Business Overview
2022 Annual Meeting of Stockholders
Michel Vounatsos, Chief Executive Officer

June 15, 2022
Forward-looking statements

This presentation and the discussions during this Annual Meeting 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; 2022 financial guidance; plans relating to share repurchases. 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; the impact of the final NCD; uncertainty of long-term success in developing, licensing, or acquiring other product candidates or additional indications for existing products; risks and uncertainty as to whether the anticipated benefits of the transaction with Samsung Biologics can be achieved; uncertainty as to whether the anticipated benefits of the cost-reduction and productivity measures can be achieved; failure to compete effectively due to significant product competition in the markets for our products; failure to successfully execute or realize the anticipated benefits of our strategic and growth initiatives; difficulties in obtaining and maintaining adequate coverage, pricing, and reimbursement for our products; our dependence on collaborators, joint venture partners, and other third parties for the development, regulatory approval, and commercialization of products and other aspects of our business, which are outside of our full control; the potential impact of the conflict in Ukraine; risks associated with current and potential future healthcare reforms; risks related to commercialization of biosimilars; failure to obtain, protect, and enforce our data, intellectual property, and other proprietary rights and the risks and uncertainties relating to intellectual property claims and challenges; the risk that positive results in a clinical trial may not be replicated in subsequent or confirmatory trials or success in early stage clinical trials may not be predictive of results in later stage or large scale clinical trials or trials in other potential indications; risks associated with clinical trials, including our ability to adequately manage clinical activities, unexpected concerns that may arise from additional data or analysis obtained during clinical trials, regulatory authorities may require additional information or further studies, or may fail to approve or may delay approval of our drug candidates; the occurrence of adverse safety events, restrictions on use with our products, or product liability claims; risks relating to 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; and any other risks and uncertainties that are described in other reports we have filed with the U.S. Securities and Exchange Commission.

These statements 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.
Achieved or Expected 2022 Milestone

Potential for renewed growth and value creation over time:

- **Pre – 2016**: Multiple Sclerosis
  - Spinal Muscular Atrophy
  - Biologics

- **2016 – 2021**: Multiple Sclerosis
  - Biologics

- **2022 - 2025**: Multiple Sclerosis
  - Biologics
  - Neurodegenerative Disorders
  - Biologics

- **2026-2030**: Multiple Sclerosis
  - Biologics
  - Neurodegenerative Disorders

- **Genetic Neurodevelopmental**:
  - Parkinson’s Disease / Movement Disorders
  - Lupus
  - Stroke

- **Neurology**:
  - Alzheimer’s
  - Biologics
  - Biologics
  - Neurodegenerative Disorders
  - Biologics

- **Neuropsychiatry**:
  - Depression
  - Biologics
  - Alzheimer’s
  - Biologics

- **Neuromuscular**:
  - Biologics
  - Biologics

- **Movement Disorders**:
  - Biologics

- **Business Development**:
  - Biologics

- **Digital Health**:
  - Biologics
Continuing to lead and invest in multiple sclerosis

2021 Highlights

- 2021 revenue of $7.1 billion, including OCREVUS royalties
- VUMERITY continued to grow in U.S. and E.U.
- Intramuscular PLEGRIDY launched in both the U.S. and E.U.
- Subcutaneous TYSABRI launched in the E.U.
- Continuing to pursue new treatment options
  - InnoCare collaboration for an oral BTK inhibitor

Note: Patient numbers represent estimated ending patient count as of December 31st of each year.
Continued leadership position in SMA

2021 Highlights

• 2021 revenue of $1.9 billion

• Over 11,000 patients on therapy

• Proven efficacy across all patient types and a well characterized safety profile

• Obtained reimbursement for SPINRAZA in China

• Strengthening our competitive positioning in SMA, pursuing:
  - New ASO that may have the potential for extended dosing intervals
  - Additional analyses on real-world evidence confirming efficacy in adults
  - Higher dose for even greater efficacy
  - Potential benefit following sub-optimal response to competitor’s gene therapy and oral treatments

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

ASO = antisense oligonucleotide
Expanding our biosimilars business

Biosimilars Patients

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<tr>
<th>Year</th>
<th>Patients</th>
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<tbody>
<tr>
<td>2017</td>
<td>75k</td>
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<tr>
<td>2018</td>
<td>123k</td>
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<tr>
<td>2019</td>
<td>209k</td>
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<tr>
<td>2020</td>
<td>243k</td>
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<tr>
<td>2021</td>
<td>251k</td>
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Commercialization of anti-TNFs in Europe

- 2021 revenue of $831 million
- Biogen contributed > €2.6 billion of healthcare savings in 2021 across Europe

Expanding biosimilar portfolio

- BYOOVIZ (LUCENTIS® biosimilar) launched June 2022 in the U.S., with additional approvals in E.U., U.K., and Canada
- BIIB800 (referencing ACTEMRA®) expected regulatory filing in the U.S. and E.U. in 2H22
- SB15 (EYLEA® biosimilar) currently in Phase 3
- Collaboration to expand biosimilar pipeline with new preclinical asset BIIB801 (referencing CIMZIA®)
- Completed sale of equity stake in Samsung Bioepis joint venture

1. Includes ~116,000 patients on BENEPALI, ~95,000 patients on IMRALDI, and ~40,000 patients on FLIXABI.
2. Biogen estimate, data on file.
Key expected milestones for late-stage pipeline in 2022

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<th>Product Launches</th>
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<td><strong>Lecanemab</strong> in Alzheimer’s disease – U.S. Filing</td>
<td><strong>Q2</strong></td>
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<th>Data Readouts</th>
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<td><strong>Zuranolone</strong> – Phase 3 SKYLARK Study in PPD</td>
<td><strong>Mid-year</strong></td>
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<td><strong>Lecanemab</strong> – Phase 3 in Alzheimer’s disease</td>
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<td><strong>Fall</strong></td>
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<td><strong>BIIB104</strong> – Phase 2 in CIAS</td>
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<td><strong>Mid-year</strong></td>
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Note: lecanemab is being developed in collaboration with Eisai Co., Ltd. (Eisai); zuranolone is being developed in collaboration with Sage Therapeutics, Inc. (Sage)

* Collaboration program; * Eisai responsible for lecanemab regulatory filing; ^ Sage responsible for zuranolone regulatory filing

MDD = major depressive disorder; PPD = postpartum depression; CIAS = cognitive impairment associated with schizophrenia

Note: timeline is for illustrative purposes only
Near-term operational priorities

Five priority actions intended to drive renewed revenue growth and value creation over time

Increasing Focus on R&D Prioritization

Goal of maximizing the probability of success of R&D portfolio

Will be informed in part by key data readouts for lecanemab, zuranolone, and BIIB104 expected in 2022

Cost-Reduction and Productivity Measures

To further align costs with revenue base, while continuing to fund promising pipeline and commercial opportunities

Note: lecanemab is being developed in collaboration with Eisai Co., Ltd.; zuranolone is being developed in collaboration with Sage Therapeutics, Inc.
Near-term operational priorities

Executing on Global Growth Opportunities

Focus on key emerging markets, such as China and certain markets in both Latin America and the Middle East

Continued launch of SPINRAZA and pursuing potential local business development opportunities

Potential Return to Growth in Biosimilars

Recently launched BYOOVIZ in the U.S., Biogen’s first biosimilar to launch in the U.S.

Three additional programs currently in development

Capital Allocation

Continue to focus deployment of cash towards incremental value creation opportunities

Continue to return cash to shareholders through share repurchases
Continuing to advance our ESG priorities

Progress Highlights

**ENVIRONMENT**
- Completed **1st life cycle assessment (LCA)** for 3 Biosimilars, identifying ways to reduce product water, land and carbon footprints
- Led on green chemistry as **14 labs achieved My Green Lab certification**, driving sustainability in scientific research
- Set more ambitious goal for **net zero supply chain by 2045** and submitted for approval by the Science Based Target initiative

**SOCIAL**
- **100%** of clinical trial studies initiated in 2021* included a plan to **recruit underrepresented patients**
- Contributed grants, in-kind materials, volunteering and other support for **Ukraine humanitarian efforts**
- Engaged more than **61,000 students**, with focus on under-represented children, in the 20 years since the inception of the Community Lab

**GOVERNANCE**
- Formalized **Board of Directors responsibility for ESG**
- Became **early adopter of the new UN Global Compact** reporting framework
- Bolstered DE&I transparency with our **2021 DE&I report**

* U.S. clinical trials in phases 1-4 led by Biogen's Global Clinical Operations | Total Community Lab students since inception in 2002

Transparency via Reporting

2021 Year in Review report published in May 2022, detailing ongoing leadership on material ESG issues.

Recognition for ESG leadership

JUST 100
#36 on JUST Capital's annual analysis of corporate ESG performance

Bloomberg Gender-Equality Index
Member of 2021 GEI, committed to driving accountability through data transparency

100 Most Sustainable Corporations
Named to Corporate Knights’ 2022 list

Best Places to Work for LGBTQ+ Equality
Named to Human Rights Campaign’s list for 8th year in a row
Questions & Answers