



Third Quarter 2020

Financial Results and Business Update

October 21, 2020

Forward-looking statements

This presentation contains 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 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; 2020 financial guidance; potential benefits and results that may be achieved through our *Healthy Climate*, *Healthy Lives* initiative; and the anticipated timeline of our *Healthy Climate*, *Healthy Lives* initiative. 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; failure to protect and enforce our data, intellectual property, and other proprietary rights and the risks and uncertainties relating to intellectual property claims and challenges; the direct and indirect impacts of the ongoing COVID-19 pandemic on our business, results of operations, and financial condition; 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; 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; difficulties in obtaining and maintaining adequate coverage, pricing, and reimbursement for our products; risks relating to technology failures or breaches; 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 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; risks related to commercialization of biosimilars; fluctuations in our operating results; fluctuations in our effective tax rate; risks related to investment in properties; the market, interest, and credit risks associated with our portfolio of marketable securities; risks relating to share repurchase programs; risks relating to access to capital and credit markets; risks related to indebtedness; environmental risks; 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; change in control provisions in certain of our collaboration agreements; risks that the goals of our *Healthy Climate*, *Healthy Lives* initiative will be completed in a timely manner or at all; uncertainty as to whether the anticipated benefits of our *Healthy Climate*, *Healthy Lives* initiative can be achieved; and the other risks and uncertainties that are described in the Risk Factors section of our most recent annual or quarterly report and 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.

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Q3 2020 earnings call agenda

Introduction

Joe Mara

VP, Investor Relations

Overview

Michel Vounatsos

Chief Executive Officer

R&D Update

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

EVP, Research & Development

Financial Update

Michael McDonnell

EVP, Chief Financial Officer

Closing Remarks

Michel Vounatsos

Chief Executive Officer

Overview

Michel Vounatsos
Chief Executive Officer





Leading in Alzheimer's disease

- FDA Accepted Biologics License Application (BLA) for aducanumab with Priority Review, and may act early under an expedited review
- Advisory Committee meeting scheduled for November 6
- Marketing Authorization Application (MAA) submitted to European Medicines Agency (EMA); formal meeting in Japan with the Pharmaceutical and Medical Devices Agency (PMDA)
- Remain focused on appropriate scientific engagement, treatment site readiness, defining aducanumab's value proposition, and helping to prepare for the potential introduction of aducanumab

If approved, aducanumab would become the first therapy to meaningfully change the course of Alzheimer's disease

Broad neuroscience pipeline to drive multi-franchise strategy

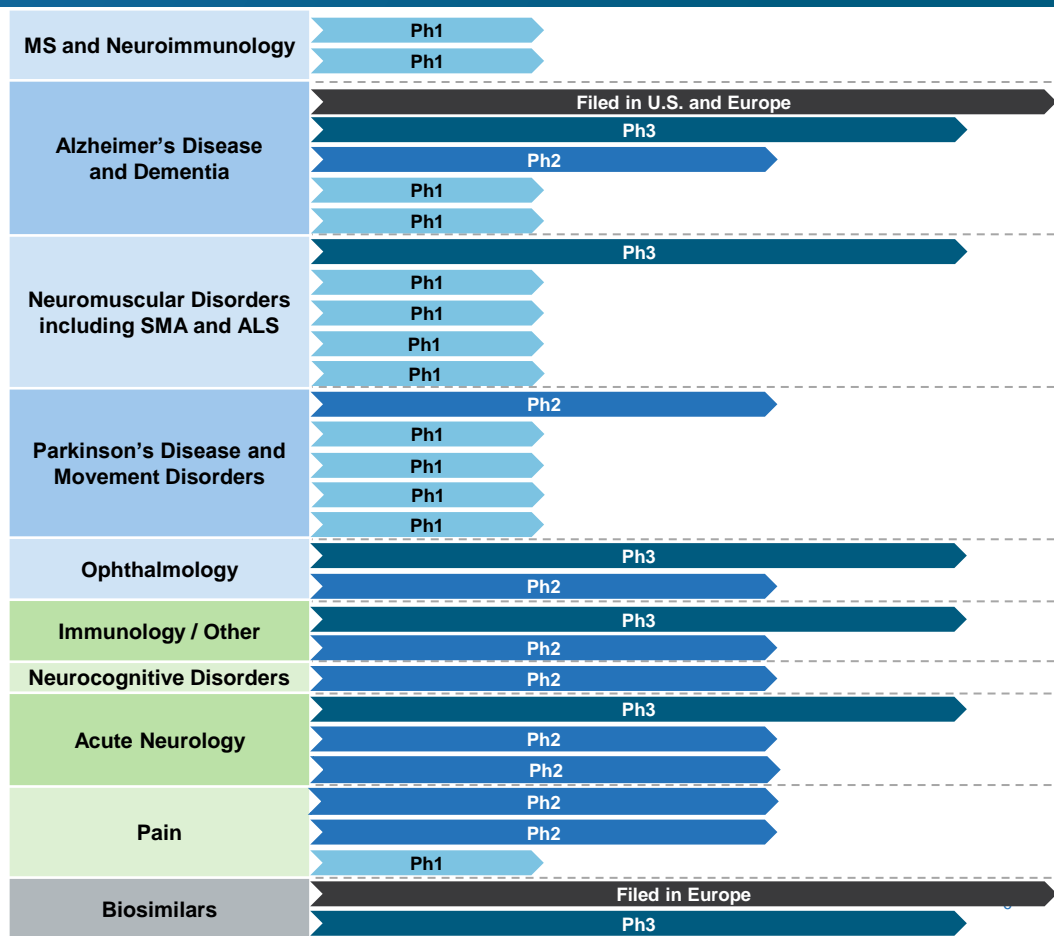
30 Clinical programs

22 New clinical programs since 2017

8 Programs in Phase 3 and filed, including aducanumab in U.S. and EU

6 Mid-to-late stage readouts expected by end of 2021

20 BD deals since 2017, including recent collaboration with Denali



MS = multiple sclerosis; SMA = spinal muscular atrophy; ALS = amyotrophic lateral sclerosis

The time is now for neuroscience



#1

Cause of disability globally

#2

Cause of deaths worldwide

Current Core Business

~2.5M patients with multiple sclerosis

Spinal muscular atrophy: A **leading genetic cause of infant mortality**

Opportunities

Alzheimer's disease: **# 1 neurodegenerative disease, ~ 50M dementia patients**

Parkinson's disease: **#2 neurodegenerative disease, ~ 10M Parkinson's patients**

<5 years average life expectancy for patients with ALS

~ **800,000 individuals** with lupus*

Stroke: **5th leading cause of death** in the U.S.

Up to 200,000 patients with inherited retinal disorders in the U.S.

Continued progress executing on our strategy

Maximizing the resilience of our MS core business

- ☑ Remain committed to MS leadership
- ☑ Broad MS portfolio, including VUMERITY
- ☑ Active lifecycle management & innovative new approaches

Accelerating our neuromuscular franchise

- ☑ > 11,000 SPINRAZA patients on therapy globally
- ☑ DEVOTE study for higher dose and potentially greater efficacy
- ☑ RESPOND study for sub-optimal response to ZOLGENSMA

Unlocking the potential of biosimilars

- ☑ Contributed ~ €1.8 billion of healthcare savings in Europe[^]
- ☑ Filing accepted for SB11* (LUCENTIS biosimilar) in Europe
- ☑ Potential to enter new geographies including U.S. and China

Leading in Alzheimer's disease

- ☑ Completed submission of BLA to FDA for aducanumab*
- ☑ MAA submitted in Europe; formal meeting in Japan with PMDA
- ☑ Continued global launch readiness

Developing & expanding our neuroscience portfolio & pursuing therapeutic adjacencies

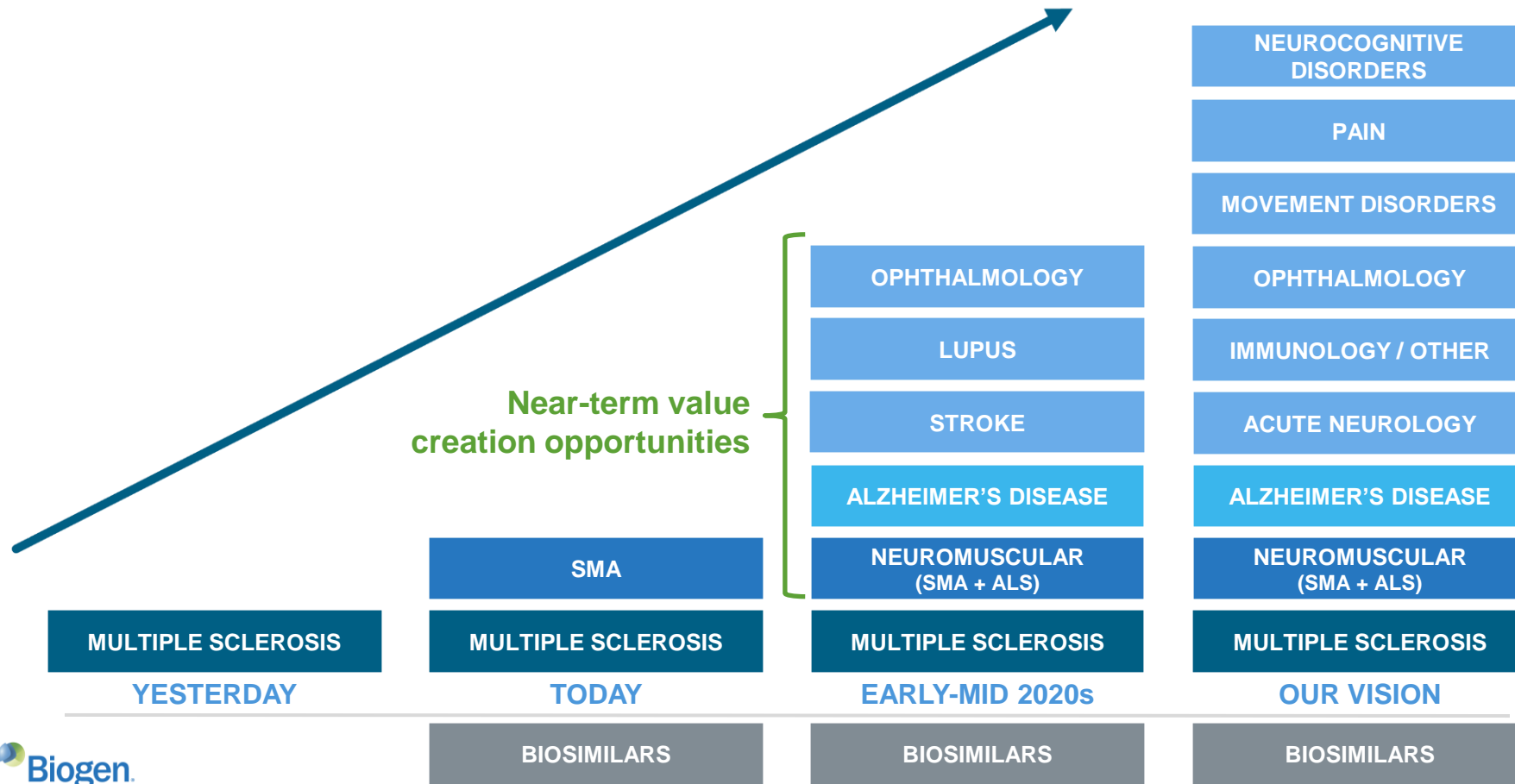
- ☑ Initiated Phase 3 for dapirolizumab pegol* in lupus
- ☑ Initiated Phase 1 for BIIB105# in ALS
- ☑ Denali collaboration enables potential leadership in Parkinson's

Continuous improvement and diligent capital allocation

- ☑ Continued business development
- ☑ \$4.6 billion in cash at the end of Q3
- ☑ Expect to maintain continuous improvement efforts and cost management

Building a multi-franchise portfolio

In areas of high unmet need



R&D Update

Al Sandrock, M.D., Ph.D.
EVP, Research & Development

Continued Progress in Alzheimer's Disease

- Aducanumab* FDA Advisory Committee meeting scheduled for November 6
- MAA submitted to EMA
- Formal regulatory meeting held with PMDA in Japan and plan to file
- First patient dosed in AHEAD 3-45 study of BAN2401* in preclinical Alzheimer's disease

Pipeline Progression

- **New study starts:**
 - Phase 3 of dapirrolizumab pegol* in SLE
 - Phase 1 of BIIB105#, ASO against ataxin-2 for ALS
- 6 mid-to-late stage data readouts expected by the end of 2021

Business Development

- **Denali Therapeutics:** Mid-stage oral, small molecule LRRK2 inhibitor in Parkinson's disease
- **Scribe Therapeutics:** New CRISPR-based platform for gene therapies in ALS

Collaboration with Denali Therapeutics expands pipeline in PD and provides access to innovative CNS-delivery platform

The logo for Denali Therapeutics features a stylized, light blue mountain range graphic on the left. A large, dark grey circle with a red border is overlaid on the right side of the graphic, containing the text "Denali Therapeutics" in white.

Denali
Therapeutics

DNL151

- Potential first-in-class, oral small molecule inhibitor of LRRK2 that may slow the progression of Parkinson's disease
- LRRK2 inhibition may provide therapeutic benefit in people with and without known genetic risks for Parkinson's disease
- DNL151 currently in Phase 1 studies to define full therapeutic window before moving to later stage development

Transport Vehicle (TV) Programs

- Access to select preclinical TV assets, including TV-abeta, designed to leverage transferrin receptor transport to enhance brain uptake



New data further reinforce VUMERITY's improved GI tolerability profile

Real-world MRI data suggests effectiveness of TYSABRI EID is similar to standard dosing regimen

- New or newly enlarging lesions were similar with EID and SID (75.3% and 75.6%, respectively)

Patient reported outcomes show significant improvements in quality of life with patients on TYSABRI over OCREVUS

The AFFINITY Phase 2b trial of opicinumab in RRMS did not achieve proof-of-concept

- Study did not meet primary or secondary endpoints
- Biogen will discontinue development of opicinumab and will apply learnings to MS research, including BIIB061

**Continued
commitment to MS**



Building depth in neuromuscular disorders

Planning to evaluate tofersen (BIIB067) when given prior to the onset of clinical symptoms in ALS

- Study designed to evaluate whether tofersen can delay clinical onset or slow disease progression of ALS in *SOD1* carriers
- Study anticipated to initiate in 2021

First patient dosed in Phase 1 study of BIIB105#, an ASO targeting ataxin-2 in ALS

Biogen is discontinuing development of BIIB089, gene therapy in SMA

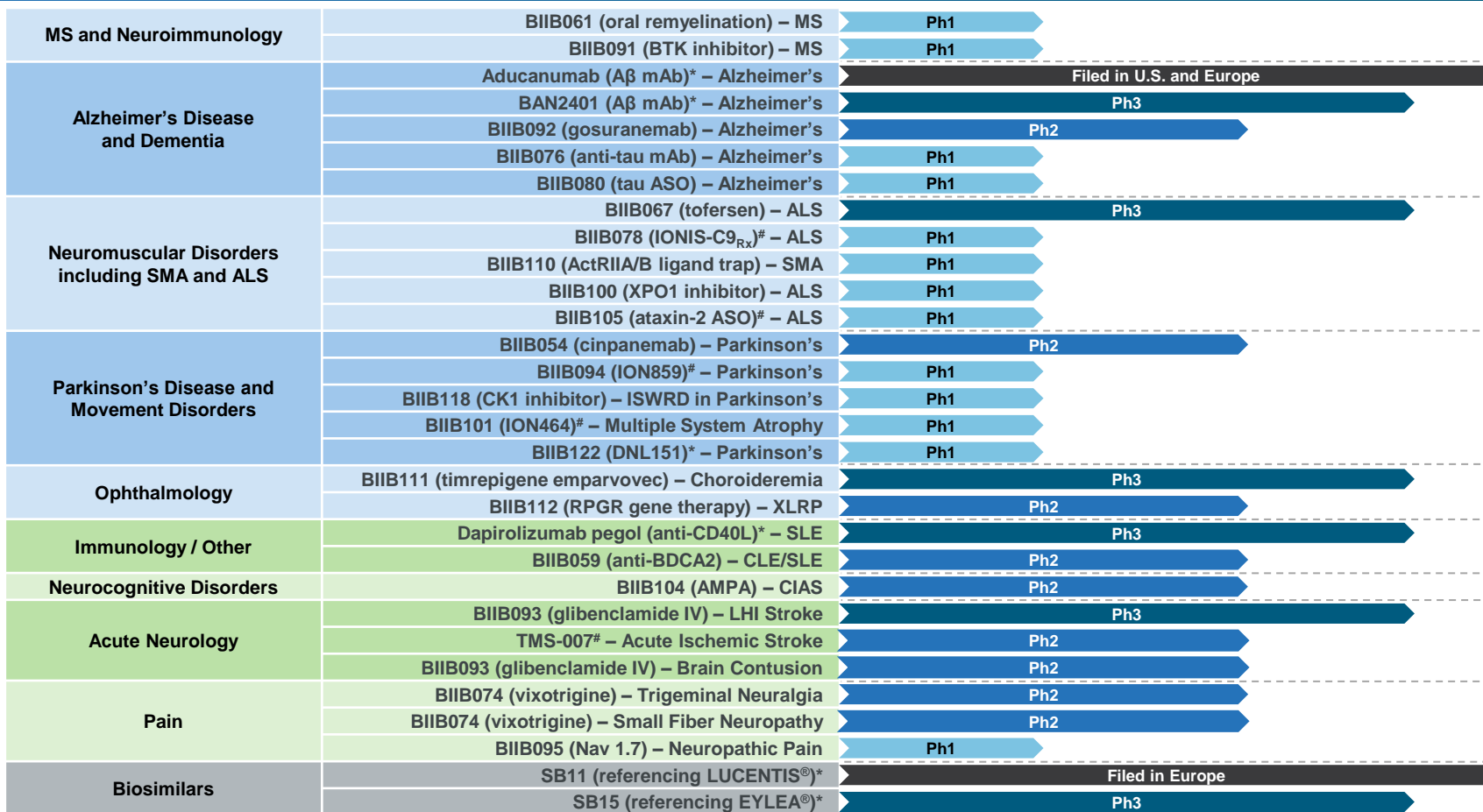
- IND on clinical hold due to dorsal root ganglion toxicity
- Pursuing next-generation SMA gene therapy technology

6 Near-term pipeline readouts expected by end of 2021 across a diversified neuroscience portfolio

		<u>Data Readout</u>	<u>Expected By*</u>	<u>Potential Value Creation</u>
Phase 3	Choroideremia	Phase 3 data for BIIB111	H1 2021	2 pivotal readouts
	ALS	Phase 3 data for tofersen	H2 2021	
Phase 2	Parkinson's disease	Phase 2 data for BIIB054	H1 2021	4 Phase 2 readouts
	XLRP	Phase 2/3 data for BIIB112	H1 2021	
	Stroke#	Phase 2 data for TMS-007 [†]	H1 2021	
	Alzheimer's disease	Phase 2 data for gosuranemab	H1 2021	

*Current best estimate subject to change

Broad neuroscience pipeline to drive multi-franchise strategy

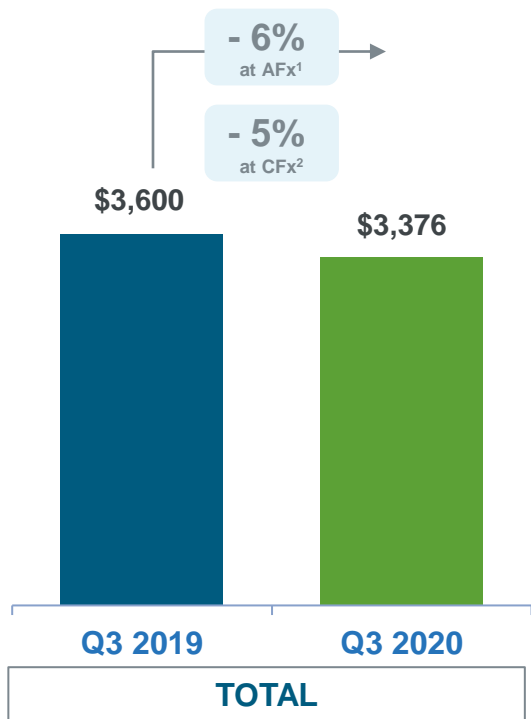


Financial Update

Michael McDonnell
EVP, Chief Financial Officer

Q3 2020 financial results

Revenues (\$M)



Diluted EPS (\$)



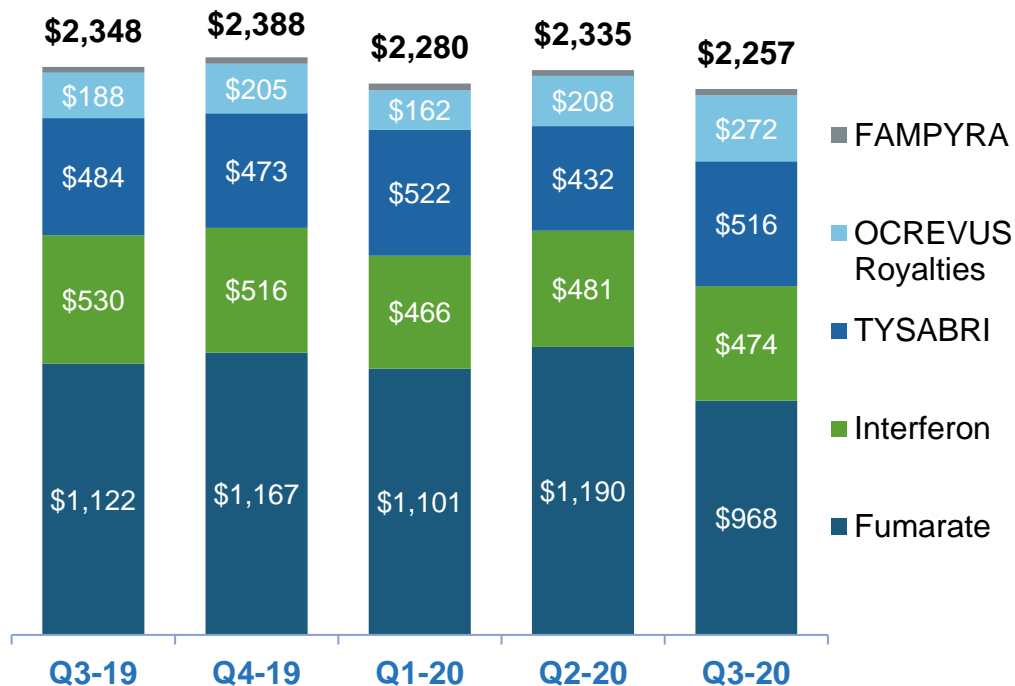
A reconciliation of our GAAP to Non-GAAP financial results is at the end of this presentation.

¹AFx reflects reported results at actual exchange rates of that period.

²CFx or constant currency is calculated by converting the current period's foreign currency revenue values into USD using the average exchange rates from the prior period and comparing the resulting revenue values to the prior period revenue values in USD, excluding any gains or losses from hedging.

Global multiple sclerosis revenues

MS Revenues (\$M)

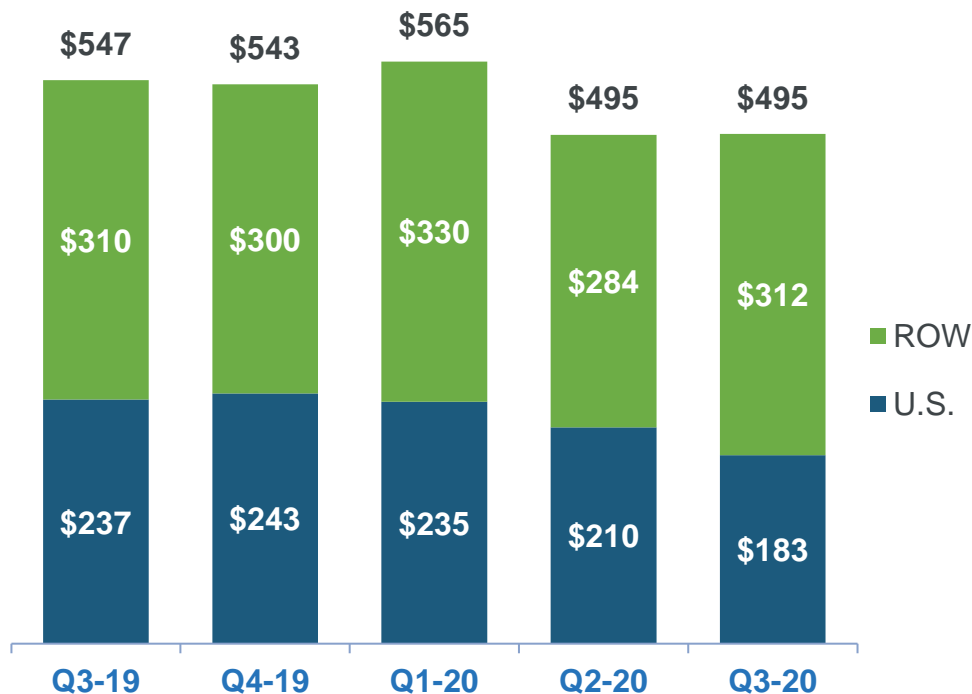


Q3 2020 Highlights

- **Global MS** revenues declined 4% vs. prior year
- **Fumarates** declined 14% vs. prior year impacted by the entrance of multiple TECFIDERA generics in the U.S.
- **TYSABRI** grew 7% vs. prior year with continued global patient growth
- **Interferons** decreased 11% vs. prior year

Global SPINRAZA revenues

SPINRAZA Revenues (\$M)

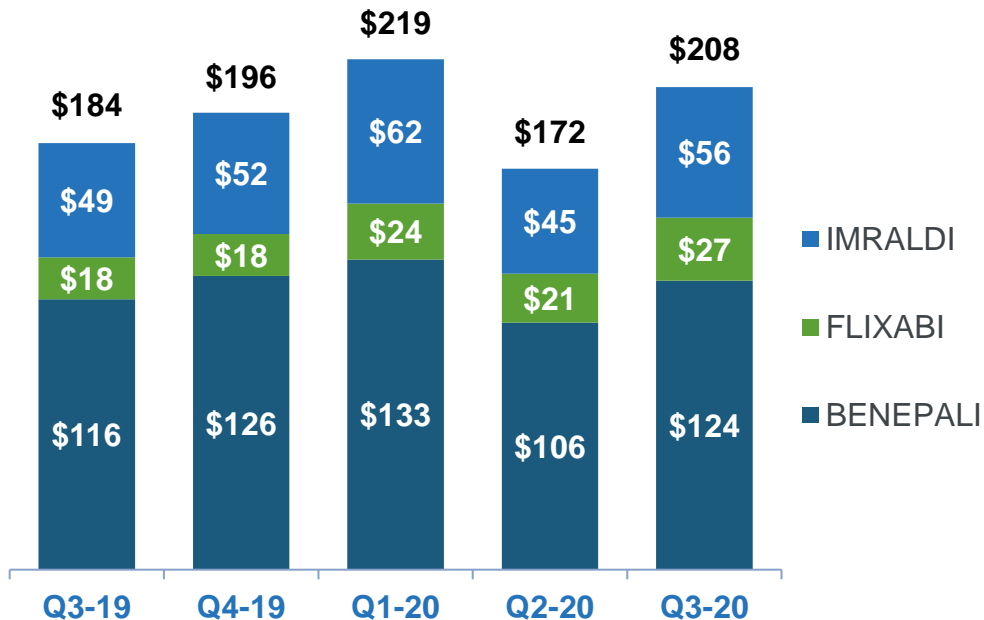


Q3 2020 Highlights

- Global SPINRAZA revenues declined 10% vs. prior year
- SPINRAZA now has > 11,000* global patients
- Approved in over 50 countries with formal reimbursement in over 40 countries

Biosimilars revenues

Biosimilars Revenues (\$M)



Q3 2020 Highlights

- Biosimilars revenues increased 13% vs. prior year
- ~ 220,000 patients on Biogen biosimilar products at end of Q3 2020*
- Filing accepted for SB11 referencing LUCENTIS in Europe
- Biogen to commercialize potential ophthalmology biosimilars referencing LUCENTIS and EYLEA across the U.S., Canada, Europe, Japan, and Australia

Q3 2020 revenue highlights

\$ in Millions	Q3 2020	Q3 2019	Q2 2020	Δ Y/Y	Δ Q/Q
Total Product Revenues¹	\$2,690	\$2,895	\$2,796	(7%)	(4%)
RITUXAN/GAZYVA Revenues	\$288	\$408	\$270	(29%)	7%
OCREVUS Royalties	\$272	\$188	\$208	45%	31%
Revenues from Anti-CD20 Therapeutic Programs	\$560	\$596	\$478	(6%)	17%
Other Revenues	\$126	\$110	\$408	15%	(69%)
Total Revenues¹	\$3,376	\$3,600	\$3,682	(6%)	(8%)

Q3 2020 financial results highlights

\$ in Millions	Q3 2020	Q3 2019	Q2 2020	ΔY/Y	ΔQ/Q
GAAP Cost of Sales	\$449	\$430	\$411	(4%)	(9%)
% of Total Revenues	13%	12%	11%		
Non-GAAP Cost of Sales	\$449	\$430	\$411	(4%)	(9%)
% of Total Revenues	13%	12%	11%		
GAAP R&D Expenses	\$1,141	\$540	\$648	(111%)	(76%)
% of Total Revenues	34%	15%	18%		
Non-GAAP R&D Expenses	\$540	\$540	\$439	0%	(23%)
% of Total Revenues	16%	15%	12%		
GAAP SG&A Expenses	\$573	\$555	\$555	(3%)	(3%)
% of Total Revenues	17%	15%	15%		
Non-GAAP SG&A Expenses	\$569	\$547	\$551	(4%)	(3%)
% of Total Revenues	17%	15%	15%		
GAAP Divestiture of Assets	\$0	(\$18)	\$0	NMF	NMF
GAAP Amortization of Acquired Intangibles	\$83	\$284	\$62	71%	(34%)
Collaboration Profit (Loss) Sharing	\$73	\$60	\$22	(21%)	(235%)

Q3 2020 financial results highlights

\$ in Millions except EPS, Shares in Millions	Q3 2020	Q3 2019	Q2 2020	Δ Y/Y	Δ Q/Q
GAAP Other Income (Expense)	(\$129)	(\$27)	\$63	(372%)	(304%)
Non-GAAP Other Income (Expense)	(\$46)	(\$23)	(\$30)	(105%)	(52%)
GAAP Tax Rate	25%	12%	22%		
Non-GAAP Tax Rate	18%	16%	19%		
GAAP JV Equity Income (Loss)	(\$13)	(\$22)	\$15	40%	(186%)
Non-GAAP JV Equity Income (Loss)	(\$3)	(\$1)	\$17	(267%)	(116%)
GAAP Net Income (Loss) Attributable to Noncontrolling Interests	\$2	(\$0)	\$64	NMF	(96%)
Non-GAAP Net Income (Loss) Attributable to Noncontrolling Interests	(\$5)	(\$0)	\$68	NMF	(107%)
Weighted average diluted shares used in calculating diluted EPS	157	184	161	15%	2%
GAAP Net Income Attributable to Biogen Inc.	\$702	\$1,546	\$1,542	(55%)	(55%)
GAAP Diluted EPS	\$4.46	\$8.39	\$9.59	(47%)	(53%)
Non-GAAP Net Income Attributable to Biogen Inc.	\$1,390	\$1,689	\$1,757	(18%)	(21%)
Non-GAAP Diluted EPS	\$8.84	\$9.17	\$10.92	(4%)	(19%)



Numbers may not foot due to rounding. Percent changes represented as favorable/(unfavorable).
A reconciliation of our GAAP to Non-GAAP financial results is at the end of this presentation.

Balance sheet highlights

\$4.6B

Cash and marketable securities
at end of Q3 2020

\$7.4B

Debt at end of Q3 2020

\$1.2B

Net cash flow from operations
in Q3 2020

\$84M

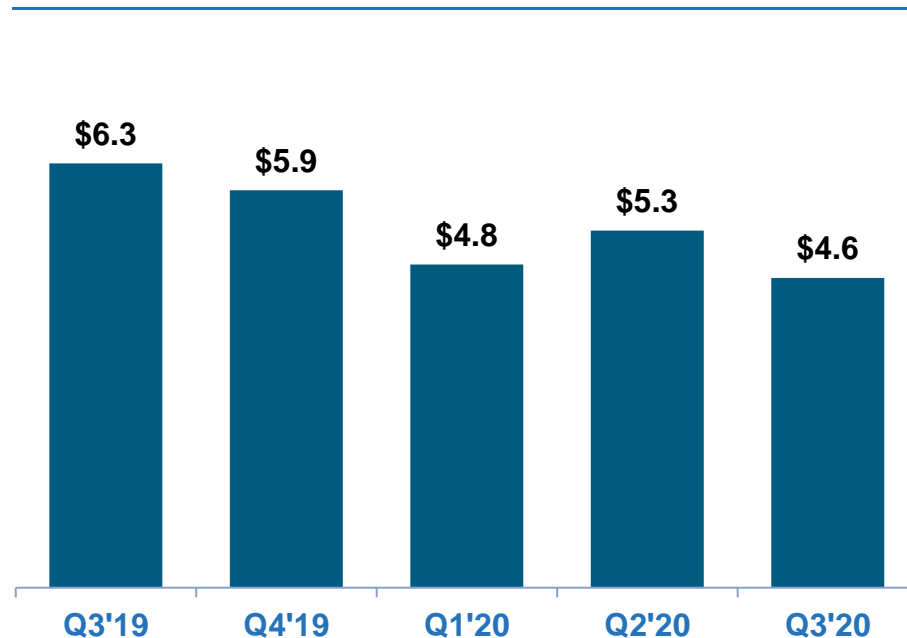
Capital expenditures in Q3 2020

\$1.1B

Free cash flow* in Q3 2020

Cash and Marketable Securities

(\$ billions)



*Free cash flow is defined as net cash flow from operations less capital expenditures. A reconciliation of GAAP to Non-GAAP financial results can be found in Table 3 at the end of this presentation.

Updated 2020 full year financial guidance

	Prior FY 2020 Guidance	Updated FY 2020 Guidance
Revenues	\$13.8 billion to \$14.2 billion	\$13.2 billion to \$13.4 billion
GAAP Diluted EPS	\$32.00 to \$34.00	\$25.50 to \$26.50
Non-GAAP Diluted EPS	\$34.00 to \$36.00	\$32.50 to \$33.50

2020 Guidance Assumptions:

- During the third quarter of 2020, the Company began to experience the impact of multiple TECFIDERA generic entrants in the U.S., and this financial guidance assumes significant erosion of TECFIDERA in the fourth quarter of 2020, the pace of which is difficult to predict
- Does not include potential impacts from new acquisitions or large business development transactions, as both have elements that are hard to predict
- Assumes that foreign exchange rates as of September 30, 2020, remain in effect for the remainder of the year



Closing Remarks

Michel Vounatsos
Chief Executive Officer



Continuing to create value through pioneering science

Biogen poised to potentially lead in Alzheimer's

- ✓ Aducanumab BLA accepted
 - ✓ MAA submitted in EU; formal meeting in Japan
 - ✓ Broad Alzheimer's portfolio
 - ✓ Denali Transport Vehicle platform
-

Working to create multiple franchises

- ✓ Continued business development
 - ✓ Collaboration with Denali expands Parkinson's portfolio
 - ✓ Continued evolution of pipeline
-

Multiple value creation inflection points

- ✓ 30 clinical assets
- ✓ 22 new clinical programs since 2017
- ✓ 6 mid- to late-stage data readouts expected by end of 2021

Leading in Neuroscience

Where science meets humanity at Biogen

PATIENTS



Science that transforms patient lives by improving brain health, mobility, breathing, and vision.

~ 220,000 Patients treated with biosimilars[^]

Driving Health Equity through study with Tufts CSDD^{^^} and CISCRP to improve healthcare outcomes and clinical trial diversity

1st Worldwide Medical Hackathon held to improve measurable and meaningful patient outcomes

Hosted Climate, Health & Equity Panel at the National Minority Quality Forum's Summit on Health Disparities

EMPLOYEES



Science that is inspired by the diversity and passion of our people.

48% women in director-level positions and above[^]

28% ethnic or racial minorities in U.S. director-level roles and above[^]

Diversity & Inclusion North Carolina Employer Award for commitment to disability inclusion

'Best Place to Work for LGBTQ+ Inclusion' 7 consecutive years with 100% score

100% on Disability Equality Index for disability inclusion

ENVIRONMENT



Science that acts with purpose to address the urgent and long-term challenges facing humankind.

Healthy Climate, Healthy Lives a 20 year, \$250M investment with the goal of eliminating use of fossil fuels and improving public health

1st U.S. life science company to join Business Ambition for 1.5C with climate target approved by Science-based Targets Initiative

1st life science company to join Ceres BICEP* network to advance stronger climate and energy policies

One of America's JUST companies recognized by JUST Capital on areas Americans value most

COMMUNITY



Science that seeks to solve societal problems and create access to innovation.

\$10M deposited to OneUnited, Black-owned bank, to provide economic empowerment and support #BankBlack movement

Provided disaster relief support for California Wildfires and Beirut Explosion

Biogen Foundation served 25 students in MGH Youth Neurology Program to inspire underrepresented youth in STEM

STAR** program enters 3rd year Biogen Foundation initiative catalyzes local STEM ecosystems through 6 Massachusetts nonprofits

Healthy Climate, Healthy Lives

\$250 million, 20-year initiative with the aim to improve health, especially for the world's most vulnerable populations



FOSSIL FUEL FREE

Goal of eliminating the use of fossil fuels across operations by 2040



COLLABORATIONS WITH GLOBAL LEADERS

Working with global leaders, including MIT, the Harvard T.H. Chan School of Public Health, and World Business Council for Sustainable Development



EMPLOYEE ENGAGEMENT

Encouraging employees to get involved in making changes

Questions & Answers



Appendix



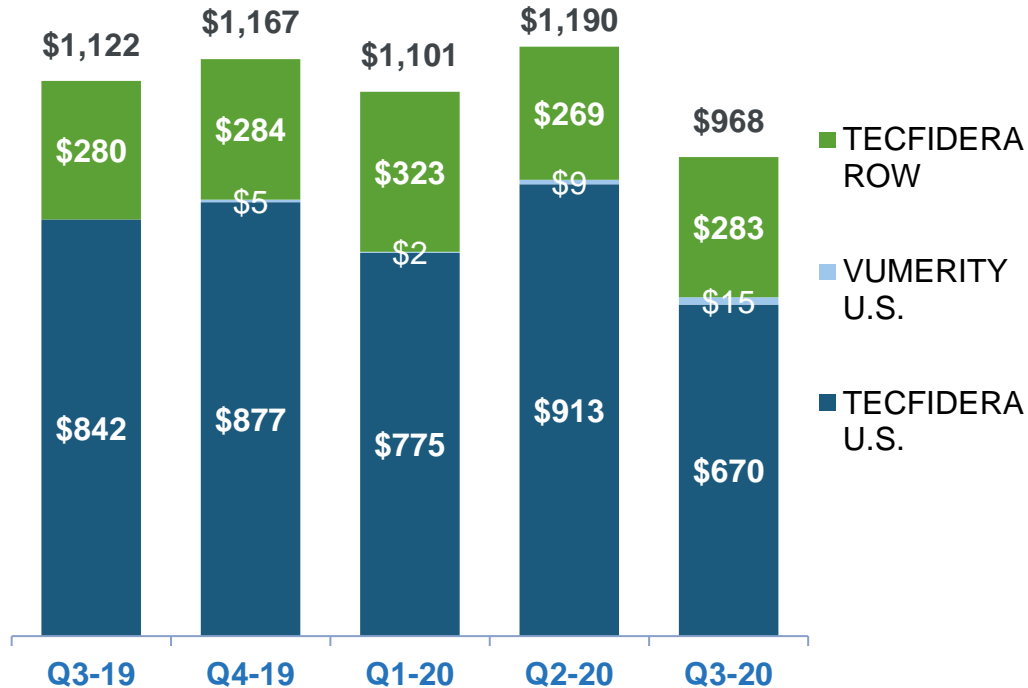
Q3 2020 MS revenue highlights

\$ in Millions	Q3 2020	Q3 2019	Q2 2020	Δ Y/Y	Δ Q/Q
TECFIDERA U.S.	\$670	\$842	\$913	(20%)	(27%)
TECFIDERA ROW ¹	\$283	\$280	\$269	1%	5%
Total TECFIDERA Revenues¹	\$953	\$1,122	\$1,182	(15%)	(19%)
VUMERITY U.S.	\$15	\$0	\$9	NMF	67%
Total Fumarate Revenues¹	\$968	\$1,122	\$1,190	(14%)	(19%)
AVONEX U.S.	\$280	\$303	\$295	(7%)	(5%)
AVONEX ROW ¹	\$101	\$117	\$94	(14%)	7%
Total AVONEX Revenues¹	\$381	\$420	\$389	(9%)	(2%)
PLEGRIDY U.S.	\$47	\$58	\$51	(18%)	(7%)
PLEGRIDY ROW ¹	\$46	\$52	\$42	(12%)	10%
Total PLEGRIDY Revenues¹	\$93	\$110	\$93	(15%)	1%
Total Interferon Revenues¹	\$474	\$530	\$481	(11%)	(2%)
TYSABRI U.S.	\$304	\$263	\$244	16%	25%
TYSABRI ROW ¹	\$212	\$221	\$188	(4%)	13%
Total TYSABRI Revenues¹	\$516	\$484	\$432	7%	20%
FAMPYRA ¹	\$27	\$24	\$23	10%	17%
Total MS Product Revenues¹	\$1,985	\$2,160	\$2,127	(8%)	(7%)
OCREVUS Royalties	\$272	\$188	\$208	45%	31%
MS Product Revenues¹ + OCREVUS Royalties	\$2,257	\$2,348	\$2,335	(4%)	(3%)

Global fumarate revenue



Fumarate Revenues (\$M)



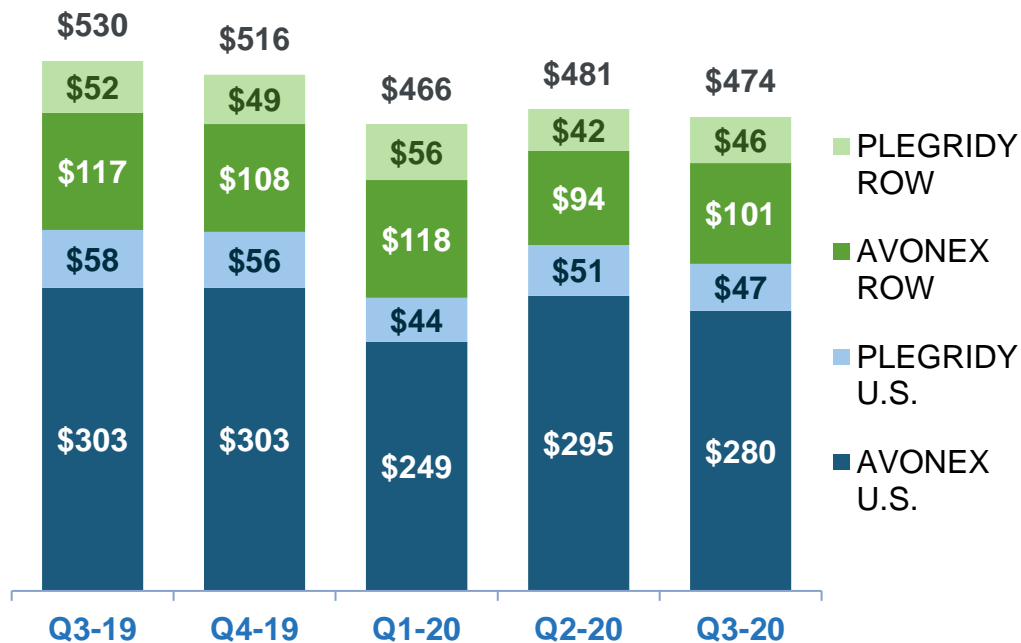
Q3 2020 Highlights

Revenues vs. Q3 2019 and Q2 2020

	<u>ΔY/Y</u>	and	<u>ΔQ/Q</u>
WW	- 14%		- 19%
U.S.	- 19%		- 26%
ROW	+ 1%		+ 5%

Global interferon revenue

Interferon Revenues (\$M)

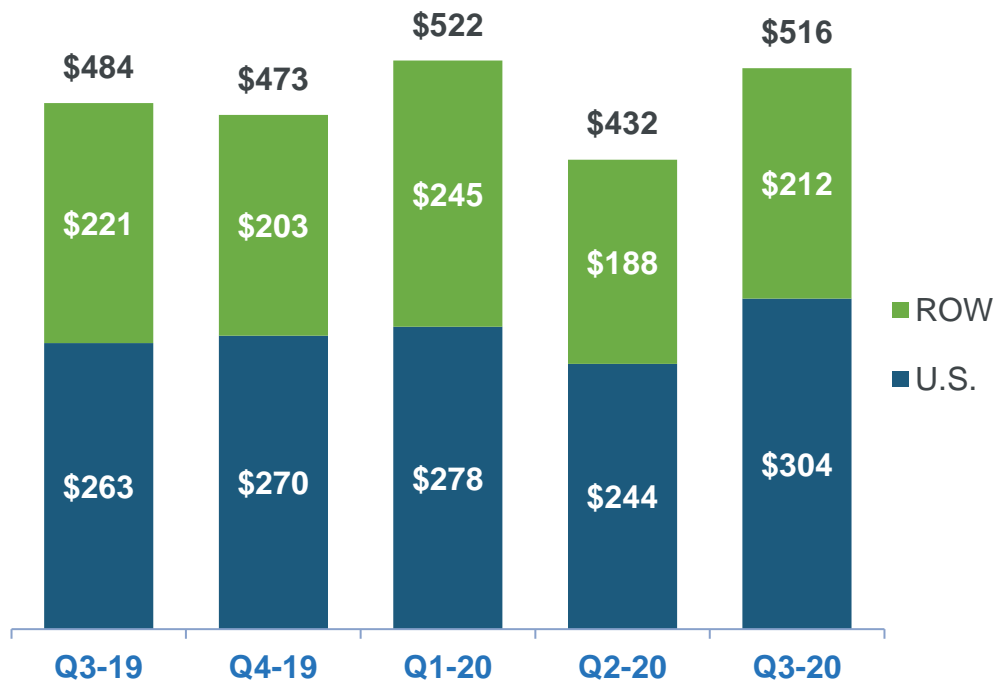


Q3 2020 Highlights

Revenues vs. Q3 2019 and Q2 2020

	$\Delta Y/Y$	and	$\Delta Q/Q$
WW	- 11%	and	- 2%
U.S.	- 9%	and	- 5%
ROW	- 13%	and	+ 8%

TYSABRI Revenues (\$M)

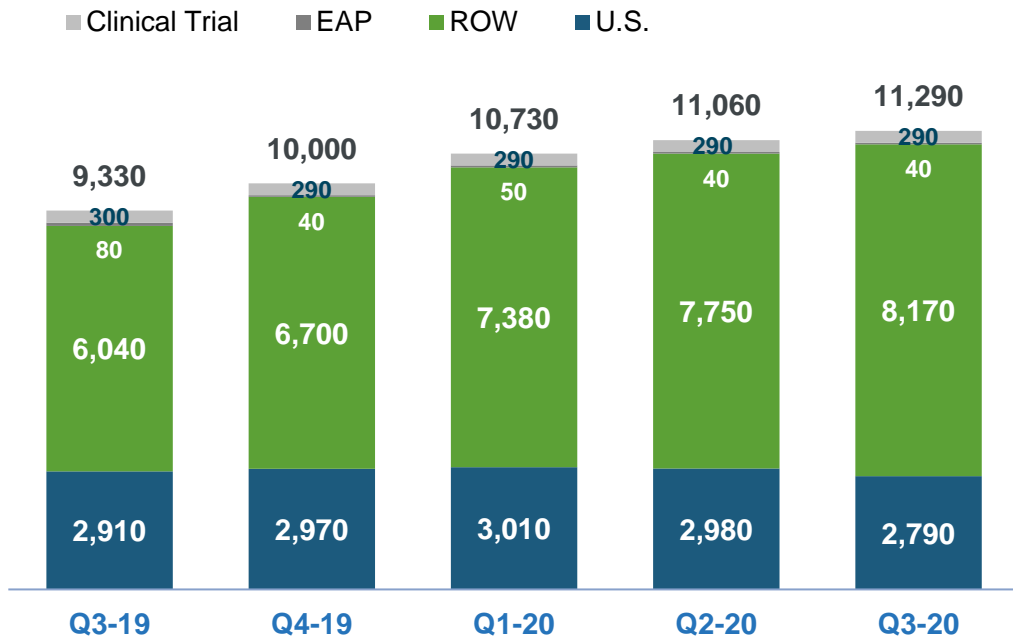


Q3 2020 Highlights

Revenues vs. Q3 2019 and Q2 2020

	<u>ΔY/Y</u>		<u>ΔQ/Q</u>
WW	+ 7%	and	+ 20%
U.S.	+ 16%	and	+ 25%
ROW	- 4%	and	+ 13%

SPINRAZA Patients



Highlights

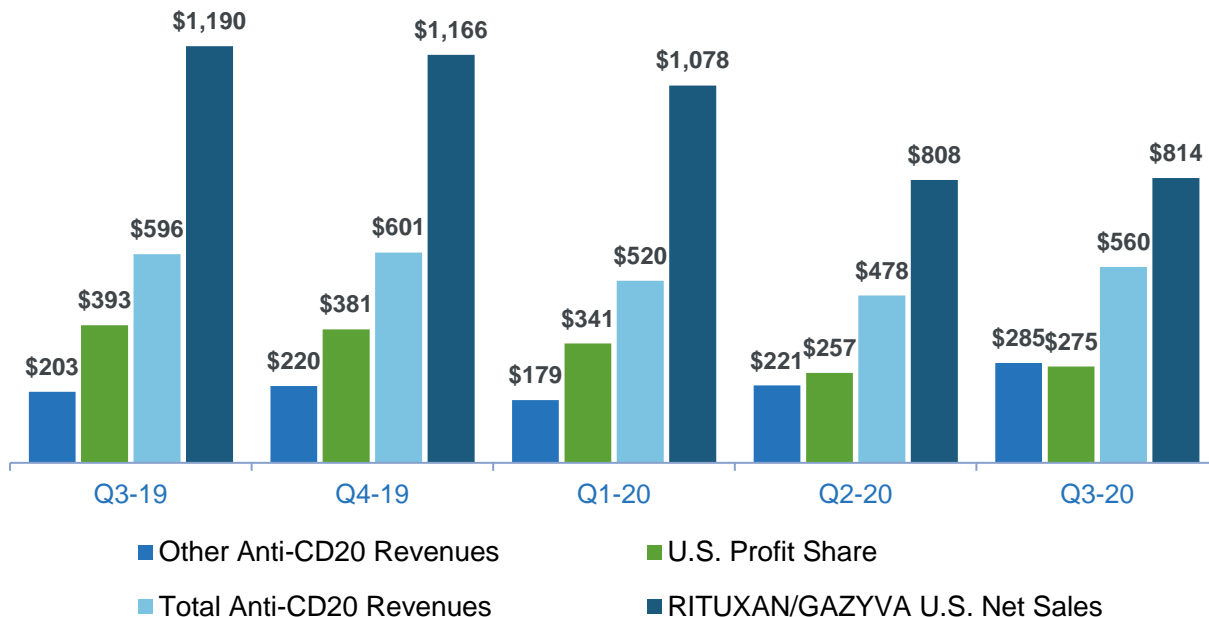
- We estimate there are over 60,000 SMA patients in markets where Biogen expects to commercialize SPINRAZA*
- As of September 30, 2020, > 11,000 patients on therapy across the post-marketing setting, the EAP, and clinical trials

Q3 2020 impact of foreign exchange and hedging

	Actuals	Hedge Gains (Losses) in the Quarter			FX Impact w/o Hedge Favorable/ (Unfavorable)		Hedge Impact Favorable/ (Unfavorable)		Total Impact Favorable/ (Unfavorable)	
	Q3'20	Q3'20	Q3'19	Q2'20	Vs. Q3'19	Vs. Q2'20	Vs. Q3'19	Vs. Q2'20	Vs. Q3'19	Vs. Q2'20
Total Revenues	\$3,376	(\$16)	\$33	\$19	\$20	\$52	(\$53)	(\$36)	(\$33)	\$16
TECFIDERA	\$953	(\$7)	\$16	\$8	\$9	\$14	(\$23)	(\$15)	(\$14)	(\$1)
Interferon	\$474	(\$3)	\$8	\$5	\$4	\$7	(\$11)	(\$7)	(\$7)	(\$1)
TYSABRI	\$516	(\$4)	\$11	\$5	\$4	\$10	(\$16)	(\$10)	(\$12)	\$0
SPINRAZA	\$495	(\$2)	(\$0)	\$2	\$5	\$13	(\$2)	(\$4)	(\$7)	\$10
Biosimilars	\$208	N/A	N/A	N/A	\$7	\$7	\$0	\$0	\$7	\$7

Anti-CD20 revenue

Revenues from Anti-CD20 Therapeutic Programs (\$M)



Highlights

- Revenues vs. Q3 2019 and Q2 2020

	<u>ΔY/Y</u>	<u>ΔQ/Q</u>
U.S. Net Sales	- 32%	and + 1%
U.S. Profit Share ¹	- 30%	and + 7%
Other Anti-CD20	+ 41%	and + 29%
Total Anti-CD20 Revenues	- 6%	and + 17%

- Other anti-CD20 revenues consist of royalty revenues on sales of OCREVUS and our share of pre-tax copromotion profits on RITUXAN in Canada

GAAP to Non-GAAP Reconciliation

(unaudited, in millions, except per share amounts)

An itemized reconciliation between diluted earnings per share on a GAAP and Non-GAAP basis is as follows:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2020	2019	2020	2019
GAAP earnings per share - Diluted	\$ 4.46	\$ 8.39	\$ 22.25	\$ 23.35
Adjustments to GAAP net income attributable to Biogen Inc. (as detailed below)	4.38	0.78	6.64	1.87
Non-GAAP earnings per share - Diluted	\$ 8.84	\$ 9.17	\$ 28.89	\$ 25.22

An itemized reconciliation between net income attributable to Biogen Inc. on a GAAP and Non-GAAP basis is as follows:

	For the Three Months Ended September 30,	
	2020	2019
GAAP net income attributable to Biogen Inc.	\$ 701.5	\$ 1,545.9
Adjustments:		
Acquisition and divestiture related costs:		
Amortization and impairment of acquired intangible assets ^A	82.6	283.9
Acquired in-process research and development	—	—
(Gain) loss on fair value remeasurement of contingent consideration ^A	(29.0)	(57.8)
Loss on divestiture of Hillerød, Denmark manufacturing operations ^B	—	(17.7)
Net distribution to noncontrolling interests	7.4	—
Acquisition-related transaction and integration costs	4.2	(0.3)
Accelerated share-based compensation expense	—	6.7
Subtotal: Acquisition and divestiture related costs	65.2	214.8
Restructuring, business transformation and other cost saving initiatives:		
2017 corporate strategy implementation ^C	—	1.3
Restructuring charges ^C	—	0.3
Subtotal: Restructuring, business transformation and other cost saving initiatives	—	1.6
(Gain) loss on equity security investments	82.2	4.6
Sangamo upfront payment and premium paid on the purchase of Sangamo common stock ^D	—	—
Denali upfront payment and premium paid on the purchase of Denali common stock ^E	601.3	—
Premium paid on early debt redemption	—	—
Valuation allowance associated with deferred tax assets ^F	33.3	—
Income tax effect related to reconciling items	(103.4)	(44.8)
Swiss tax reform ^G	—	(54.3)
Amortization included in equity in loss of investee, net of tax ^H	10.3	21.2
Non-GAAP net income attributable to Biogen Inc.	\$ 1,390.4	\$ 1,689.0

Use of Non-GAAP Financial Measures

We supplement our GAAP consolidated financial statements and GAAP financial measures with other financial measures, such as free cash flow, adjusted net income and adjusted diluted earnings per share as well as “constant currency” measures that have been adjusted for the change in foreign exchange rates between periods. 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, divestitures and significant collaboration and licensing arrangements

We exclude transaction, integration and certain other costs related to the acquisition and divestiture of businesses, the acquisitions of assets, significant collaboration and licensing arrangements and items associated with the initial consolidation or deconsolidation of variable interest entities. These adjustments include, but are not limited to, upfront payments in significant collaborations and licensing arrangements, 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.

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

GAAP to Non-GAAP Reconciliation

(unaudited, in millions, except per share amounts)

	For the Nine Months Ended September 30,	
	2020*	2019
GAAP net income attributable to Biogen Inc.	\$ 3,642.7	\$ 4,448.8
Adjustments:		
Acquisition and divestiture related costs:		
Amortization and impairment of acquired intangible assets ^A	215.6	422.2
Acquired in-process research and development	75.0	—
(Gain) loss on fair value remeasurement of contingent consideration ^A	(23.5)	(66.3)
Loss on divestiture of Hillerød, Denmark manufacturing operations ^B	—	95.5
Net distribution to noncontrolling interests	0.3	—
Stock option expense ^I	—	26.2
Acquisition-related transaction and integration costs	9.4	23.4
Accelerated share-based compensation expense	—	6.7
Subtotal: Acquisition and divestiture related costs	276.8	507.7
Restructuring, business transformation and other cost saving initiatives:		
2017 corporate strategy implementation ^C	—	3.0
Restructuring charges ^C	—	1.5
Subtotal: Restructuring, business transformation and other cost saving initiatives	—	4.5
(Gain) loss on equity security investments	40.2	(197.3)
Sangamo upfront payment and premium paid on the purchase of Sangamo common stock ^D	208.2	—
Denali upfront payment and premium paid on the purchase of Denali common stock ^E	601.3	—
Premium paid on early debt redemption	9.4	—
Valuation allowance associated with deferred tax assets ^F	89.3	—
Income tax effect related to reconciling items	(171.2)	38.2
Swiss tax reform ^G	—	(54.3)
Amortization included in equity in loss of investee, net of tax ^H	33.2	57.6
Non-GAAP net income attributable to Biogen Inc.	\$ 4,729.9	\$ 4,805.2

*Beginning in the third quarter of 2020, material upfront payments associated with significant collaboration and licensing arrangements are excluded from Non-GAAP R&D expense in order to better reflect the Company's core operating performance. Year-to-date Non-GAAP results also reflect this change as the \$125.0 million upfront payment related to the collaboration with Sangamo Therapeutics, Inc. in the second quarter of 2020 has also now been excluded from Non-GAAP R&D expense.

A reconciliation between total revenue and adjusted revenue at constant currency is as follows:

	For the Three Months Ended September 30,				
	GAAP Revenues		Currency Translation Impact	Adjusted Revenues at Constant Currency	% Change Adjusted Revenues at Constant Currency ^A
	2020	2019	Q3 '20 v. Q3 '19	Q3 '20 v. Q3 '19	Q3 '20 v. Q3 '19
Total Revenues	\$ 3,376.1	\$ 3,600.1			
Less impact of hedging gains/losses	\$ (17.8)	\$ 36.0			
Adjusted revenues	\$ 3,393.9	\$ 3,564.1	\$ (25.6)	\$ 3,368.3	(5)%

^AConstant currency is calculated by converting the current period's foreign currency revenue values into USD using the average exchange rates from the prior period and comparing the resulting revenue values to the prior period revenue values in USD, excluding any gains or losses from hedging.

A reconciliation between net cash flow from operations and free cash flow is as follows:

	For the Three Months Ended			For the Nine Months Ended	
	September 30, 2020	September 30, 2019	June 30, 2020	September 30, 2020	September 30, 2019
Net cash flows provided by operating activities	\$ 1,181.1	\$ 1,694.9	\$ 1,948.5	\$ 4,596.9	\$ 5,118.4
Purchases of property, plant, and equipment	(84.1)	(90.1)	(105.0)	(338.8)	(404.1)
Free Cash Flow ^A	\$ 1,097.0	\$ 1,604.8	\$ 1,843.5	\$ 4,258.1	\$ 4,714.3

^AFree cash flow is defined as net cash flow from operations less capital expenditures.

2020 Full Year Guidance: GAAP to Non-GAAP Reconciliation

An itemized reconciliation between projected net income attributable to Biogen Inc. and diluted earnings per share on a GAAP and Non-GAAP basis is as follows:

	2020 Full Year Guidance		
	\$	Shares	Diluted EPS
GAAP net income attributable to Biogen Inc.	\$ 4,197.0	161.4	\$ 26.00
Adjustments:			
Amortization and impairment of acquired intangible assets ^A	279.0		
Gain (loss) on fair value remeasurement of contingent consideration ^A	(23.0)		
Acquired in-process research and development	75.0		
Payments related to license agreements ^{D,E}	810.0		
Amortization included in equity in loss of investee, net of tax ^H	40.0		
Other	59.0		
Valuation allowance associated with deferred tax assets ^F	89.0		
Income tax effect related to reconciling items	(199.0)		
Non-GAAP net income attributable to Biogen Inc.	\$ 5,327.0	161.4	\$ 33.00

Notes to GAAP to Non-GAAP Reconciliation

^A Amortization and impairment of acquired intangible assets for the three and nine months ended September 30, 2020, compared to the same periods in 2019, decreased primarily due to a lower rate of amortization for acquired intangible assets.

For the three and nine months ended September 30, 2020, amortization and impairment of acquired intangible assets reflects the impact of a \$19.3 million impairment charge related to one of our in-process research and development (IPR&D) intangible assets. Amortization and impairment of acquired intangible assets for the three and nine months ended September 30, 2019, reflects the impact of a \$215.9 million impairment charge related to certain IPR&D assets associated with the Phase 2b study of BG00011 (STX-100) for the potential treatment of idiopathic pulmonary fibrosis, which was discontinued during the third quarter of 2019. We also adjusted the value of our contingent consideration obligations related to BG00011 resulting in a gain of \$61.2 million in the third quarter of 2019.

^B In August 2019 we completed the sale of all of the outstanding shares of our subsidiary that owned our biologics manufacturing operations in Hillerød, Denmark to FUJIFILM Corporation (FUJIFILM). Upon the closing of this transaction, we received approximately \$881.9 million in cash, which may be adjusted based on contractual terms. We determined that the operations disposed of in this transaction did not meet the criteria to be classified as discontinued operations under the applicable guidance.

For the nine months ended September 30, 2019, we recorded a loss of approximately \$160.2 million in our condensed consolidated statements of income. This loss included a pre-tax loss of \$95.5 million, which reflected a \$17.7 million decrease to our previously recorded loss, reflecting our estimated fair value of the assets and liabilities held for sale as of September 30, 2019, adjusted for our expected costs to sell our Hillerød, Denmark manufacturing operations of approximately \$11.2 million and included our initial estimate of the fair value of an adverse commitment of approximately \$114.0 million associated with the guarantee of future minimum batch production at the Hillerød facility. The value of this adverse commitment was determined using a probability-weighted estimate of future manufacturing activity. In addition, we recorded a tax expense of \$64.7 million related to the transaction during the nine months ended September 30, 2019.

In addition, we may earn certain contingent payments based on future manufacturing activities at the Hillerød facility. For the disposition of a business, our policy is to recognize contingent consideration when the consideration is realizable. Consistent with our assessment as of the transaction date, we currently believe the probability of earning these payments is remote and therefore we did not include these contingent payments in our calculation of the fair value of the operations.

Notes to GAAP to Non-GAAP Reconciliation

^C 2017 corporate strategy implementation and restructuring charges are related to our efforts to create a leaner and simpler operating model.

^D In February 2020 we entered into a collaboration and license agreement with Sangamo Therapeutics, Inc. (Sangamo) to develop and commercialize ST-501 for tauopathies, including Alzheimer's disease; ST-502 for synucleinopathies, including Parkinson's disease; a third neuromuscular disease target; and up to nine additional neurological disease targets to be identified and selected within a five-year period. In connection with the closing of this transaction in April 2020 we purchased \$225.0 million of Sangamo common stock, or approximately 24 million shares at approximately \$9.21 per share, which are subject to transfer restrictions. We recorded an asset in investments and other assets in our condensed consolidated balance sheets to reflect the initial fair value of the Sangamo common stock acquired and a charge of approximately \$83.2 million to research and development expense in our condensed consolidated statements of income to reflect the premium paid for the Sangamo common stock. We also made an upfront payment of \$125.0 million that was recorded as research and development expense.

^E In August 2020 we entered into a collaboration and license agreement with Denali Therapeutics Inc. (Denali) to co-develop and co-commercialize Denali's small molecule inhibitors of leucine-rich kinase 2 (LRRK2) for Parkinson's disease. As part of this collaboration we purchased approximately \$465.0 million of Denali common stock in September 2020, or approximately 13 million shares at approximately \$34.94 per share, which are subject to transfer restrictions. We recorded an asset in investments and other assets in our condensed consolidated balance sheets to reflect the initial fair value of the Denali common stock acquired and a charge of approximately \$41.3 million to research and development expense in our condensed consolidated statements of income to reflect the premium paid for the Denali common stock. We also made an upfront payment of \$560.0 million that was recorded as research and development expense.

^F Income tax expense for the three and nine months ended September 30, 2020, included \$33.3 million and \$89.3 million, respectively, in income tax expense related to a net valuation allowance against certain deferred tax assets, due to the decisions of the U.S. District Court of the Northern District of West Virginia and the U.S. District Court of the District of Delaware that the asserted claims of our U.S. patent No. 8,399,514, which cover the treatment of multiple sclerosis with 480 mg of dimethyl fumarate per day as provided for in our TECFIDERA label, are invalid.

Notes to GAAP to Non-GAAP Reconciliation

^G During the third quarter of 2019 a new taxing regime in the country and certain cantons of Switzerland was enacted, which we refer to as Swiss Tax Reform. As a result of the impact of Swiss Tax Reform, we recorded an income tax benefit of approximately \$54.3 million resulting from a remeasurement of our deferred tax assets and liabilities in the three and nine months ended September 30, 2019.

^H Amortization included in equity in loss of investee, net of tax represents the amortization of the differences between the fair value of our investment in Samsung Bioepis Co., Ltd. and the carrying value of our interest in the underlying net assets of the investee. These basis differences are amortized over their economic life.

^I Stock option expense reflects the accelerated vesting of stock options previously granted to Nightstar Therapeutics plc (NST) employees as a result of our acquisition of NST in the second quarter of 2019.