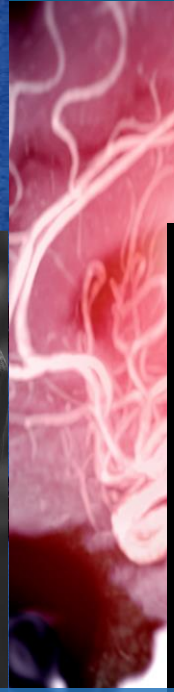
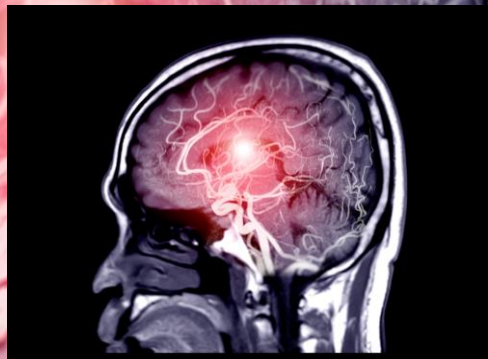
where science meets humanity™





Second Quarter 2021

Financial Results and Business Update

July 22, 2021

Biogen

Non-GAAP financial information

This presentation and the discussions during this conference call include certain financial measures that were not prepared in accordance with accounting principles generally accepted in the U.S. (GAAP), including adjusted net income, adjusted diluted earnings per share, revenue growth at constant currency, which excludes the impact of changes in foreign exchange rates and hedging gains or losses, and free cash flow, which is defined as net flow from operations less capital expenditures. Additional information regarding the GAAP and Non-GAAP financial measures and a reconciliation of the GAAP to Non-GAAP financial measures can be found on slides 41-44 of this presentation and in the Q2 2021 earnings release and related financial tables posted on the *Investors* section of Biogen.com. We believe that these and other Non-GAAP financial measures provide additional insight into the ongoing economics of our business and reflect how we manage our business internally, set operational goals, and form the basis of our management incentive programs. Non-GAAP financial measures are in addition to, not a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP.

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

Forward-looking statements

This presentation and the discussions during this conference call contain forward-looking statements, including statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, relating to: our strategy and plans; potential of, and expectations for, our commercial business and pipeline programs; capital allocation and investment strategy; clinical development programs, clinical trials, and data readouts and presentations; risks and uncertainties associated with drug development and commercialization; regulatory discussions, submissions, filings, and approvals and the timing thereof; the potential benefits, safety, and efficacy of our and our collaboration partners' products and investigational therapies; the anticipated benefits and potential of investments, collaborations, and business development activities; our future financial and operating results; 2021 financial guidance; plans relating to share repurchases; and the anticipated completion and timing of the proposed collaboration with InnoCare Pharma Limited (InnoCare).These forward-looking statements may be accompanied by such words as "aim," "anticipate," "believe," "could," "estimate," "expect," "forecast," "goal," "intend," "may," "plan," "potential," "possible," "prospect," "will," "would," and other words and terms of similar meaning. Drug development and commercialization involve a high degree of risk, and only a small number of research and development programs result in commercialization of a product. Results in early-stage clinical trials may not be indicative of full results or results from later stage or larger scale clinical trials and do not ensure regulatory approval. You should not place undue reliance on these statements or the scientific data presented.

These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements, including: our dependence on sales from our products; uncertainty of long-term success in developing, licensing, or acquiring other product candidates or additional indications for existing products; failure to compete effectively due to significant product competition in the markets for our products; failure to successfully execute or realize the anticipated benefits of our strategic and growth initiatives; difficulties in obtaining and maintaining adequate coverage, pricing, and reimbursement for our products; our dependence on collaborators, joint venture partners, and other third parties for the development, regulatory approval, and commercialization of products and other aspects of our business, which are outside of our full control; risks associated with current and potential future healthcare reforms; risks related to commercialization of biosimilars; failure to obtain, protect, and enforce our data, intellectual property, and other proprietary rights and the risks and uncertainties relating to intellectual property claims and challenges; the risk that positive results in a clinical trial may not be replicated in subsequent or confirmatory trials or success in early stage clinical trials may not be predictive of results in later stage or large scale clinical trials or trials in other potential indications; risks associated with clinical trials, including our ability to adequately manage clinical activities, unexpected concerns that may arise from additional data or analysis obtained during clinical trials, regulatory authorities may require additional information or further studies, or may fail to approve or may delay approval of our drug candidates; the occurrence of adverse safety events, restrictions on use with our products, or product liability claims; risks relating to the distribution and sale by third parties of counterfeit or unfit versions of our products; risks relating to the use of social media for our business; risks relating to technology failures or breaches; risks relating to management and key personnel changes, including attracting and retaining key personnel; failure to comply with legal and regulatory requirements; the risks of doing business internationally, including currency exchange rate fluctuations; risks relating to investment in our manufacturing capacity; problems with our manufacturing processes; fluctuations in our effective tax rate; the direct and indirect impacts of the ongoing COVID-19 pandemic on our business, results of operations, and financial condition; fluctuations in our operating results; risks related to investment in properties; the market, interest, and credit risks associated with our investment portfolio; risks relating to share repurchase programs; risks relating to access to capital and credit markets; risks related to indebtedness; change in control provisions in certain of our collaboration agreements; environmental risks; risks that the proposed collaboration with InnoCare will not be completed in a timely manner or at all; the possibility that certain closing conditions to the proposed collaboration with InnoCare will not be satisfied; and any other risks and uncertainties that are described in other reports we have filed with the U.S. Securities and Exchange Commission (SEC).

These statements are based on our current beliefs and expectations and speak only as of the date of this presentation. We do not undertake any obligation to publicly update any forward-looking statements.

Q2 2021 earnings call agenda

Introduction	**Michael Hencke** Investor Relations
Overview	**Michel Vounatsos** Chief Executive Officer
R&D Update	**Al Sandrock, M.D., Ph.D.** Head of Research & Development
Financial Update	**Michael McDonnell** Chief Financial Officer
Closing Remarks	**Michel Vounatsos** Chief Executive Officer
Also available for Q&A	**Chirfi Guindo** Head of Global Product Strategy & Commercialization **Alisha Alaimo** President, U.S. Organization

Biogen

Overview

Michel Vounatsos

Chief Executive Officer

Working to provide additional clarity on ADUHELM through the following goals

- Exploring all options to maximize patient access
- Educating on the updated label language
- Dissemination of additional data including Phase 3 publication
- Expediting the execution of the Phase 4 confirmatory study
- Leveraging unique data generation opportunity with EMBARK

Biogen

Note: Aducanumab is being developed in collaboration with Eisai Co., Ltd.

ADUHELM is the 1st new therapy for Alzheimer's disease in almost 20 years

Patient Demand & Site Readiness

- Strong indications of very high initial patient interest as well as increased referrals from PCPs to specialists
- Of the ~900 sites we expected to be ready shortly after approval, we estimate ~35% have completed a positive P&T review or indicated they won't require one

Reimbursement Status

- Recent opening of a National Coverage Determination (NCD) analysis by CMS
- Expect regional Medicare Administrative Contractors and Medicare Advantage plans will provide coverage while the NCD analysis is underway

Label Update

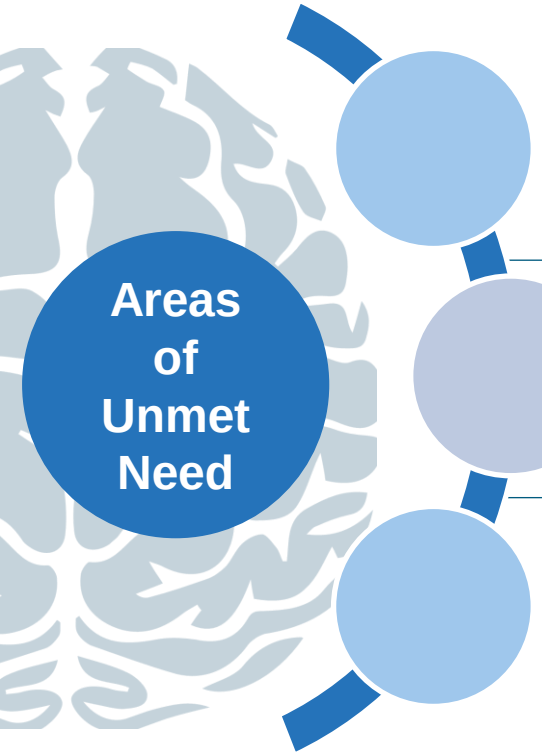
- FDA approved updated Prescribing Information to clarify treatment should be initiated in patients with mild cognitive impairment due to Alzheimer's disease or mild Alzheimer's dementia

Regulatory updates

- Continued engagement with regulators outside of the U.S. on aducanumab
- Lecanemab (BAN2401) granted Breakthrough Therapy designation by FDA

Note: Aducanumab and lecanemab are being developed in collaboration with Eisai Co., Ltd.
PCP: primary care physician; P&T: pharmacy and therapeutics committee; CMS: Centers for Medicare & Medicaid Services

Pipeline delivered meaningful mid-to-late stage results



Major depressive disorder

17 million patients suffering from depression in the U.S. alone

Positive WATERFALL Phase 3 trial of zuranolone[+]

Acute ischemic stroke

Stroke is the second leading cause of death worldwide and those who survive may suffer irreversible damage to the brain

Positive Phase 2a trial of TMS-007 (BIIB131)

Biosimilar

Referencing ACTEMRA®/RoACTEMRA®
In 2020 global sales of ACTEMRA® were 2.8 billion CHF[#]

Positive Phase 3 readout of BAT1806[++]

Company reported sales in Swiss Francs.
+ Zuranolone is being developed in collaboration with Sage Therapeutics, Inc.
++ BAT1806 is being developed in collaboration with Bio-Thera Solutions, Ltd.

Strong progress implementing strategy

Maximizing the resilience of our MS business

- ☑ Q2 MS revenue, including OCREVUS royalties, of $1.8 billion
- ☑ Q2 revenue excluding U.S. TECFIDERA grew vs. Q2 2020
- ☑ Continued revenue growth for VUMERITY: The #1 oral MS product in new prescriptions in the U.S.*
- ☑ Announced collaboration with InnoCare Pharma Limited for orelabrutinib#

Enhancing our neuromuscular franchise

- ☑ Q2 SPINRAZA revenue of $500 million with continued growth ex-U.S.
- ☑ Over 11,000 patients on therapy globally as of June 30, 2021^
- ☑ SPINRAZA discontinuation rate in the U.S. decreased vs. Q1 2021

Unlocking the potential of biosimilars

- ☑ Q2 biosimilars revenue of $202 million
- ☑ Market-leading anti-TNF portfolio in E.U.
- ☑ Announced positive Phase 3 readout for BAT1806+
- ☑ Positive CHMP opinion for our proposed biosimilar++ referencing LUCENTIS®

Developing and expanding our neuroscience portfolio with expected Phase 3 readouts in H2'21

- ☑ Tofersen (SOD1 ASO) in ALS
- ☑ Zuranolone+++ in major depressive disorder

* Biogen data on file as of May 29, 2021. # Closing of the transaction is contingent upon completion of review under antitrust laws, including the Hart-Scott-Rodino Antitrust Improvements Act of 1976 in the U.S.
^ Includes patients on therapy across the post-marketing setting, the Expanded Access Program, and clinical trials.
+ BAT1806 is being developed in collaboration with Bio-Thera Solutions, Ltd.; ++ Collaboration program being developed with Samsung Bioepis Co., Ltd.
+++ Zuranolone is being developed in collaboration with Sage Therapeutics, Inc.
CHMP: Committee for Medicinal Products for Human Use; ALS: amyotrophic lateral sclerosis

R&D Update

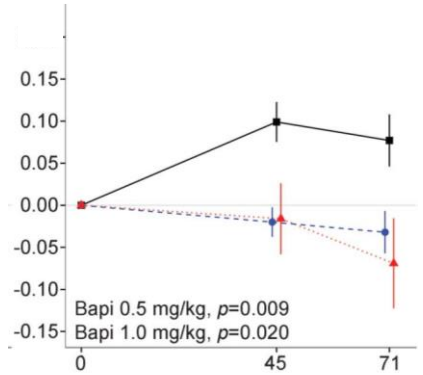
Al Sandrock, M.D., Ph.D.
Head of Research & Development

Amyloid PET imaging results with bapineuzumab, crenezumab, and solanezumab

Bapineuzumab

Amyloid-β ^{11}C-PiB-PET imaging results from 2 randomized bapineuzumab phase 3 AD trials

Enchi Liu, PhD
Mark E. Schmidt, MD
Richard Margolin, MD
Reisa Sperling, MD, MMSc
Robert Koeppe, PhD
Neale S. Mason, PhD
William E. Klunk, MD, PhD
Chester A. Mathis, PhD
Stephen Salloway, MD, MS
Nick C. Fox, MD, FRCP
Derek L. Hill, PhD
Andrea S. Les, PhD
Peter Collins, BA
Keith M. Gregg, PhD
Jianing Di, PhD
Yuan Lu, MS
I. Cristina Tudor, PhD
Bradley T. Wyman, PhD
Kevin Booth, MD, DVM
Stephanie Broome, PhD
Eric Yuen, MD
Michael Grundman, MD, MPH
H. Robert Brashear, MD
For the Bapineuzumab 301 and 302 Clinical Trial Investigators

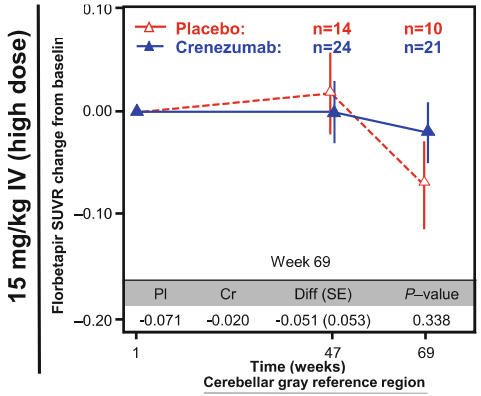


Neurology 2015;85:692-700.

Crenezumab

Amyloid positron emission tomography and cerebrospinal fluid results from a crenezumab anti-amyloid-beta antibody double-blind, placebo-controlled, randomized phase II study in mild-to-moderate Alzheimer's disease (BLAZE)

Stephen Salloway[1], Lee A. Honigberg[2], William Cho[2], Michael Ward[2], Michel Friesenhahn[2], Flavia Brunstein[2], Angelica Quartino[2], David Clayton[2], Deborah Mortensen[2], Tobias Bittner[3], Carole Ho[2], Christina Rabe[2], Stephen P. Schauer[2], Kristin R. Wildsmith[2], Reina N. Fuji[2], Shehnaaz Suliman[2], Eric M. Reiman[4], Kewei Chen[4] and Robert Paul[1]



Alzheimer's Research & Therapy 2018;10:96.

Solanezumab

Phase 3 solanezumab trials: Secondary outcomes in mild Alzheimer's disease patients

Eric R. Siemers[a,*], Karen L. Sundell[a], Christopher Carlson[a], Michael Case[a], Gopalan Sethuraman[a], Hong Liu-Seifert[a], Sherie A. Dowsett[a], Michael J. Pontecorvo[b], Robert A. Dean[a], Ronald Dematteos[a]

[a]Eli Lilly and Company, Indianapolis, IN, USA
[b]Avid Radiopharmaceuticals, Philadelphia PA, USA

Of the 251 subjects with mild AD who participated in the optional amyloid imaging addendum and had interpretable baseline scans, 195 (78%) were considered to have positive amyloid burden at baseline based on a centralized visual reading of the PET scans. For these baseline amyloid positive subjects, the treatment group difference in baseline to endpoint change in composite summary SUVR normalized to mean whole cerebellum did not reach statistical significance (LS mean change [SE] placebo: 0.02 [0.017] vs. solanezumab: −0.01 [0.019]; $P = .17$).

Alzheimer's & Dementia 2016; 12:110-120 (emphasis added)

Please see the FDA Summary Review Memorandum on ADUHELM for additional commentary
PET: positron emission tomography

No evidence of functional unblinding from ARIA management was observed across clinical scales

Differences vs. placebo with respect to primary and secondary endpoints were compared using:

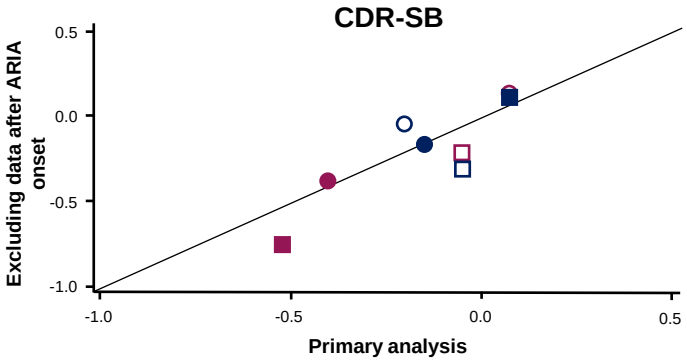
- primary analysis (**x-axis**)
- analysis excluding data after ARIA onset (**y-axis**)

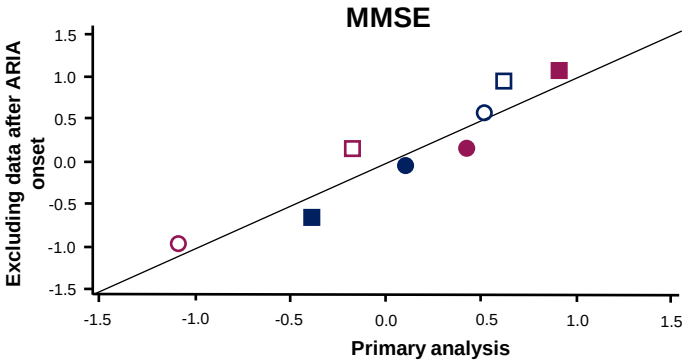
Results show that data points are **scattered evenly above and below** the line of unity, indicating random variability and no evidence of functional unblinding

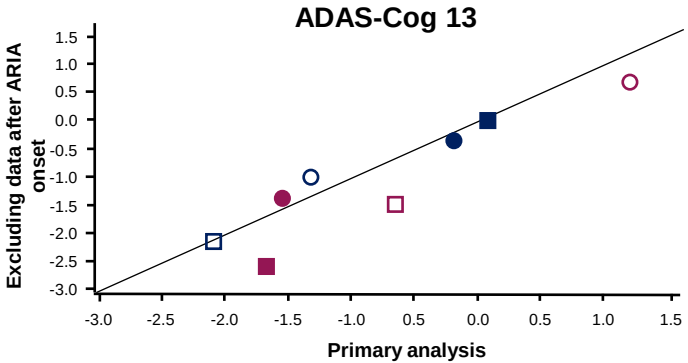
EMERGE **ENGAGE**

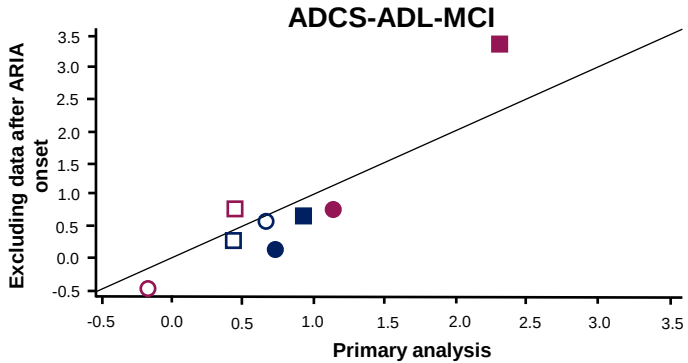
■ high dose carrier □ high dose non-carrier

● low dose carrier ○ low dose non-carrier









AD/PD 2021 Conference

Biogen

Note: Aducanumab is being developed in collaboration with Eisai Co., Ltd.
ARIA: amyloid-related imaging abnormalities; ADAS-Cog 13: Alzheimer's Disease Assessment Scale–Cognitive Subscale (13-item); ADCS-ADL-MCI: Alzheimer's Disease Cooperative Study–Activities of Daily Living Inventory (mild cognitive impairment version); CDR-SB: Clinical Dementia Rating–Sum of Boxes; MMSE: Mini-Mental State Examination

Biogen is committed to generating additional evidence on aducanumab

Post-marketing Confirmatory Phase 4 Study

Verify the clinical benefit of aducanumab in Alzheimer's disease

EMBARK Long-term Extension Study

Long-term safety and tolerability of aducanumab

ICARE AD-US Real-world Observational Study

Real-world, long-term effectiveness and safety data on aducanumab

Biogen

Note: Aducanumab is being developed in collaboration with Eisai Co., Ltd.

Building long-term leadership in Alzheimer's disease

Additional regulatory filings for aducanumab submitted in Mexico, Israel, South Korea, and United Arab Emirates

- Regulatory reviews ongoing in Australia, Brazil, Canada, E.U., Switzerland, and Japan

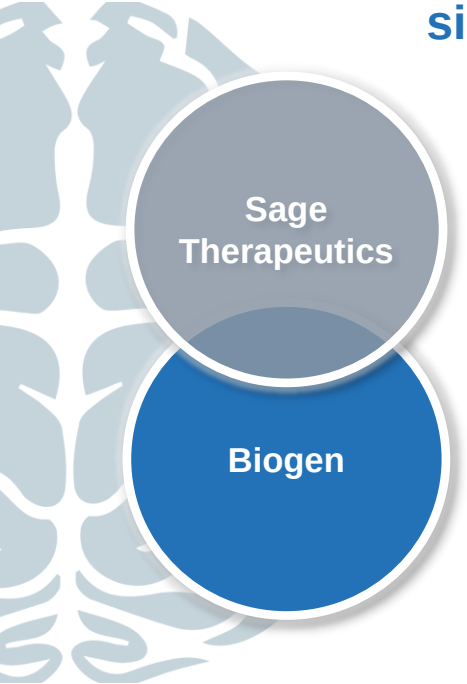
Evaluating subcutaneous formulation of aducanumab to expand potential treatment options

Continuing to advance an innovative pipeline in Alzheimer's disease

- Lecanemab granted Breakthrough Therapy designation by the FDA
- BIIB092 (gosuranemab) Phase 2 study did not meet primary or secondary endpoints
- Advancing BIIB080, anti-tau ASO in Alzheimer's disease

Note: Aducanumab and lecanemab are being developed in collaboration with Eisai Co., Ltd.
ASO: antisense oligonucleotide

Positive Phase 3 WATERFALL Study of zuranolone in MDD



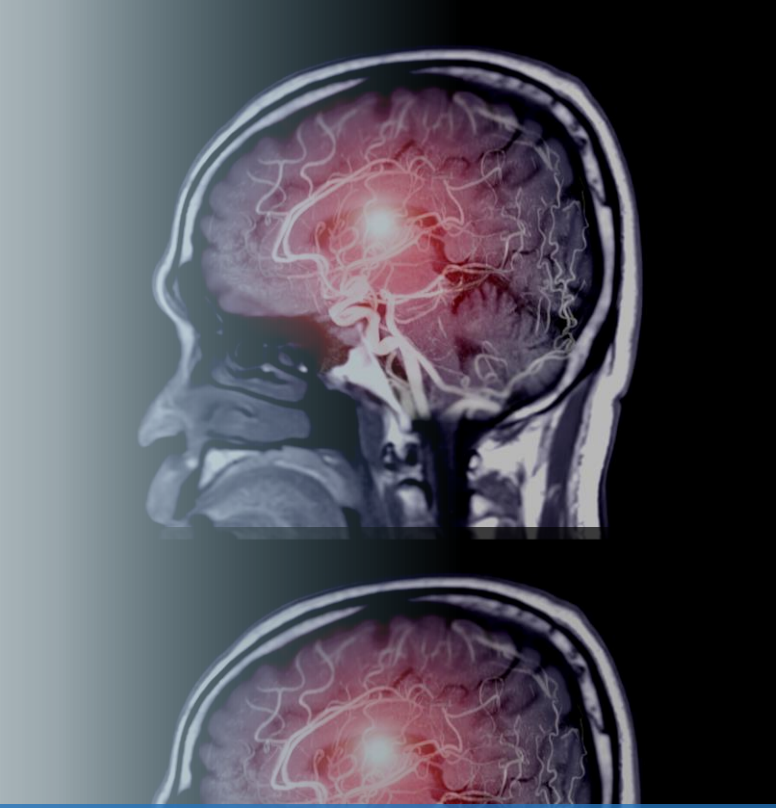
WATERFALL Study met the primary endpoint of a statistically significant reduction in HAMD-17 score at Day 15

- *Rapid onset of effect beginning at Day 3, the earliest time point measured*
- *Majority of AEs were mild to moderate in severity; most common TEAE observed on zuranolone 50 mg are consistent with the safety profile of zuranolone known to date*
- *No weight gain, sexual dysfunction, euphoria, withdrawal symptoms, or increased signal of suicidal ideation or behavior*

Zuranolone has the potential to transform the treatment of Major Depressive Disorder

Biogen

Note: Zuranolone is being developed in collaboration with Sage Therapeutics, Inc.
MDD: major depressive disorder; HAMD-17: Hamilton Rating Scale for Depression; AE: adverse event; TEAE: treatment emergent adverse event



Developing the next-generation of stroke care

Phase 2a study of TMS-007 (BIIB131) in acute ischemic stroke demonstrated positive impacts on blood vessel reopening and patient functional recovery

- *Patients were treated with BIIB131 up to 12 hours after the onset of stroke symptoms - average time to treatment was 9.5 hours vs. 9.3 hours for placebo*
- *No incidence of symptomatic intracranial hemorrhage*
- *Improved recanalization rate in patients with a visible occlusion – 58.3% for BIIB131 vs. 26.7% for placebo*
- *Significant improvement in patient functional recovery as measured by modified Rankin Scale, a measure of independence in daily living*

BIIB131 has the potential to be a next generation thrombolytic with an improved benefit-risk profile

Continued progress in R&D

Continued Progress in Alzheimer's Disease

- Aducanumab regulatory filing submitted in Mexico, Israel, South Korea, and UAE – aducanumab filing currently under review in 10 geographies
- Breakthrough Designation awarded to lecanemab by the FDA

Pipeline Progression

- Phase 3 study of zuranolone* met the primary endpoint in MDD
- Phase 2 positive data for BIIB133 (TMS-007) in acute ischemic stroke - Asset acquired from TMS
- Initiated Phase 3 study of BIIB059 in Systemic Lupus Erythematosus
- Phase 2/3 of BIIB112 in XLRP did not meet primary endpoint; positive trends in secondary endpoints
- Phase 3 of BIIB111 in choroideremia failed to meet primary or secondary endpoints
- Phase 2 of BIIB092 in AD failed to meet primary or secondary endpoints

Growing the Pipeline in MS

- Proposed collaboration with Innocare for orelabrutinib^ – a Phase 2, CNS-penetrant and highly selective BTK inhibitor in MS

Biogen

* Collaboration program
^ Closing of the transaction is contingent upon completion of review under antitrust laws, including the Hart-Scott-Rodino Antitrust Improvements Act of 1976 in the U.S
Note: Aducanumab and lecanemab are being developed in collaboration with Eisai Co., Ltd.
UAE: United Arab Emirates; MDD: major depressive disorder; XLRP: X-linked retinitis pigmentosa; AD: Alzheimer's disease; BTK: Bruton's tyrosine kinase; MS: multiple sclerosis

Two pivotal readouts expected by end of 2021 in ALS and Depression

	Data Readout	Expected By
ALS	Phase 3 data for tofersen	Fall 2021

- *Initiated individual compassionate use access to tofersen for SOD1-ALS rapid progressors*
- *Enrolled the first participant in ATLAS – Phase 3 study in pre-symptomatic SOD1-ALS mutation carriers*

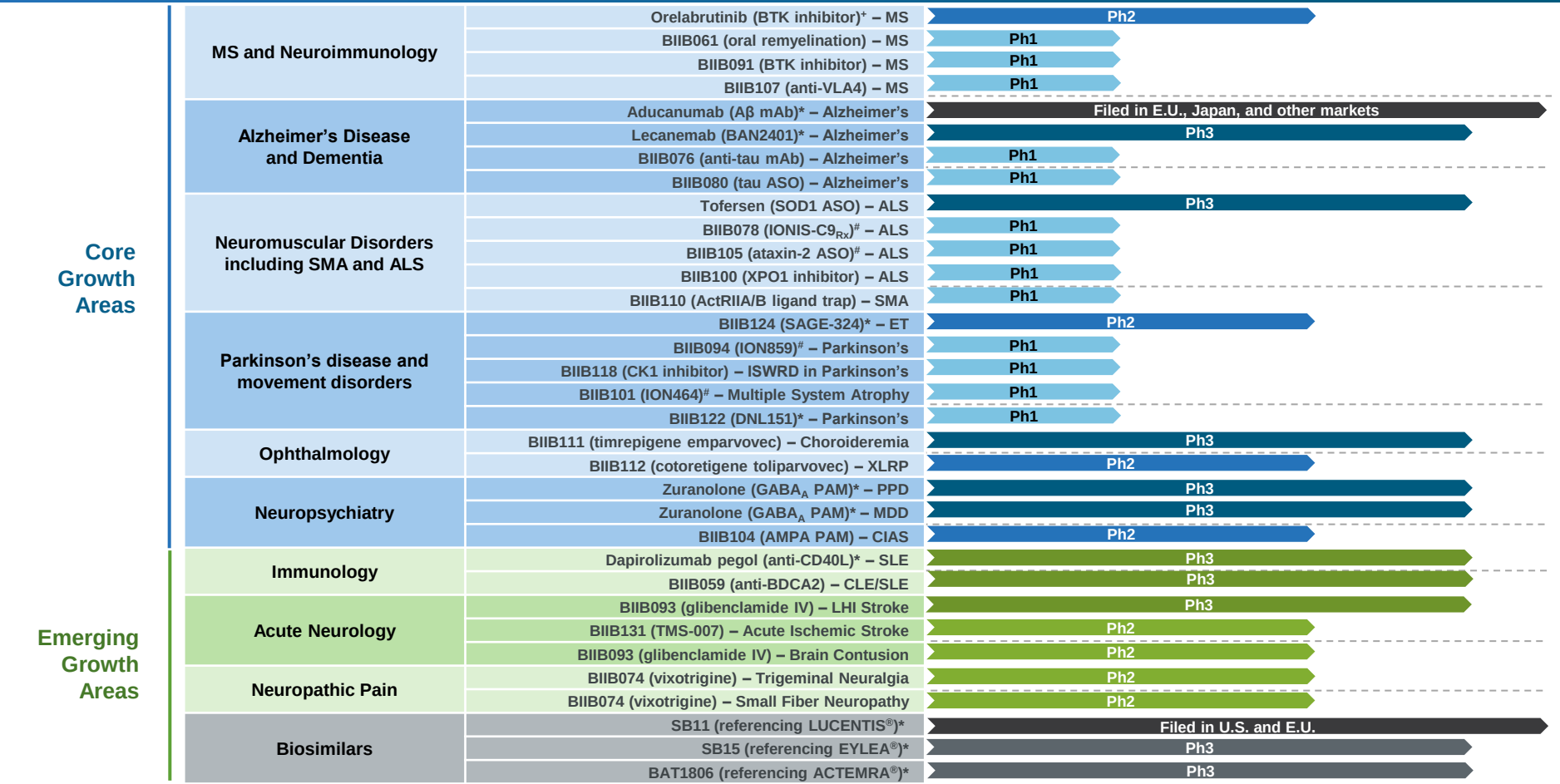
MDD	Phase 3 data for zuranolone	H2 2021

- *CORAL Phase 3 – Efficacy and safety of zuranolone 50 mg co-initiated with new open-label ADT in patients with MDD*

Biogen

Note: Zuranolone is being developed in collaboration with Sage Therapeutics, Inc.
ALS: amyotrophic lateral sclerosis; MDD: major depressive disorder; ADT: antidepressant

Broad neuroscience pipeline to drive multi-franchise strategy



+ Closing of the transaction is contingent upon completion of review under antitrust laws, including the Hart-Scott-Rodino Antitrust Improvements Act of 1976 in the U.S.; * Collaboration program; # Option agreement; MS: multiple sclerosis; ALS: amyotrophic lateral sclerosis; SMA: spinal muscular atrophy; ET: essential tremor; ISWRD: irregular sleep wake rhythm disorder; XLRP: X-linked retinitis pigmentosa; PPD: postpartum depression; MDD: major depressive disorder; CIAS: cognitive impairment associated with schizophrenia; SLE: systemic lupus erythematosus; CLE: cutaneous lupus erythematosus; LHI: large hemispheric infarction

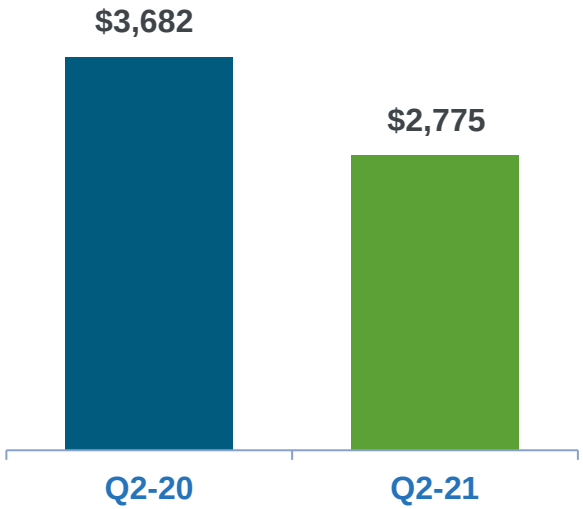
Financial Update

Michael McDonnell

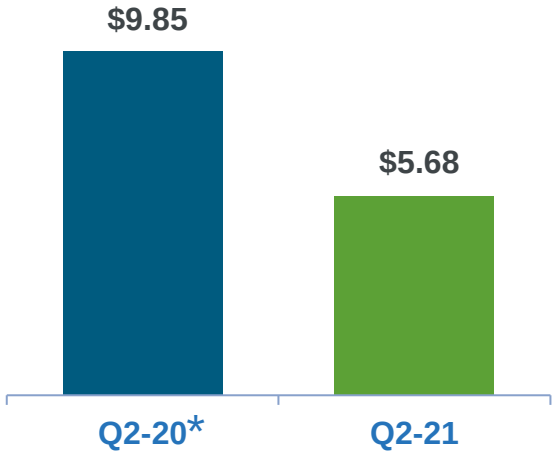
Chief Financial Officer

Q2 2021 financial results

Total Revenue ($M)



Non-GAAP Diluted EPS ($)



Our GAAP financial measures and a reconciliation of GAAP to Non-GAAP financial results are at the end of this presentation.
*Beginning in the second quarter of 2021 material upfront payments and premiums paid on the acquisition of common stock associated with significant collaboration and licensing arrangements along with the related transaction costs incurred are no longer excluded from Non-GAAP R&D and SG&A expenses. Non-GAAP financial results for the second quarter of 2020 have been updated to reflect the $208 million payment related to the collaboration with Sangamo Therapeutics, Inc. along with the associated transaction costs and income tax effect.

U.S. ADUHELM

Q2 2021 Financials

- $2 million revenue
- Collaboration profit sharing includes a net reimbursement of $85 million from Eisai related to the commercialization of ADUHELM in the U.S.
- $100 million U.S. launch milestone paid to Neurimmune reflected in non-controlling interest; Eisai's share of this is reflected in collaboration profit (loss) sharing

Near-Term Considerations

- Modest revenue expected in 2021 due to:
  - Site readiness and capacity
  - Payer coverage
  - Dose titration

Collaboration Economics & Accounting

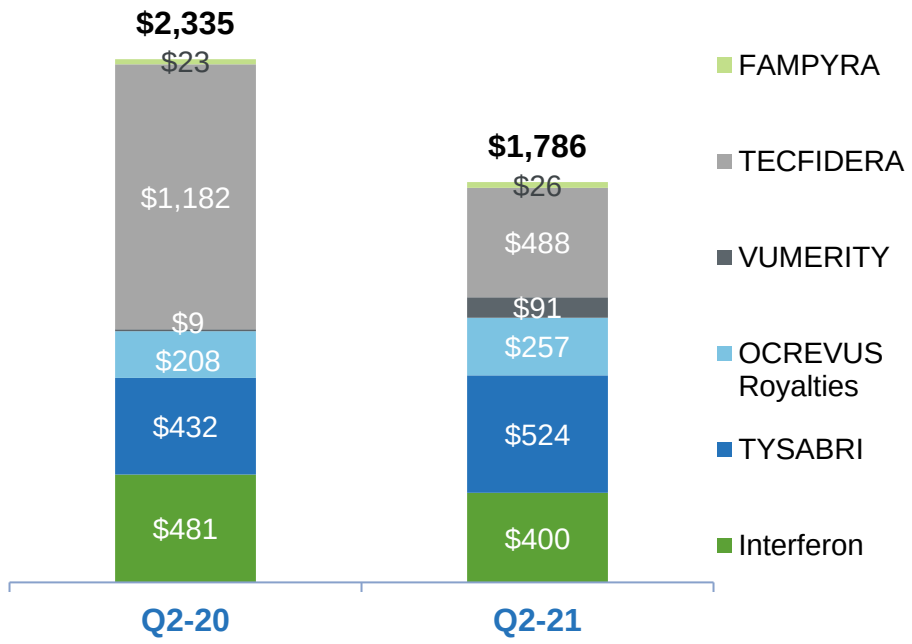
Profit Share	• Biogen 55% / Eisai 45%
Revenue / Cost of Goods Sold	• Biogen books 100% of revenue and cost of goods sold • Eisai's share of gross margin will be reflected in collaboration profit sharing
Royalties	• Biogen will pay Neurimmune royalties ranging from the high single digits to sub-teens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

Biogen

Note: Aducanumab is being developed in collaboration with Eisai Co., Ltd.

Global multiple sclerosis revenue

MS Revenue ($M)



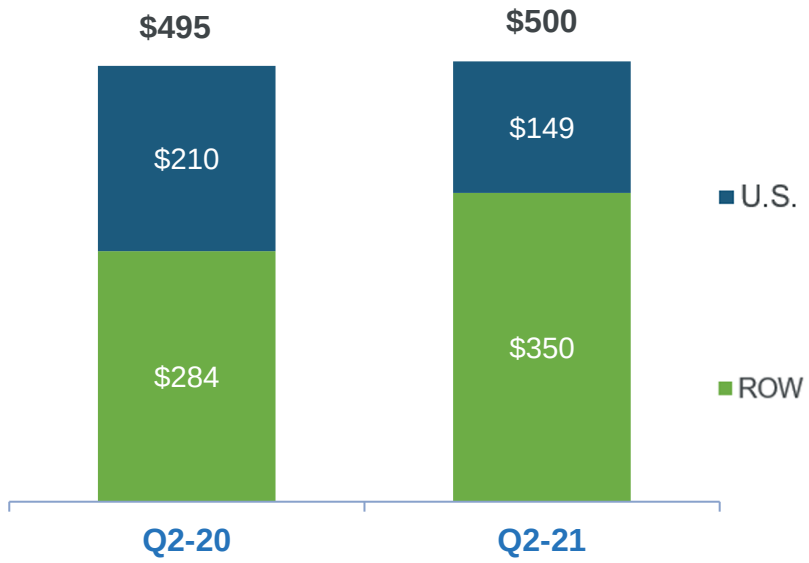
Numbers may not foot due to rounding.

Highlights

- **TECFIDERA** decreased 59% vs. prior year impacted by the entrance of multiple generics in the U.S.
- **VUMERITY** has continued to grow in the U.S.
- **TYSABRI** increased 21% vs. prior year
  - Subcutaneous administration approved in the E.U.
- **Interferon** decreased 17% vs. prior year
  - Intramuscular PLEGRIDY launched in the U.S. and E.U.

Global SPINRAZA revenue

SPINRAZA Revenue ($M)



Numbers may not foot due to rounding.

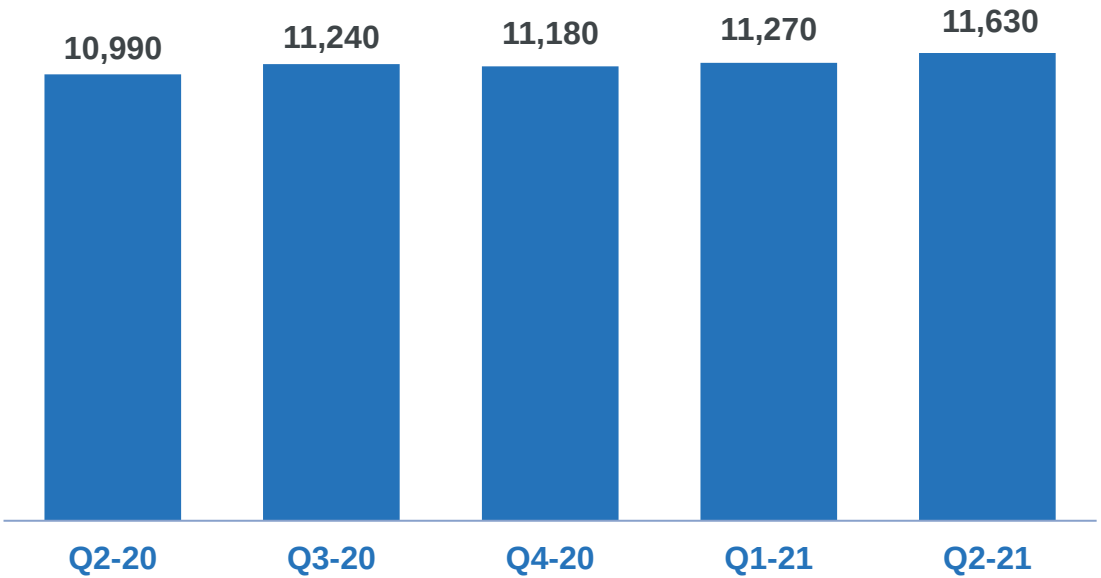
Highlights

- U.S. SPINRAZA revenue impacted by competition, exacerbated by impacts of COVID-19
- ROW revenue growth vs. Q2 2020 benefitted from accelerated shipments
- Over 11,000 patients* on therapy, an increase of 6% versus Q2 2020 driven by continued growth outside the U.S.
- Proven efficacy across all patient types and a well characterized safety profile

* Total patients across the post-marketing setting, the Expanded Access Program, and clinical trials.

SPINRAZA patient dynamics

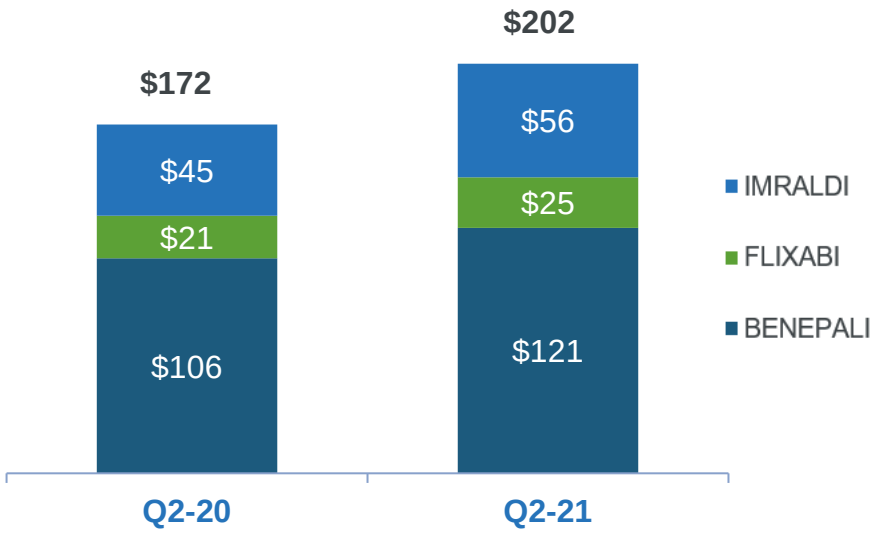
SPINRAZA Patients*



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

Biosimilars revenue

Biosimilars Revenue ($M)



Numbers may not foot due to rounding.

Highlights

- Market-leading anti-TNF portfolio in E.U.
- ~ 240,000 patients on Biogen biosimilar products at end of Q2 2021*
- Biogen contributed ~ €2.4 billion of healthcare savings in 2020 across Europe#
- Continued impacts of slowdown in new treatments and reduced clinic capacity due to the COVID-19 pandemic along with pricing pressures
- SB11 (referencing LUCENTIS) filed in U.S. and positive CHMP opinion in E.U.
- Positive Phase 3 readout of BAT1806 referencing ACTEMRA/RoACTEMRA

* Includes ~112,000 patients on BENEPALI, ~91,000 patients on IMRALDI, and ~39,000 patients on FLIXABI.
# Biogen estimate, data on file.
CHMP: Committee for Medicinal Products for Human Use
Note: BAT1806 is being developed in collaboration with Bio-Thera Solutions, Ltd.; SB11 is being developed with Samsung Bioepis Co., Ltd.

Q2 2021 revenue highlights

$ in Millions	Q2 2021	Q2 2020	Δ Y/Y
Total Product Revenue*	**$2,236**	**$2,796**	**(20%)**
RITUXAN/GAZYVA Revenue	$183	$270	(32%)
OCREVUS Royalties	$257	$208	23%
Revenue from Anti-CD20 Therapeutic Programs	**$440**	**$478**	**(8%)**
Other Revenue	$99	$408	(76%)
Total Revenue*	**$2,775**	**$3,682**	**(25%)**

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

Q2 2021 financial results highlights

($ in Millions except EPS, Shares in Millions)	Q2 2021	Q2 2020*	Δ Y/Y
Total Revenue	**$2,775**	**$3,682**	**(25%)**
Cost of Sales	$460	$411	(12%)
Gross Profit	**$2,315**	**$3,270**	**(29%)**
% of revenue	83%	89%	
R&D Expense	$585	$648	10%
Non-GAAP SG&A Expense	$635	$555	(14%)
Collaboration Profit Sharing	($15)	$22	170%
Non-GAAP Operating Income	**$1,110**	**$2,046**	**(46%)**
Non-GAAP Other Income (Expense)	($58)	($30)	(90%)
Non-GAAP Profit Before Taxes and JV Equity	**$1,052**	**$2,016**	**(48%)**
Non-GAAP Taxes	$166	$380	56%
Non-GAAP Taxes %	15.8%	18.9%	
Non-GAAP JV Equity Income (Loss)	$50	$17	193%
Non-GAAP Net Income	**$936**	**$1,652**	**(43%)**
Non-GAAP Net Income (Loss) Attributable to Noncontrolling Interests	$84	$68	24%
Non-GAAP Net Income Attributable to Biogen Inc.	**$852**	**$1,584**	**(46%)**
Weighted average diluted shares used in calculating diluted EPS	150	161	7%
Non-GAAP Diluted EPS	**$5.68**	**$9.85**	**(42%)**

Numbers may not foot due to rounding. Percent changes represented as favorable/(unfavorable).
Our GAAP financial measures and a reconciliation of GAAP to Non-GAAP financial results are at the end of this presentation.
*Beginning in the second quarter of 2021 material upfront payments and premiums paid on the acquisition of common stock associated with significant collaboration and licensing arrangements along with the related transaction costs incurred are no longer excluded from Non-GAAP R&D and SG&A expenses. Non-GAAP financial results for the second quarter of 2020 have been updated to reflect the $208 million payment related to the collaboration with Sangamo Therapeutics, Inc. along with the associated transaction costs and income tax effect.

Deployment of capital in Q2 2021

$72 million
Capital Expenditures

$450 million
Share Repurchases

Free Cash Flow $1,155 million*

*Free cash flow is defined as net cash flow from operations less capital expenditures.
Our GAAP financial measures and a reconciliation of GAAP to Non-GAAP financial results are at the end of this presentation.

Balance sheet highlights

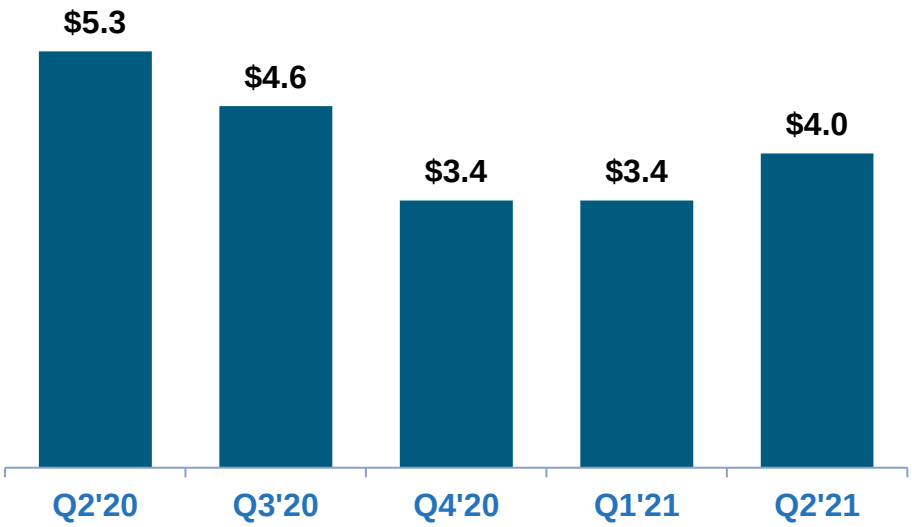
$7.3 billion
Debt at end of Q2 2021

$4.0 billion
Cash and marketable securities at end of Q2 2021

$3.3 billion
Net debt at end of Q2 2021

Cash and Marketable Securities

($ billions)



Updated 2021 full year financial guidance

	Prior FY 2021 Guidance	Updated FY 2021 Guidance
Revenue	**$10.45 billion to $10.75 billion**	**$10.65 billion to $10.85 billion**
Non-GAAP Diluted EPS	**$17.50 to $19.00**	**$17.50 to $19.00**
Capital Expenditures	**$375 million to $425 million**	**$375 million to $425 million**

Please see Biogen's Q2 2021 earnings release, available at the *Investors* section of Biogen's website at investors.biogen.com, for additional 2021 financial guidance assumptions.

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

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

Biogen

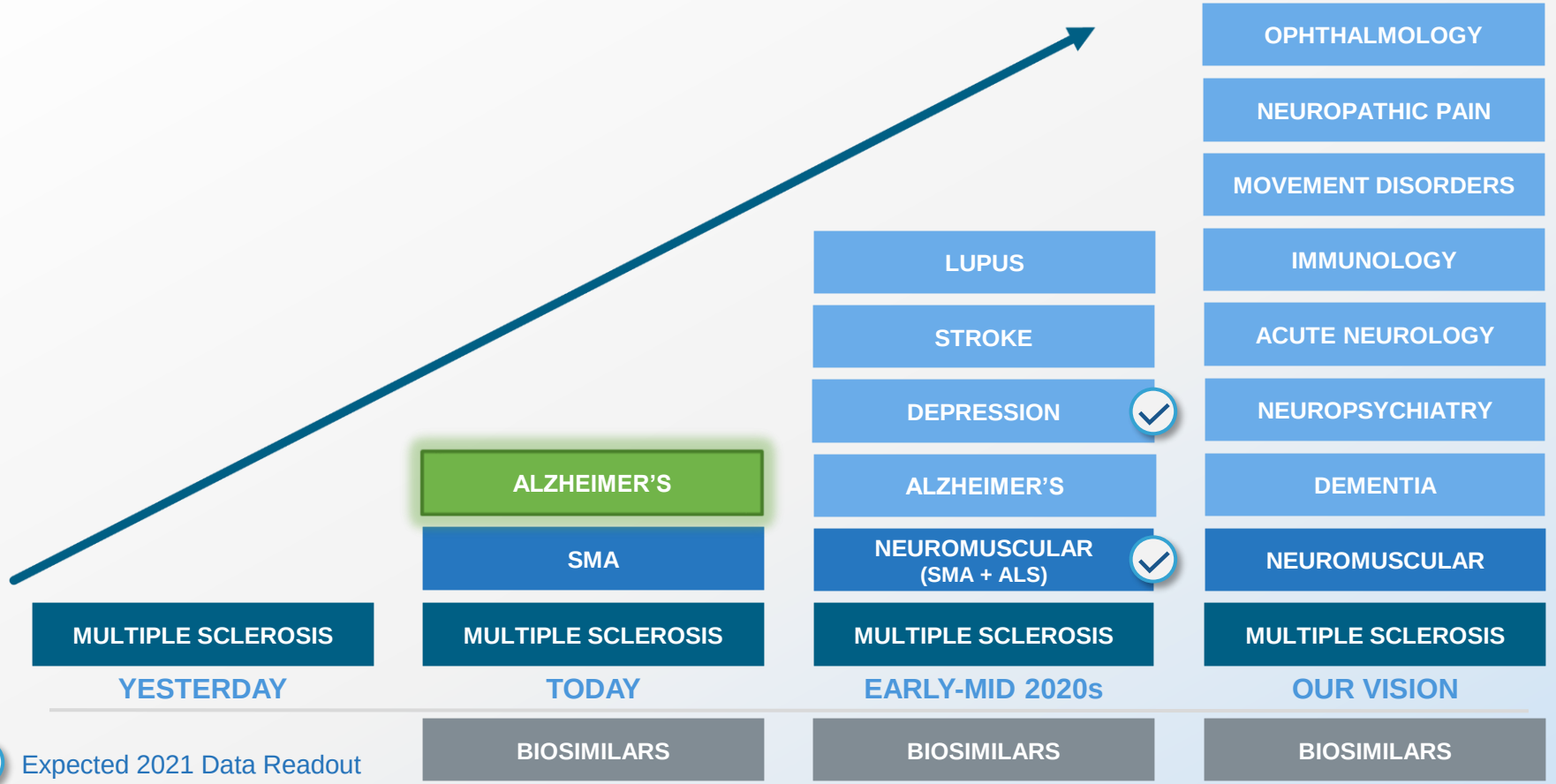
Closing Remarks

Michel Vounatsos

Chief Executive Officer

Biogen

Continuing to build a multi-franchise portfolio



Questions & Answers

Appendix

Continuing to advance our ESG priorities

Progress Highlights

ENVIRONMENT

- Launched climate and health initiative with WBCSD,[1] engaging over 20 companies across 4 continents
- 30% of suppliers committed to science-based climate targets, and 17% committed to 100% renewables by 2030[2]
- Generated 180 climate, health, and equity ideas from Employee Innovation Challenge

SOCIAL

- Initiated collaborations with CVS Health and NAFC[3] to address health equity in Alzheimer's
- Expanded Biogen Foundation Youth Neurology program[4] reaching 50+ underrepresented students across MA & NC
- Hosted 18 interns from HBCUs,[5] building the talent pipeline

GOVERNANCE

- Ranked 5th company by *Fortune* and Measure Up with best diversity and inclusion numbers overall[6]
- Recognized as #2 pharmaceutical company for ESG by Alva Group[7]
- Scored 100% for 4th year in a row on Disability Equality Index

Transparency via Reporting

Launching 1st Diversity, Equity & Inclusion (DE&I) Report
Coming early August
biogen.com

Recognition for Leadership in Corporate Responsibility

SUSTAINALYTICS Sustainability Award Gold Class 2021 S&P Global

JUST capital

3BL MEDIA 100 BEST CORPORATE CITIZENS 2020

BEST PLACES TO WORK 2021 for LGBTQ Equality 100% CORPORATE EQUALITY INDEX

MSCI ESG RATINGS AA

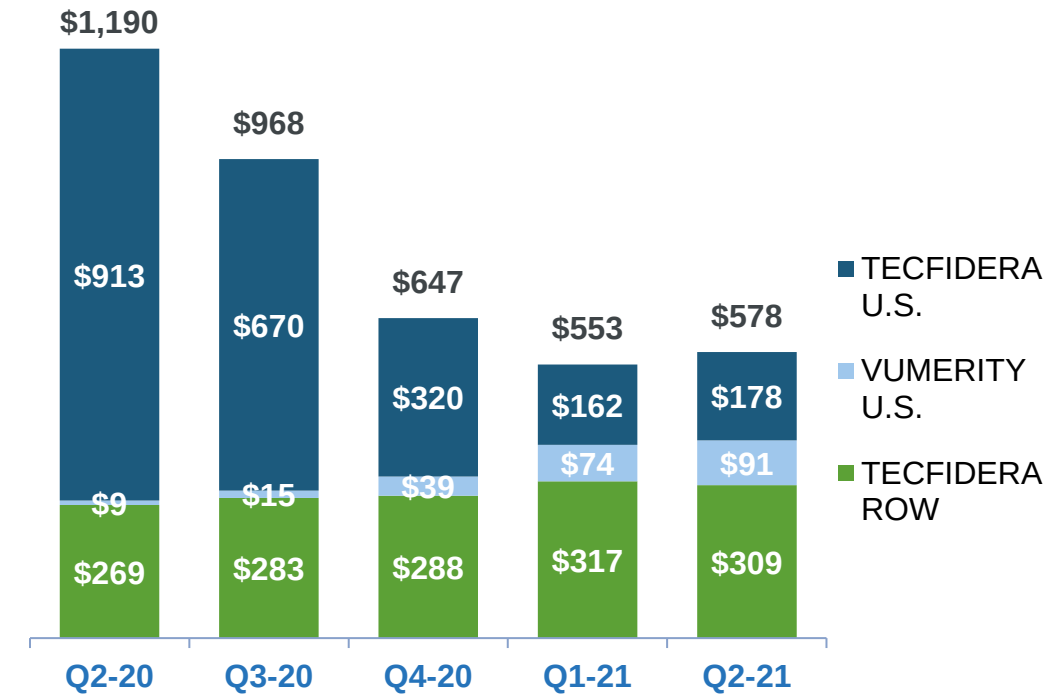
Biogen

[1] Word Business Council for Sustainable Development. [2] Measured by supplier spend. [3] National Association of Free and Charitable Clinics. [4] Through collaborations with MGH and Duke University. [5] Historically Black Colleges & Universities. [6] *Fortune* and Refinitiv partnered to bring this year's *Fortune 500* list including Measure Up, a ranking of the most progressive companies in diversity and inclusion. [7] Alva Group ESG Intelligence on top 10 ESG pharma companies in 2021.

Global fumarate revenue

Tecfidera (dimethyl fumarate) delayed-release capsules
VUMERITY™ (diroximel fumarate) delayed-release capsules 231 mg

Fumarate Revenue ($M)



Numbers may not foot due to rounding.

Q2 2021 Highlights

Revenue vs. Q2 2020 and Q1 2021

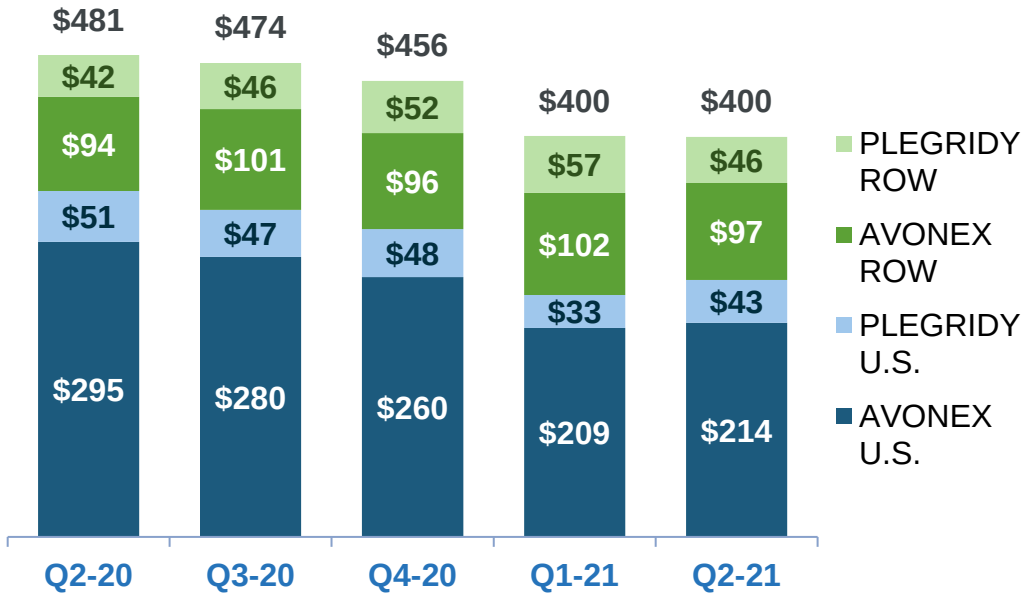
	ΔY/Y		ΔQ/Q
WW	- 51%	and	+ 5%
U.S.	- 71%	and	+14 %
ROW	+ 15%	and	- 2%

- Biogen believes that Q2 2021 TECFIDERA revenue in the U.S. increased vs Q1 2021 due to seasonality and shipping dynamics
- Biogen believes that Q1 2020 TECFIDERA revenue outside the U.S. benefitted by ~ $28 million from accelerated sales due to the COVID-19 pandemic, of which ~ $17 million was utilized in Q2 2020

Global interferon revenue

AVONEX (interferon beta-1a) plegridy (peginterferon beta-1a)

Interferon Revenue ($M)



Numbers may not foot due to rounding.

Q2 2021 Highlights

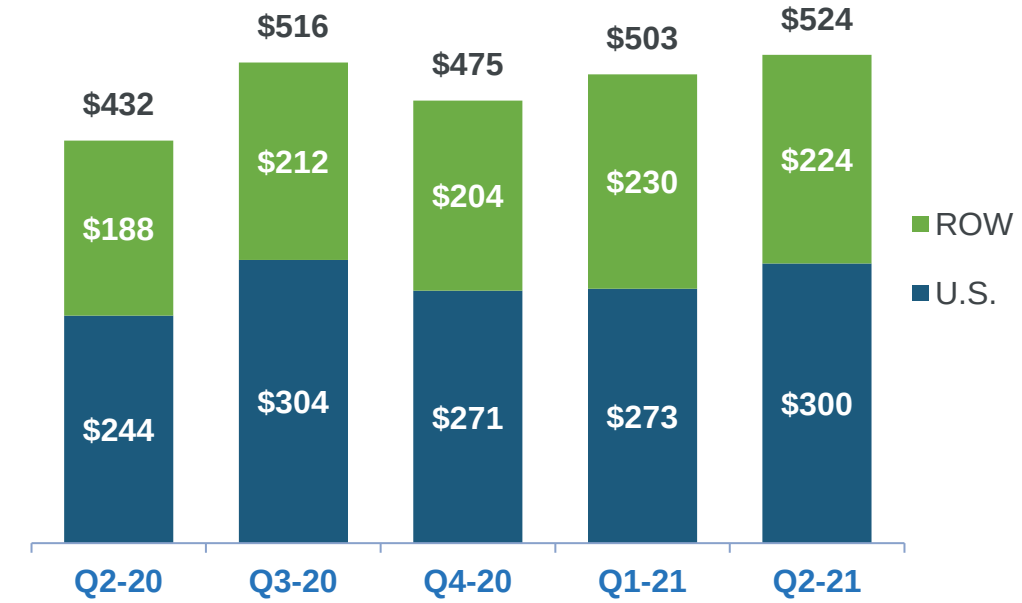
Revenue vs. Q2 2020 and Q1 2021

	ΔY/Y		ΔQ/Q
WW	- 17%	and	0%
U.S.	- 26%	and	+ 6%
ROW	+ 5%	and	- 10%

- Biogen believes that Q1 2020 interferon revenue outside the U.S. benefitted by ~ $25 million from accelerated sales due to the COVID-19 pandemic, of which ~ $15 million was utilized in Q2 2020

Global TYSABRI revenue

TYSABRI Revenue ($M)



Numbers may not foot due to rounding.

Q2 2021 Highlights

Revenue vs. Q2 2020 and Q1 2021

	ΔY/Y		ΔQ/Q
WW	+ 21%	and	+ 4%
U.S.	+ 23%	and	+10 %
ROW	+ 19%	and	- 2%

- Biogen believes that Q2 2021 TYSBRI revenue benefitted from shipping dynamics in both the U.S. and outside the U.S.
- Biogen believes that Q1 2020 TYSABRI revenue outside the U.S. benefitted by ~ $7 million from accelerated sales due to the COVID-19 pandemic, of which ~ $5 million was utilized in Q2 2020

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,	
	2021	2020	2021	2020
Revenue:				
Product, net	$ 2,236.0	$ 2,795.7	$ 4,447.7	$ 5,700.3
Revenue from anti-CD20 therapeutic programs	440.0	478.3	829.0	998.7
Other	99.0	407.6	192.3	516.9
Total revenue	2,775.0	3,681.6	5,469.0	7,215.9
Cost and expense:				
Cost of sales, excluding amortization and impairment of acquired intangible assets	459.7	411.1	937.8	865.5
Research and development	585.1	647.6	1,099.3	1,123.9
Selling, general and administrative	637.3	555.1	1,232.3	1,125.2
Amortization and impairment of acquired intangible assets	604.1	61.5	702.2	133.0
Collaboration profit sharing	(15.2)	21.8	53.3	93.5
(Gain) loss on fair value remeasurement of contingent consideration	0.3	10.0	(33.5)	5.5
Acquired in-process research and development	18.0	—	18.0	75.0
Total cost and expense	2,289.3	1,707.1	4,009.4	3,421.6
Income from operations	485.7	1,974.5	1,459.6	3,794.3
Other income (expense), net	96.4	63.0	(410.5)	(57.5)
Income before income tax expense and equity in loss of investee, net of tax	582.1	2,037.5	1,049.1	3,736.8
Income tax (benefit) expense	(409.1)	446.1	(364.9)	738.2
Equity in (income) loss of investee, net of tax	(34.3)	(15.1)	(16.1)	(0.4)
Net income	1,025.5	1,606.5	1,430.1	2,999.0
Net income (loss) attributable to noncontrolling interests, net of tax	577.0	64.4	571.4	57.8
Net income attributable to Biogen Inc.	$ 448.5	$ 1,542.1	$ 858.7	$ 2,941.2
Net income per share:				
Basic earnings per share attributable to Biogen Inc.	$ 3.00	$ 9.60	$ 5.70	$ 17.65
Diluted earnings per share attributable to Biogen Inc.	$ 2.99	$ 9.59	$ 5.68	$ 17.61
Weighted-average shares used in calculating:				
Basic earnings per share attributable to Biogen Inc.	149.7	160.6	150.8	166.7
Diluted earnings per share attributable to Biogen Inc.	150.1	160.9	151.2	167.0

Biogen

GAAP to Non-GAAP Reconciliation

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

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2021	2020	2021	2020
Selling, General and Administrative Expense:				
Total selling, general and administrative, GAAP	$ 637.3	$ 555.1	$ 1,232.3	$ 1,125.2
Less: other	2.0	—	2.2	—
Total selling, general and administrative, Non-GAAP	$ 635.3	$ 555.1	$ 1,230.1	$ 1,125.2
Amortization and Impairment of Acquired Intangible Assets:				
Total amortization and impairment of acquired intangible assets, GAAP	$ 604.1	$ 61.5	$ 702.2	$ 133.0
Less: impairment charges [A]	541.6	—	585.9	—
Less: amortization of acquired intangible assets	62.5	61.5	116.3	133.0
Total amortization and impairment of acquired intangible assets, Non-GAAP	$ —	$ —	$ —	$ —
(Gain) Loss on Fair Value Remeasurement of Contingent Consideration:				
Total (gain) loss on fair value remeasurement of contingent consideration, GAAP	$ 0.3	$ 10.0	$ (33.5)	$ 5.5
Less: (gain) loss on fair value remeasurement of contingent consideration	0.3	10.0	(33.5)	5.5
Total (gain) loss on fair value remeasurement of contingent consideration, Non-GAAP	$ —	$ —	$ —	$ —
Other Income (Expense), net:				
Total other income (expense), net, GAAP	$ 96.4	$ 63.0	$ (410.5)	$ (57.5)
Less: gain (loss) on equity security investments	154.3	102.9	(281.8)	42.0
Plus: premium paid on debt exchange or early debt redemption	—	9.4	9.5	9.4
Total other income (expense), net, Non-GAAP	$ (57.9)	$ (30.5)	$ (119.2)	$ (90.1)
Income Tax (Benefit) Expense:				
Total income tax (benefit) expense, GAAP	$ (409.1)	$ 446.1	$ (364.9)	$ 738.2
Less: Neurimmune step-up tax basis [B]	(492.0)	—	(492.0)	—
Less: valuation allowance associated with deferred tax assets	—	56.0	—	56.0
Less: income tax effect related to Non-GAAP reconciling items	(83.4)	9.7	(192.7)	(28.7)
Total income tax expense, Non-GAAP	$ 166.3	$ 380.4	$ 319.8	$ 710.9
Effective Tax Rate:				
Total effective tax rate, GAAP	(70.3)%	21.9 %	(34.8)%	19.8 %
Less: Neurimmune step-up tax basis [B]	(84.5)		(46.9)	
Less: valuation allowance associated with deferred tax assets	—	2.7	—	1.5
Less: impact of GAAP to Non-GAAP adjustments	(1.6)	0.3	(3.7)	0.2
Total effective tax rate, Non-GAAP	15.8	18.9 %	15.8 %	18.1 %

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

Use of Non-GAAP Financial Measures

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

Our "Non-GAAP net income attributable to Biogen Inc." and "Non-GAAP earnings per share - Diluted" financial measures exclude the following items from "GAAP net income attributable to Biogen Inc." and "GAAP earnings per share - Diluted":

1. Acquisitions and divestitures

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

2. Restructuring, business transformation and other cost saving initiatives

We exclude costs associated with our execution of certain strategies and initiatives to streamline operations, achieve targeted cost reductions, rationalize manufacturing facilities or refocus research and development activities. These costs may include employee separation costs, retention bonuses, facility closing and exit costs, asset impairment charges or additional depreciation when the expected useful life of certain assets have been shortened due to changes in anticipated usage and other costs or credits that management believes do not have a direct correlation to our ongoing or future business operations.

3. (Gain) loss on equity security investments

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

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

Equity Income/Loss of Investee, Noncontrolling Interests, 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,	
	2021	2020*	2021	2020*
Equity in (Income) Loss of Investee, Net of Tax:				
Total equity in (income) loss of investee, GAAP	$ (34.3)	$ (15.1)	$ (16.1)	$ (0.3)
Less: amortization of equity in (income) loss of investee	16.0	2.0	23.2	22.9
Total equity in (income) loss of investee, Non-GAAP	$ (50.3)	$ (17.1)	$ (39.3)	$ (23.2)
Net Income (Loss) Attributable to Noncontrolling Interests, Net of Tax:				
Total net income (loss) attributable to noncontrolling interests, GAAP	$ 577.0	$ 64.4	$ 571.4	$ 57.8
Less: Neurimmune step-up tax basis [B]	492.0	—	492.0	—
Less: net distribution to noncontrolling interests and other	0.9	(3.5)	(4.4)	(7.1)
Total net income (loss) attributable to noncontrolling interests, Non-GAAP	$ 84.1	$ 67.9	$ 83.8	$ 64.9
Net Income Attributable to Biogen Inc.:				
Total net income attributable to Biogen Inc., GAAP	$ 448.5	$ 1,542.1	$ 858.7	$ 2,941.2
Plus: impairment charges [A]	541.6	—	585.9	—
Plus: amortization of acquired intangible assets	62.5	61.5	116.3	133.0
Plus: acquired in-process research and development	18.0	—	18.0	75.0
Plus: (gain) loss on fair value remeasurement of contingent consideration	0.3	10.0	(33.5)	5.5
Plus: (gain) loss on equity security investments	(154.3)	(102.9)	281.8	(42.0)
Plus: net distribution to noncontrolling interests & amortization of equity in loss of investee [B]	16.9	(1.5)	18.8	15.8
Plus: premium paid on debt exchange or early debt redemption	—	9.4	9.5	9.4
Plus: other	2.1	—	2.2	—
Plus: valuation allowance associated with deferred tax assets	—	56.0	—	56.0
Plus: income tax effect related to Non-GAAP reconciling items	(83.4)	9.7	(192.7)	(28.8)
Total net income attributable to Biogen Inc., Non-GAAP	$ 852.2	$ 1,584.3	$ 1,665.0	$ 3,165.1
Diluted Earnings Per Share				
Total diluted earnings per share, GAAP	$ 2.99	$ 9.59	$ 5.68	$ 17.61
Plus: adjustments to GAAP net income attributable to Biogen Inc. (as detailed above)	2.69	0.26	5.34	1.34
Total diluted earnings per share, Non-GAAP	$ 5.68	$ 9.85	$ 11.02	$ 18.95

*Beginning in the second quarter of 2021 material upfront payments and premiums paid on the acquisition of common stock associated with significant collaboration and licensing arrangements along with the related transaction costs incurred are no longer excluded from Non-GAAP R&D and SG&A expenses. Non-GAAP financial results for 2020 have been updated to include the $208 million payment related to the collaboration with Sangamo Therapeutics, Inc. along with the associated transaction costs and income tax effect for the three and six months ended June 30, 2020.

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

	For the Three Months Ended June 30, 2021	For the Six Months Ended June 30, 2021
Total Revenue		
Revenue growth, as reported	(24.6)%	(24.2)%
Less: impact of foreign currency translation and hedging (gains) losses	1.4	1.2
Revenue growth at constant currency	(26.0)%	(25.4)%
Total MS Revenue (including OCREVUS royalties)		
Revenue growth, as reported	(23.5)%	(28.0)%
Less: impact of foreign currency translation and hedging (gains) losses	0.6	(3.0)
Revenue growth at constant currency	(24.1)%	(25.0)%
Total SPINRAZA Revenue		
Revenue growth, as reported	1.0 %	(3.7)%
Less: impact of foreign currency translation and hedging (gains) losses	3.8	3.8
Revenue growth at constant currency	(2.8)%	(7.5)%
Total Biosimilars Revenue		
Revenue growth, as reported	17.9 %	4.4 %
Less: impact of foreign currency translation and hedging (gains) losses	8.7	7.7
Revenue growth at constant currency	9.2 %	(3.3)%
Total Other Revenue		
Revenue growth, as reported	(75.7)%	(62.8)%
Less: impact of foreign currency translation and hedging (gains) losses	0.1	0.1
Revenue growth at constant currency	(75.8)%	(62.9)%

Free cash flow

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2021	2020	2021	2020
Cash Flow:				
Net cash provided by (used in) operating activities	$ 1,227.3	$ 1,948.5	$ 1,996.3	$ 3,415.8
Net cash provided by (used in) investing activities	(152.7)	(832.7)	(217.4)	(389.8)
Net cash provided by (used in) financing activities	(564.5)	(1,313.4)	(1,349.5)	(3,558.7)
Net increase (decrease) in cash and cash equivalents	$ 510.1	$ (197.6)	$ 429.4	$ (532.7)
Net cash provided by (used in) operating activities	$ 1,227.3	$ 1,948.5	$ 1,996.3	$ 3,415.8
Less: Purchases of property, plant and equipment	71.9	105.0	164.5	254.7
Free cash flow	$ 1,155.4	$ 1,843.5	$ 1,831.8	$ 3,161.1

Biogen

Notes to GAAP to Non-GAAP Reconciliation

Operating Expense & Net Income Attributable to Biogen Inc.

[A] For the three and six months ended June 30, 2021, amortization and impairment of acquired intangible assets totaled $604.1 million and $702.2 million, respectively, compared to $61.5 million and $133.0 million, respectively, in the prior year comparative periods.

For the three months ended June 30, 2021, amortization and impairment of acquired intangible assets reflects a $350.0 million impairment charge related to BIIB111 (timrepigene emparvovec) for the potential treatment of choroideremia and a $191.6 million impairment charge related to BIIB112 (cotoretigene toliparvovec) for the potential treatment of X-linked retinitis pigmentosa.

For the six months ended June 30, 2021, amortization and impairment of acquired intangible assets also reflects a $44.3 million impairment charge related to vixotrigine (BIIB074) for the potential treatment of trigeminal neuralgia (TGN). For the three and six months ended June 30, 2020, we had no impairment charges.

During the second quarter of 2021 we announced that our Phase 3 STAR study of BIIB111 did not meet its primary or key secondary endpoints. We reassessed the fair value of the program based on the results of this study and recognized an impairment charge of $350.0 million during the second quarter of 2021, which resulted in a reduction of the in-process research and development (IPR&D) asset from $365.0 million to $15.0 million.

During the second quarter of 2021 we announced that our Phase 2/3 XIRIUS study of BIIB112 did not meet its primary endpoint; however, positive trends were observed across several clinically relevant prespecified secondary endpoints. We reassessed the fair value of the program based on the results of this study and recognized an impairment charge of $191.6 million during the second quarter of 2021, which resulted in a reduction of the IPR&D asset from $220.0 million to $28.4 million.

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