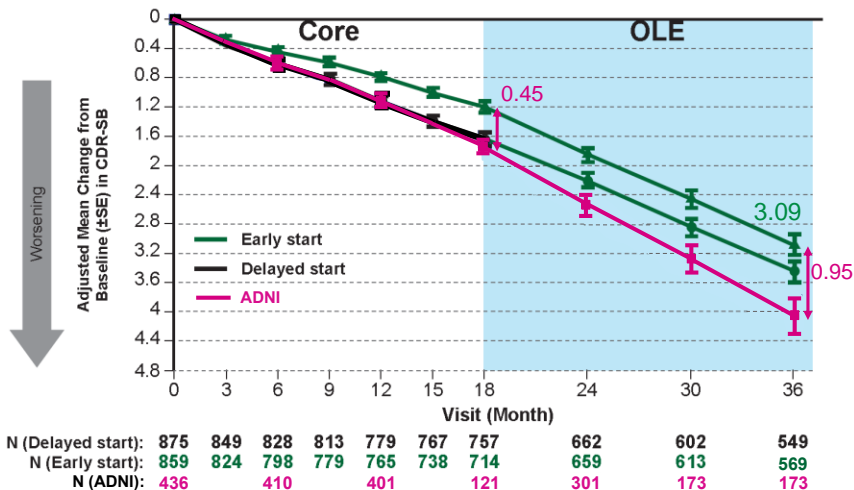


Pipeline Updates: Removed = BIIB107 (MS), BIIB121 (Angelman syndrome), BIIB105 (ALS) and BIIB124 (essential tremor); Added = Felzartamab, Izastobart, DEVOTE Study evaluating high dose nusinersen; Advanced = litifilimab to Phase 3 (CLE); Approvals = Tofersen in the E.U.; * Collaboration program; # Collaboration and option agreement; ^ Licensed from Ionis Pharmaceuticals, Inc.; ALS = amyotrophic lateral sclerosis; AMR = antibody mediated rejection; ASO = antisense oligonucleotide; CLE = cutaneous lupus erythematosus; DPNP = diabetic peripheral neuropathic pain; GABA = γ-Aminobutyric acid; IgAN = IgA nephropathy; LN = lupus nephritis; LRRK2 = leucine rich repeat kinase 2; MDD = major depressive disorder; MS = multiple sclerosis; MSA = Multiple System Atrophy; OGA = O-GlcNAcase; PAM = positive allosteric modulator; PMN = primary membranous nephropathy; PPD = postpartum depression; SLE = systemic lupus erythematosus; SMA = spinal muscular atrophy; SOD1 = superoxide dismutase type 1

3-year data indicates the continued benefit of LEQEMBI

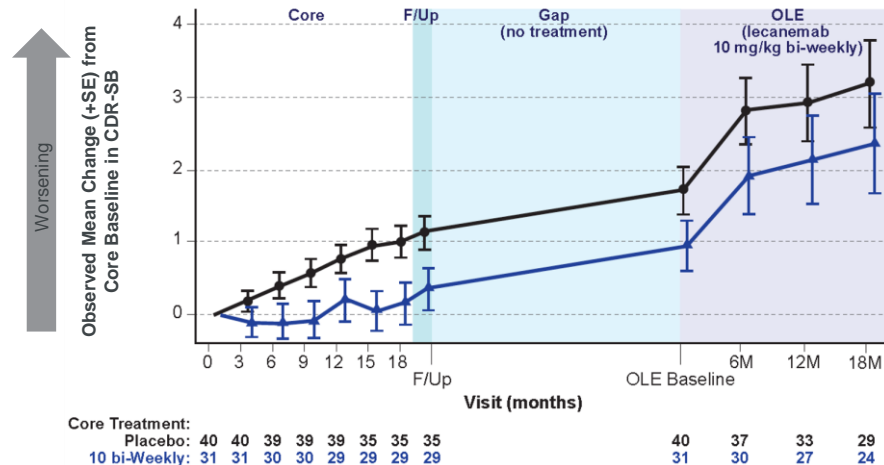
Alzheimer's does not stop after plaque removal and data shows continued clinical benefit with longer-treatment duration of LEQEMBI

Early-start LEQEMBI showed expanded benefit at 36 months vs. natural history* in the Clarity Ph 3



Van Dyck et al., AAIC 2024

Clinical data and biomarkers from Ph 2 show AD does not stop progressing after removal of plaques#



Adapted from Reyderman, AAIC 2024

See LEQEMBI USPI for full prescribing information; * vs. 18-month timepoint; # McDade et al., *Alz Res Therapy* 14, 191 (2022); ADNI observational cohort is matched to baseline demographics of those in Clarity AD study and shows similar rate of decline to placebo out to 18-months; AAIC = Alzheimer's Association International Conference; AD = Alzheimer's disease; ADNI = Alzheimer's Disease Neuroimaging Initiative; CDR-SB = clinical dementia rating scale – sum of boxes; F/Up = follow-up; OLE = open label extension

Leading in Alzheimer's with the goal of expanding LEQEMBI treatment options for patients



LEQEMBI IV Maintenance

- *sBLA filed with an expected FDA decision by January 2025*

LEQEMBI SC AI – Maintenance

- *Received FDA Fast Track designation*
- *Rolling submission initiated with expected completion in Q4' 2024*

LEQEMBI SC AI – Treatment Initiation

- *Generating data on a lower SC AI dose with aim of optimizing patient experience*

AHEAD 3-45 Study

- *Evaluating LEQEMBI in preclinical AD*

Investing to fight against Alzheimer's on multiple fronts

Aim to expand our leadership through a diversified Alzheimer's strategy



Targeting tau as the potential next frontier in Alzheimer's treatment

- Advancing our investigational tau ASO (BIIB080), ***the first tau targeting asset to show reduction of tau pathology in the brain***
- BIIB080 Phase 2 CELIA study has been amended and target enrollment ***reduced by ~50%*** with the aim of accelerating development to Phase 3
- Advancing BIIB113, a Phase 1 ***oral small molecule aiming to prevent tau accumulation***

Advancing a preclinical portfolio encompassing a range of targets implicated in Alzheimer's disease biology

- ***Multiple modalities*** encompassing small molecule, antibody-drug conjugate and active transport approaches

Key development events in 2024

Rare Disease

SKYCLARYS Pediatric Phase 1 dose-finding study

- Refining plans for a Phase 3 study to follow dose identification

Expect H2 Readout of Phase 3 DEVOTE study evaluating a higher dose SPINRAZA

- Designed to assess safety and efficacy of a higher dose of nusinersen to address unmet need

Immunology

Advanced Amethyst Phase 2/3 study of litifilimab in CLE to Phase 3 portion

- First actively enrolling Phase 3 study in CLE and potential to be the **first targeted therapy approved for CLE**

Expect Q3 readout of Phase 3 study of Dapirolizumab pegol in SLE

- Potential **first-in-class** therapy for SLE

Acquisition of HI-Bio

- Acquisition includes felzartamab, an anti-CD38 mAb with **'pipeline in a product'** potential

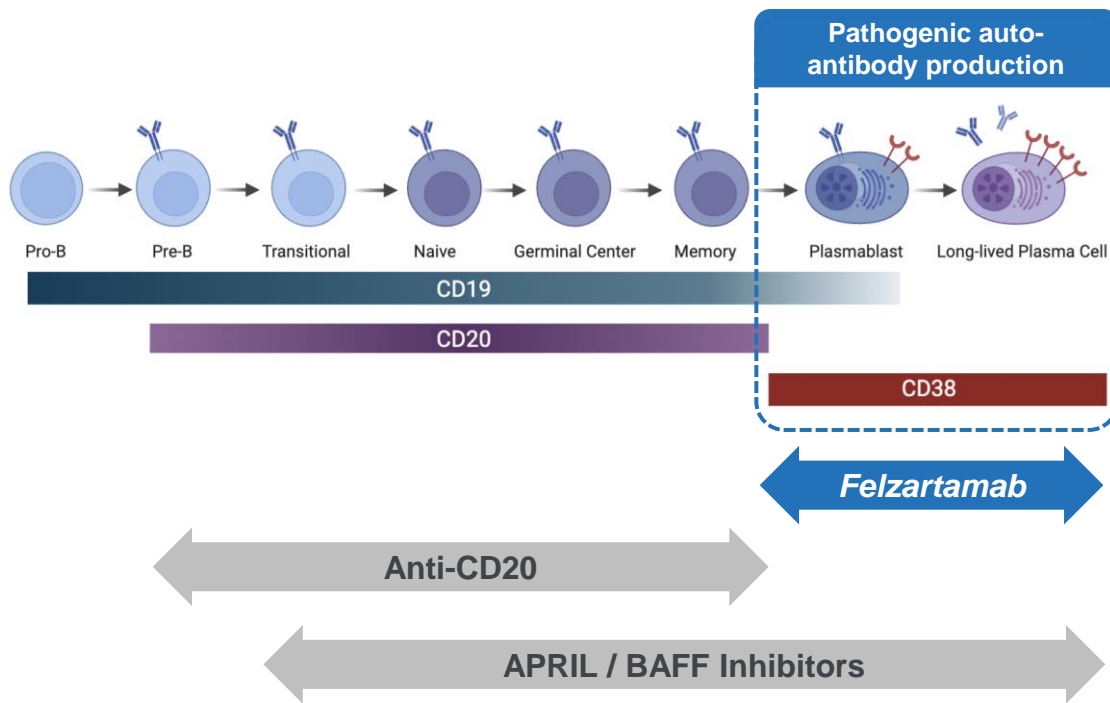
Felzartamab Review

Travis Murdoch, M.D.

Head of HI-Bio



Felzartamab is specific for CD38+ plasma cells responsible for producing pathogenic antibodies



Unique MoA of felzartamab has the potential to deliver a non-chronic treatment option and differentiated safety profile in antibody-mediated diseases

Felzartamab has established proof-of-concept across multiple rare immunology indications with significant unmet need

Antibody Mediated Rejection

Leading cause of kidney transplant loss with ~23k patients living with AMR in the U.S.¹

No approved or effective drugs resulting in loss of kidney function, dialysis or need for re-transplantation²

Phase 2 data showed **strong efficacy** in AMR resolution³

IgA Nephropathy

The most prevalent glomerular disease estimated to affect ~130k people in the U.S.⁴

Well established disease biology characterized by **aggregation of immune complexes** in the kidney⁵

Interim phase 2 data showed **durable and potentially disease-modifying** effect in IgAN

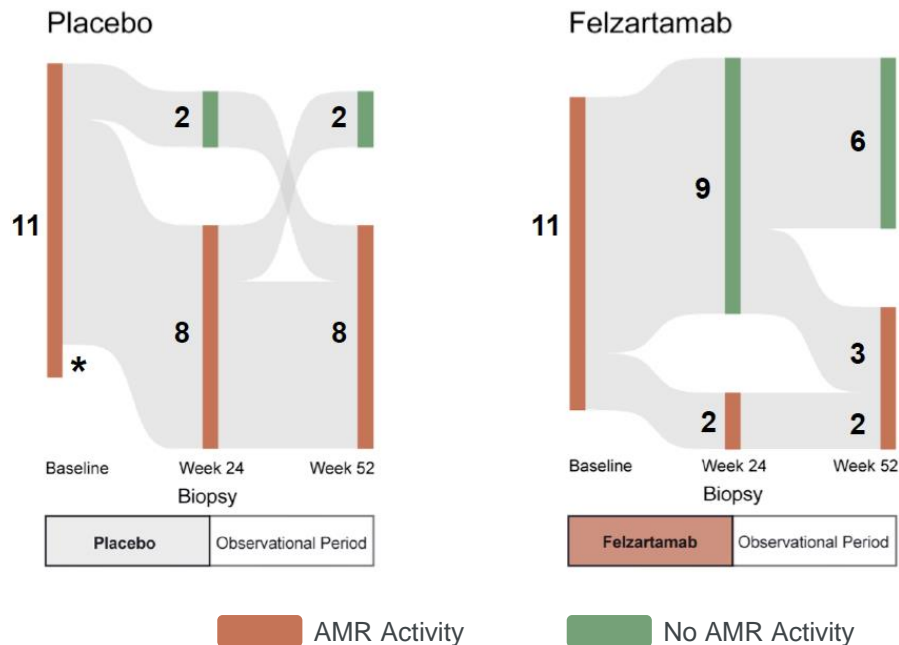
Primary Membranous Nephropathy

Leading cause of nephrotic syndrome with ~36k patients in the U.S.⁶

Established disease biomarker with anti-PLA2R present in 70 – 80% of PMN patients⁷

Phase 2 data showed **rapid, deep, and durable reductions in aPLA2R** translating to clinical benefit⁸

Felzartamab Phase 2 demonstrated unprecedented efficacy in AMR



Felzartamab treatment resulted in ~81% AMR resolution at week 24 vs. 20% for placebo

At 52 weeks, 6 felzartamab-responders (6/9; 67%) maintained resolution of AMR

TEAEs were mild to moderate in severity with no treatment discontinuations

Adapted from Mayer et al., NEJM, 2024

Felzartamab administration resulted in a durable effect on upstream biomarkers of IgAN

MoA selective for IgAN disease pathology

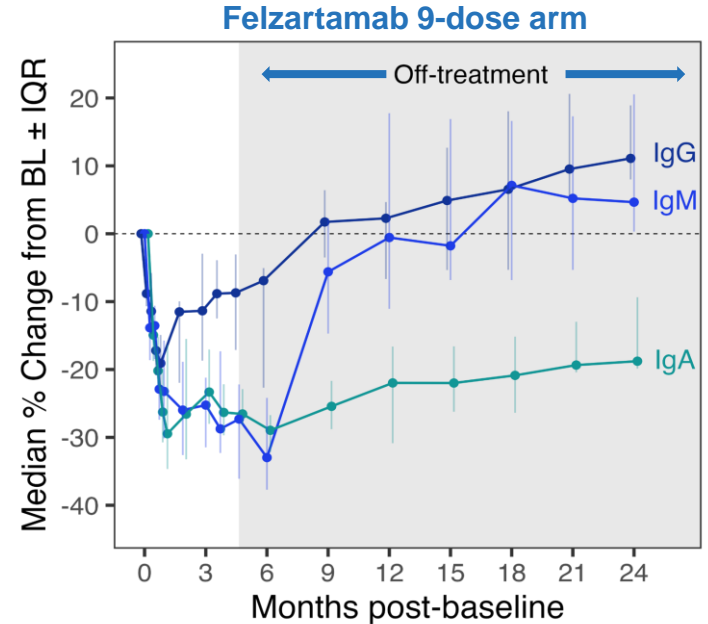
Felzartamab directly depletes CD38+ plasma cells responsible for production of Gd-IgA1 and its auto-antibody

Durable effect on IgAN disease biology

5 months of felzartamab treatment resulted in a selective and durable reductions in IgA out to 24 months

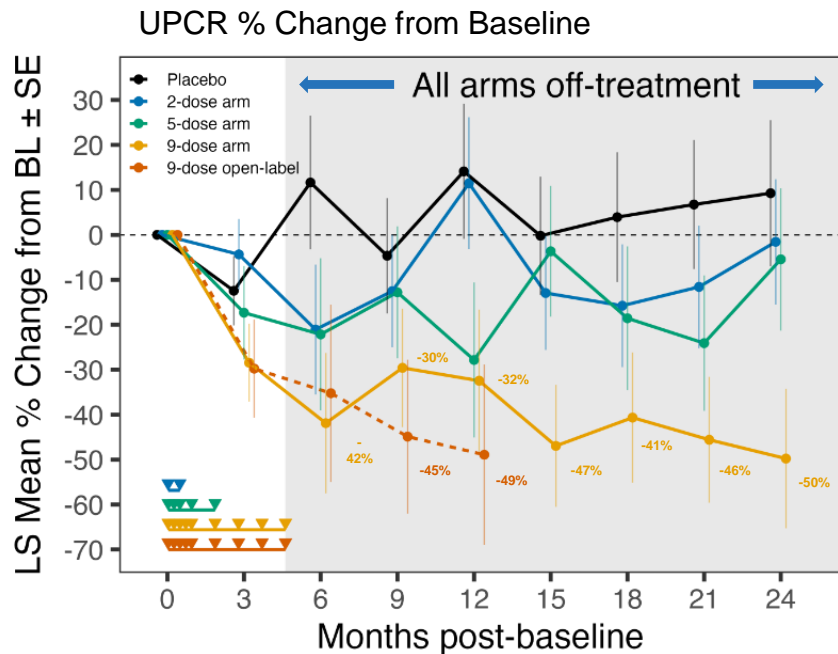
Potential for differentiated safety profile

Rebound in IgM and IgG may maintain protective immunity



Floege et al., ERA Congress, 2024

Felzartamab has the potential to be a non-chronic treatment option in IgAN



Floege et al., ERA Congress, 2024

Interim Phase 2 Results

Durable Efficacy out to 24 months

Felzartamab demonstrated ~50% UPCR reduction at 24 months in the 9-dose group (>18 months off treatment) and durable stabilization of eGFR

Potential for differentiated safety profile

Administration of felzartamab was generally well tolerated with a safety profile consistent with prior studies

Data showed felzartamab drives rapid, deep, and durable effect on disease biomarkers and kidney function in PMN

High unmet need for disease modifying agents

Current SoC, including anti-CD20 agents, are insufficient with **up to 40% of patients not achieving remission***

Observed efficacy across broad PMN population

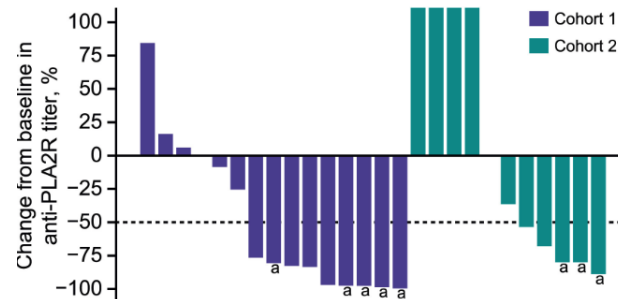
Observed rapid partial and complete immunologic responses in both newly diagnosed & relapsed patients, as well as those refractory to prior immunosuppressive treatment

Unique clinical profile has the potential to transform SoC in PMN

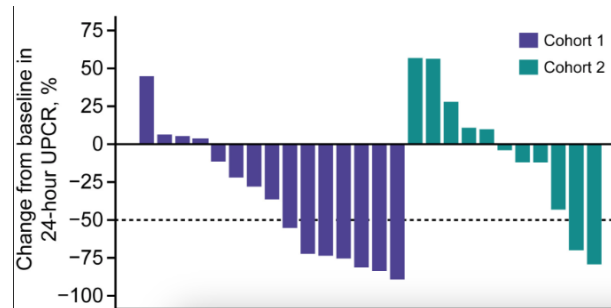
Phase 2 results potentially position felzartamab as the first, B-cell sparing treatment for PMN

The majority of TEAEs reported were mild to moderate and consistent with the known MoA of felzartamab in the PMN population

Durable depletion of anti-PLA2R



Emerging proteinuria responses



Cohort 1
Newly diagnosed & relapsed

Cohort 2
Refractory subjects to prior IST

^a immunological complete response at the specified time point; * Dahan et al. J Am Soc Nephrol. 2017 Jan;28(1):348-358

IST = immunosuppressive therapy; MoA = mechanism of action; PLA2R = phospholipase A2 receptor autoantibody; PMN = primary membranous nephropathy; TEAE = treatment emergent adverse event; SoC = standard of care

Felzartamab represents a potential first-in-class therapeutic candidate with promise as a pipeline-in-a-product



Potential Best-in-class

Novel anti-CD38 targeting plasma cells producing pathogenic antibodies

Engineered to potentially enable more convenient administration and differentiated safety profile



Targeted Biology

Depletion of CD38+ plasma cells with selectivity observed for pathogenic antibodies

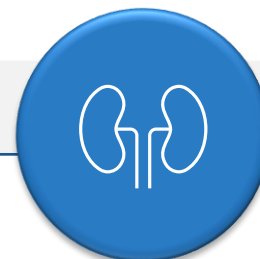
B-cell compartment spared



Compelling Clinical Data

Proof of concept data generated across multiple indications demonstrating durable efficacy

ODD and BTB granted by FDA in PMN, ODD granted for AMR



Broad Application

Pipeline-in-product opportunity

Plans to advance to Phase 3 across three rare kidney diseases

Financial Update

Michael McDonnell

Chief Financial Officer

Second quarter 2024 key financial highlights

- ✓ Second quarter 2024 total revenue \$2.5 billion; GAAP diluted EPS of \$4.00 and Non-GAAP diluted EPS of \$5.28, both GAAP and Non-GAAP diluted EPS include a \$0.52 per share benefit from the sale of one of Biogen's two PRVs
- ✓ Total revenue was flat at actual currency and up 1% at constant currency with GAAP diluted EPS down 2% and Non-GAAP diluted EPS up 31% (excluding PRV sale, GAAP diluted EPS declined 14% and Non-GAAP diluted EPS increased 18%)
- ✓ Core pharmaceutical revenue increased 5% at actual currency and 6% at constant currency as revenue from new product launches more than offset declines in MS
- ✓ GAAP and Non-GAAP cost of sales as a percentage of revenue improved 2 and 4 percentage points, respectively, on improved revenue mix and lower idle capacity charges
- ✓ GAAP and Non-GAAP operating income increased 34% and 43%, respectively, with GAAP and Non-GAAP operating margins improving to 32% and 39%, respectively
- ✓ Excluding PRV sale, GAAP and Non-GAAP operating income increased 18% and 30%, respectively, with GAAP and Non-GAAP operating margins improving to 28% and 36%, respectively
- ✓ Generated \$592M in FCF; cash balance of \$1.9B as of June 30, 2024 was reduced by \$1.15B in July to fund the HI-Bio deal
- ✓ Raised full year 2024 guidance: Non-GAAP EPS now expected to be between \$15.75 to \$16.25, an increase from the previous range of \$15.00 to \$16.00, representing EPS growth of approximately 9% at the mid-point versus FY 2023

Advancing toward our goal of a new Biogen that creates enhanced value for patients and our shareholders



Note: All comparisons are year-over-year (2Q 2024 vs 2Q 2023)
Core pharmaceutical revenue = product revenue plus Biogen's 50% share of net LEQEMBI product revenue and cost of sales, including royalties
FCF = free cash flow; PRV = priority review voucher

Second quarter 2024 revenue highlights

(\$ in Millions)	Q2 2024	Q2 2023	Δ Y/Y	Δ Constant Currency*
Multiple sclerosis product revenue ¹	\$1,150	\$1,209	(5%)	(5%)
Total rare disease revenue ²	\$534	\$438	22%	25%
Biosimilars revenue	\$198	\$195	2%	1%
Other product revenue ³	\$18	\$3	431%	441%
Total product revenue	\$1,900	\$1,846	3%	4%
Revenue from anti-CD20 therapeutic programs	\$445	\$433	3%	3%
Contract manufacturing, royalty and other revenue	\$121	\$177	(32%)	(32%)
Total revenue	\$2,465	\$2,456	0%	1%

* Constant Currency – 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. Foreign currency revenue values are converted into U.S. Dollars using the exchange rates from the end of the previous calendar year.

¹ includes TECFIDERA, VUMERITY, AVONEX, PLEGRIDY, TYSABRI, and FAMPYRA.

² includes SPINRAZA, SKYCLARYS, and QALSODY.

³ includes ADUHELM, FUMADERM and ZURZUVAE.

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

Second quarter 2024 financial results summary

(\$ in Millions except EPS, Shares in Millions)	Q2 2024	Q2 2023	Δ Y/Y
Total Revenue	\$2,465	\$2,456	0%
GAAP Cost of Sales*	\$546	\$593	8%
<i>% of revenue</i>	22%	24%	
Non-GAAP Cost of Sales*	\$504	\$593	15%
<i>% of revenue</i>	20%	24%	
GAAP R&D Expense	\$514	\$584	12%
Non-GAAP R&D Expense	\$464	\$584	21%
GAAP SG&A Expense	\$554	\$548	(1%)
Non-GAAP SG&A Expense	\$542	\$534	(1%)
GAAP and Non-GAAP Gain on Sale of Priority Review Voucher	(\$89)	\$0	NMF
GAAP Operating Income	\$784	\$587	34%
Non-GAAP Operating Income	\$971	\$681	43%
GAAP Other (Income) Expense	\$85	(\$121)	(170%)
Non-GAAP Other (Income) Expense	\$55	(\$15)	(472%)
GAAP Taxes %	16.5%	16.2%	
Non-GAAP Taxes %	15.9%	15.7%	
GAAP Net Income Attributable to Biogen Inc.	\$584	\$592	(1%)
Non-GAAP Net Income Attributable to Biogen Inc.	\$771	\$585	32%
Weighted average diluted shares used in calculating diluted EPS	146	146	0%
GAAP Diluted EPS	\$4.00	\$4.07	(2%)
Non-GAAP Diluted EPS	\$5.28	\$4.02	31%

* Excluding amortization and impairment of acquired intangible assets. NMF = No meaningful figure
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 June 30, 2024)

\$1.9B* Cash and marketable securities

\$6.3B Debt

\$4.4B Net debt

* In July 2024 Biogen utilized \$1.15 billion of cash to acquire HI-Bio, which is not included in these figures

Cash Flow (Q2 2024)

\$626M Net cash flow from operations

\$34M Capital expenditures

\$592M Free cash flow[#]

Updated full year 2024 financial guidance

	Prior FY 2024 Guidance	Updated FY 2024 Guidance
Non-GAAP Diluted EPS	\$15.00 to \$16.00 Reflecting growth of ~5% at the mid-point*	\$15.75 to \$16.25 Reflecting growth of ~9% at the mid-point*

* Versus reported full year 2023

Please see Biogen's Q2 2024 earnings release, available at the Investors section of Biogen's website at investors.biogen.com, for additional 2024 financial guidance assumptions.

This financial guidance does not include any impact from potential acquisitions or large business development transactions or pending and future litigation, as all are hard to predict, or any impact of potential tax or healthcare reform. Biogen may incur charges, realize gains or losses, or experience other events or circumstances in 2024 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.

Full year 2024 guidance assumptions*

Total revenue now expected to decline by a low-single digit percentage

Core pharmaceutical# revenue expected to be roughly flat as expected revenue from new product launches offsets expected MS revenue decline

Contract manufacturing revenue expected to be significantly lower due to completing certain lower-margin commitments in 2023

\$0.52 EPS benefit from PRV sale with proceeds expected to be reinvested in growth initiatives later this year

Full year 2024 guidance assumptions (continued)*

Expect continued ramp in commercial spending for new product launches

Expect additional operating expenditures (primarily R&D) in 2H 2024 of approximately \$50 million related to the HI-Bio acquisition

Continue to expect full year 2024 combined Non-GAAP R&D and SG&A spend to total approximately \$4.3 billion

Now expect operating income to grow at a mid- to high-teen percentage with mid-single digit percentage point operating margin improvement

Now expect interest income to be reduced by approximately \$20 million in 2H 2024 as a result of the HI-Bio acquisition

Questions & Answers



Appendix



Consolidated Statement of Income

(unaudited, in millions, except per share amounts)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2024	2023	2024	2023
Revenue:				
Product, net	\$ 1,899.6	\$ 1,845.8	\$ 3,611.5	\$ 3,609.1
Revenue from anti-CD20 therapeutic programs	444.5	433.4	838.5	832.9
Contract manufacturing, royalty and other revenue	120.8	176.8	305.4	477.0
Total revenue	<u>2,464.9</u>	<u>2,456.0</u>	<u>4,755.4</u>	<u>4,919.0</u>
Cost and expense:				
Cost of sales, excluding amortization and impairment of acquired intangible assets	546.0	592.7	1,088.2	1,255.5
Research and development	513.9	584.2	966.8	1,154.8
Selling, general and administrative	553.8	548.0	1,135.3	1,153.0
Amortization and impairment of acquired intangible assets	86.9	52.9	165.2	103.1
Collaboration profit sharing/(loss reimbursement)	62.4	56.9	128.0	114.0
Restructuring charges	6.6	34.4	18.1	44.0
Gain on sale of PRV	(88.6)	—	(88.6)	—
Other (income) expense, net	85.2	(121.2)	178.9	(51.8)
Total cost and expense	<u>1,766.2</u>	<u>1,747.9</u>	<u>3,591.9</u>	<u>3,772.6</u>
Income before income tax expense and equity in loss of investee, net of tax	698.7	708.1	1,163.5	1,146.4
Income tax (benefit) expense	115.1	114.8	186.5	165.5
Net income	583.6	593.3	977.0	980.9
Net income (loss) attributable to noncontrolling interests, net of tax	—	1.7	—	1.4
Net income attributable to Biogen Inc.	<u>\$ 583.6</u>	<u>\$ 591.6</u>	<u>\$ 977.0</u>	<u>\$ 979.5</u>
Net income per share:				
Basic earnings per share attributable to Biogen Inc.	\$ 4.01	\$ 4.09	\$ 6.72	\$ 6.78
Diluted earnings per share attributable to Biogen Inc.	\$ 4.00	\$ 4.07	\$ 6.70	\$ 6.74
Weighted-average shares used in calculating:				
Basic earnings share attributable to Biogen Inc.	145.6	144.7	145.4	144.6
Diluted earnings per share attributable to Biogen Inc.	145.9	145.5	145.9	145.4

Consolidated Balance Sheets

(unaudited, in millions)

	As of June 30, 2024	As of December 31, 2023
ASSETS		
Cash and cash equivalents	\$ 1,908.9	\$ 1,049.9
Accounts receivable, net	1,627.1	1,664.1
Due from anti-CD20 therapeutic programs	451.1	435.9
Inventory	2,506.1	2,527.4
Other current assets	615.3	1,182.0
Total current assets	7,108.5	6,859.3
Property, plant and equipment, net	3,249.3	3,309.7
Operating lease assets	389.4	420.0
Intangible assets, net	8,232.9	8,363.0
Goodwill	6,227.4	6,219.2
Deferred tax asset	915.1	928.6
Investments and other assets	681.5	745.0
TOTAL ASSETS	\$ 26,804.1	\$ 26,844.8
LIABILITIES AND EQUITY		
Current portion of term loan	\$ —	\$ 150.0
Taxes payable	281.6	257.4
Accounts payable	354.5	403.3
Accrued expenses and other	2,472.1	2,623.6
Total current liabilities	3,108.2	3,434.3
Notes payable and term loan	6,292.0	6,788.2
Deferred tax liability	590.6	641.8
Long-term operating lease liabilities	367.5	400.0
Other long-term liabilities	556.7	781.1
Equity	15,889.1	14,799.4
TOTAL LIABILITIES AND EQUITY	\$ 26,804.1	\$ 26,844.8

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

(unaudited, in millions)

	For the Three Months Ended June 30,					
	2024			2023		
	United States	Rest of World	Total	United States	Rest of World	Total
Multiple Sclerosis (MS):						
TECFIDERA	\$ 44.1	\$ 208.1	\$ 252.2	\$ 66.5	\$ 187.7	\$ 254.2
VUMERITY	144.2	21.6	165.8	130.3	15.9	146.2
Total Fumarate	188.3	229.7	418.0	196.8	203.6	400.4
AVONEX	117.2	65.6	182.8	145.9	74.4	220.3
PLEGRIDY	28.2	39.9	68.1	34.1	48.0	82.1
Total Interferon	145.4	105.5	250.9	180.0	122.4	302.4
TYSABRI	248.7	213.5	462.2	259.9	223.2	483.1
FAMPYRA	—	18.7	18.7	—	23.4	23.4
Subtotal: MS	582.4	567.4	1,149.8	636.7	572.6	1,209.3
Rare Disease:						
SPINRAZA	157.3	271.8	429.1	155.8	281.3	437.1
SKYCLARYS ⁽¹⁾	75.6	24.4	100.0	—	—	—
QALSODY ⁽²⁾	4.6	0.4	5.0	0.9	—	0.9
Subtotal: Rare Disease	237.5	296.6	534.1	156.7	281.3	438.0
Biosimilars:						
BENEPALI	—	117.3	117.3	—	109.2	109.2
IMRALDI	—	53.2	53.2	—	58.8	58.8
FLIXABI	—	13.1	13.1	—	20.1	20.1
BYOOVIZ ⁽³⁾	10.3	3.4	13.7	7.0	—	7.0
TOFIDENCE ⁽⁴⁾	0.8	—	0.8	—	—	—
Subtotal: Biosimilars	11.1	187.0	198.1	7.0	188.1	195.1
Other:						
ZURZUVAE ⁽⁵⁾	14.9	—	14.9	—	—	—
Other ⁽⁶⁾	0.8	1.9	2.7	0.6	2.8	3.4
Subtotal: Other	15.7	1.9	17.6	0.6	2.8	3.4
Total product revenue	\$ 846.7	\$ 1,052.9	\$ 1,899.6	\$ 801.0	\$ 1,044.8	\$ 1,845.8

⁽¹⁾ SKYCLARYS was obtained as part of our acquisition of Reata in September 2023. SKYCLARYS became commercially available in the U.S. during the second quarter of 2023 and we began recognizing revenue from SKYCLARYS in the U.S. during the fourth quarter of 2023, subsequent to our acquisition. SKYCLARYS was approved and became commercially available in the E.U. during the first quarter of 2024.

⁽²⁾ QALSODY became commercially available in the U.S. during the second quarter of 2023 and commercially available in the E.U. during the second quarter of 2024.

⁽³⁾ BYOOVIZ became commercially available in certain international markets in 2023.

⁽⁴⁾ TOFIDENCE became commercially available in the U.S. during the second quarter of 2024.

⁽⁵⁾ ZURZUVAE became commercially available in the U.S. during the fourth quarter of 2023.

⁽⁶⁾ Other includes FUMADERM and ADUHELM.

	For the Six Months Ended June 30,					
	2024			2023		
	United States	Rest of World	Total	United States	Rest of World	Total
Multiple Sclerosis (MS):						
TECFIDERA	\$ 87.8	\$ 418.7	\$ 506.5	\$ 141.2	\$ 387.5	\$ 528.7
VUMERITY	250.1	43.2	293.3	223.8	30.6	254.4
Total Fumarate	337.9	461.9	799.8	365.0	418.1	783.1
AVONEX	228.4	132.9	361.3	248.5	144.2	392.7
PLEGRIDY	56.8	76.4	133.2	64.0	91.3	155.3
Total Interferon	285.2	209.3	494.5	312.5	235.5	548.0
TYSABRI	462.5	431.0	893.5	505.3	450.6	955.9
FAMPYRA	—	37.9	37.9	—	47.5	47.5
Subtotal: MS	1,085.6	1,140.1	2,225.7	1,182.8	1,151.7	2,334.5
Rare Disease:						
SPINRAZA	305.8	464.6	770.4	302.5	577.9	880.4
SKYCLARYS ⁽¹⁾	148.6	29.4	178.0	—	—	—
QALSODY ⁽²⁾	9.0	0.6	9.6	0.9	—	0.9
Subtotal: Rare Disease	463.4	494.6	958.0	303.4	577.9	881.3
Biosimilars:						
BENEPALI	—	236.0	236.0	—	218.2	218.2
IMRALDI	—	108.0	108.0	—	113.2	113.2
FLIXABI	—	30.9	30.9	—	40.5	40.5
BYOOVIZ ⁽³⁾	14.0	5.3	19.3	15.2	0.4	15.6
TOFIDENCE ⁽⁴⁾	0.8	—	0.8	—	—	—
Subtotal: Biosimilars	14.8	380.2	395.0	15.2	372.3	387.5
Other:						
ZURZUVAE ⁽⁵⁾	27.3	—	27.3	—	—	—
Other ⁽⁶⁾	1.7	3.8	5.5	1.0	4.8	5.8
Subtotal: Other	29.0	3.8	32.8	1.0	4.8	5.8
Total product revenue	\$ 1,592.8	\$ 2,018.7	\$ 3,611.5	\$ 1,502.4	\$ 2,106.7	\$ 3,609.1

Total Revenue

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2024	2023	2024	2023
Product revenue	\$ 1,899.6	\$ 1,845.8	\$ 3,611.5	\$ 3,609.1
OCREVUS royalties	336.3	325.5	639.0	609.1
RITUXAN/GAZIYA [†] /LUNSUMIO [™] revenue	103.4	103.6	190.5	216.1
Other revenues from anti-CD20 programs	4.8	4.3	9.0	7.7
Contract manufacturing, royalty and other revenue	120.8	176.8	305.4	477.0
Total revenue	\$ 2,464.9	\$ 2,456.0	\$ 4,755.4	\$ 4,919.0

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 June 30,		For the Six Months Ended June 30,	
	2024	2023	2024	2023
Cost of Sales:				
Total cost of sales, GAAP	\$ 546.0	\$ 592.7	\$ 1,088.2	\$ 1,255.5
Less: amortization of Reata inventory fair value step-up	42.3	—	84.5	—
Total cost of sales, Non-GAAP	\$ 503.7	\$ 592.7	\$ 1,003.7	\$ 1,255.5
Research and Development Expense:				
Total research and development expense, GAAP	\$ 513.9	\$ 584.2	\$ 966.8	\$ 1,154.8
Less: amortization of Reata inventory fair value step-up	44.8	—	44.8	—
Less: restructuring charges and other cost saving initiatives	5.5	0.4	13.2	0.4
Less: other	—	—	(1.4)	0.1
Total research and development expense, Non-GAAP	\$ 463.6	\$ 583.8	\$ 910.2	\$ 1,154.3
Selling, General and Administrative Expense:				
Total selling, general and administrative, GAAP	\$ 553.8	\$ 548.0	\$ 1,135.3	\$ 1,153.0
Less: acquisition-related transaction and integration costs	6.0	—	10.2	—
Less: restructuring charges and other cost saving initiatives	3.7	11.5	7.3	11.5
Less: other	2.6	2.7	6.9	5.1
Total selling, general and administrative, Non-GAAP	\$ 541.5	\$ 533.8	\$ 1,110.9	\$ 1,136.4
Amortization and Impairment of Acquired Intangible Assets:				
Total amortization and impairment of acquired intangible assets, GAAP	\$ 86.9	\$ 52.9	\$ 165.2	\$ 103.1
Less: amortization of acquired intangible assets	76.1	44.6	144.9	87.2
Total amortization and impairment of acquired intangible assets, Non-GAAP	\$ 10.8	\$ 8.3	\$ 20.3	\$ 15.9
Other (Income) Expense, net:				
Total other (income) expense, net, GAAP	\$ 85.2	\$ (121.2)	\$ 178.9	\$ (51.8)
Less: (gain) loss on equity security investments	30.3	(106.5)	61.0	(29.4)
Less: other	0.3	—	0.3	—
Total other (income) expense, net, Non-GAAP	\$ 54.6	\$ (14.7)	\$ 117.6	\$ (22.4)
Income Tax (Benefit) Expense:				
Total income tax expense, GAAP	\$ 115.1	\$ 114.8	\$ 186.5	\$ 165.5
Less: income tax effect related to Non-GAAP reconciling items	(30.9)	5.9	(60.8)	(20.4)
Total income tax expense, Non-GAAP	\$ 146.0	\$ 108.9	\$ 247.3	\$ 185.9
Effective Tax Rate:				
Total effective tax rate, GAAP	16.5 %	16.2 %	16.0 %	14.4 %
Less: impact of GAAP to Non-GAAP adjustments	0.6	0.5	0.1	(0.3)
Total effective tax rate, Non-GAAP	15.9 %	15.7 %	15.9 %	14.7 %

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.

GAAP to Non-GAAP Reconciliation

Net Income & Diluted EPS

(unaudited, in millions, except per share amounts)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2024	2023	2024	2023
Net Income (loss) Attributable to Biogen Inc.:				
Total net income (loss) attributable to Biogen Inc., GAAP	\$ 583.6	\$ 591.6	\$ 977.0	\$ 979.5
Plus: amortization of Reata inventory fair value step-up	87.0	—	129.3	—
Plus: acquisition-related transaction and integration costs	6.0	—	10.2	—
Plus: amortization of acquired intangible assets	76.1	44.6	144.9	87.2
Plus: restructuring charges and other cost saving initiatives	15.9	46.3	38.6	56.0
Plus: (gain) loss on equity security investments	30.3	(106.5)	61.0	(29.4)
Plus: income tax effect related to Non-GAAP reconciling items	(30.9)	5.9	(60.8)	(20.4)
Plus: other	2.9	2.7	5.7	5.1
Total net income (loss) attributable to Biogen Inc., Non-GAAP	<u>\$ 770.9</u>	<u>\$ 584.6</u>	<u>\$ 1,305.9</u>	<u>\$ 1,078.0</u>
Diluted Earnings Per Share:				
Total diluted earnings (loss) per share, GAAP	\$ 4.00	\$ 4.07	\$ 6.70	\$ 6.74
(Less) Plus: adjustments to GAAP net income attributable to Biogen Inc. (as detailed above)	1.28	(0.05)	2.25	0.67
Total diluted earnings per share, Non-GAAP	<u>\$ 5.28</u>	<u>\$ 4.02</u>	<u>\$ 8.95</u>	<u>\$ 7.41</u>

GAAP to Non-GAAP Reconciliation

Revenue Change at Constant Currency vs Q2 2023 (unaudited, in millions)

Revenue changes at constant currency are presented excluding the impact of changes in foreign currency exchange rates and hedging gains or losses. Foreign currency revenue values are converted into U.S. Dollars using the exchange rates from the end of the previous calendar year.

	Q2 2024 vs. Q2 2023	YTD 2024 vs. YTD 2023
Total Revenue:		
Revenue change, as reported	0.4 %	(3.3)%
Less: impact of foreign currency translation and hedging gains / losses	(0.5)	(0.3)
Revenue change at constant currency	0.9 %	(3.0)%
Total Product Revenue:		
Revenue change, as reported	2.9 %	0.1 %
Less: impact of foreign currency translation and hedging gains / losses	(0.8)	(0.5)
Revenue change at constant currency	3.7 %	0.6 %
Total Core Pharmaceutical Revenue (Product revenue and LEQEMBI):		
Revenue change, as reported	4.7 %	1.6 %
Less: impact of foreign currency translation and hedging gains / losses	(0.9)	(0.6)
Revenue change at constant currency	5.6 %	2.2 %
Total MS Product Revenue:		
Revenue change, as reported	(4.9)%	(4.7)%
Less: impact of foreign currency translation and hedging gains / losses	(0.3)	(0.3)
Revenue change at constant currency	(4.6)%	(4.4)%
Total TECIDERA Rest of World Revenue		
Revenue change, as reported	10.9 %	8.1 %
Less: impact of foreign currency translation and hedging gains / losses	(1.3)	(1.0)
Revenue change at constant currency	12.2 %	9.1 %
Total VUMERITY Revenue		
Revenue change, as reported	13.4 %	15.3 %
Less: impact of foreign currency translation and hedging gains / losses	(0.1)	0.1
Revenue change at constant currency	13.5 %	15.2 %
Total Rare Disease Revenue		
Revenue change, as reported	21.9 %	8.7 %
Less: impact of foreign currency translation and hedging gains / losses	(3.0)	(1.8)
Revenue change at constant currency	24.9 %	10.5 %
Total SPINRAZA Revenue		
Revenue change, as reported	(1.8)%	(12.5)%
Less: impact of foreign currency translation and hedging gains / losses	(2.3)	(1.3)
Revenue change at constant currency	0.5 %	(11.2)%
Total Biosimilars Product Revenue:		
Revenue change, as reported	1.5 %	1.9 %
Less: impact of foreign currency translation and hedging gains / losses	0.5	0.2
Revenue change at constant currency	1.0 %	1.7 %

	Q2 2024 vs. Q2 2023	YTD 2024 vs. YTD 2023
Total Other Product Revenue (FUMADERM, ADUHELM and ZURZUVAE):		
Revenue change, as reported	431.0 %	476.6 %
Less: impact of foreign currency translation and hedging gains / losses	(10.0)	(7.4)
Revenue change at constant currency	441.0 %	484.0 %
Total Revenue from Anti-CD20 Therapeutic Programs Revenue:		
Revenue change, as reported	2.6 %	0.7 %
Less: impact of foreign currency translation and hedging gains / losses	0.1	0.1
Revenue change at constant currency	2.5 %	0.6 %
Total Contract Manufacturing, Royalty and Other Revenue:		
Revenue change, as reported	(31.7)%	(36.0)%
Less: impact of foreign currency translation and hedging gains / losses	(0.1)	0.6
Revenue change at constant currency	(31.6)%	(36.6)%

GAAP to Non-GAAP Reconciliation

Free Cash Flow
(unaudited, in millions)

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 June 30,		For the Six Months Ended June 30,	
	2024	2023	2024	2023
Cash Flow:				
Net cash provided by (used in) operating activities	\$ 625.8	\$ 487.0	\$ 1,179.0	\$ 942.3
Net cash provided by (used in) investing activities	466.5	(753.5)	400.5	(1,706.5)
Net cash provided by (used in) financing activities	(245.2)	(9.8)	(684.8)	(53.2)
Net increase (decrease) in cash and cash equivalents	<u>\$ 847.1</u>	<u>\$ (276.3)</u>	<u>\$ 894.7</u>	<u>\$ (817.4)</u>
Net cash provided by (used in) operating activities	\$ 625.8	\$ 487.0	\$ 1,179.0	\$ 942.3
Less: Purchases of property, plant and equipment	33.5	71.0	79.4	137.6
Free cash flow	<u>\$ 592.3</u>	<u>\$ 416.0</u>	<u>\$ 1,099.6</u>	<u>\$ 804.7</u>