

# Hemophilia Business Spin-Off



May 3, 2016

# Forward-Looking Statements

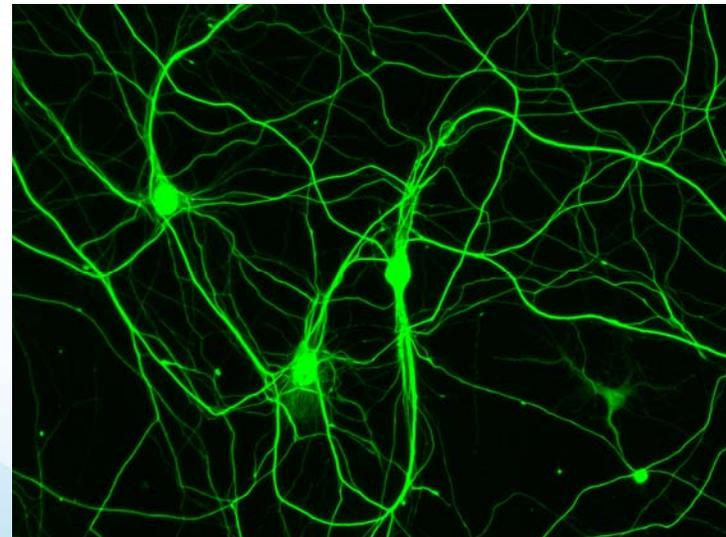
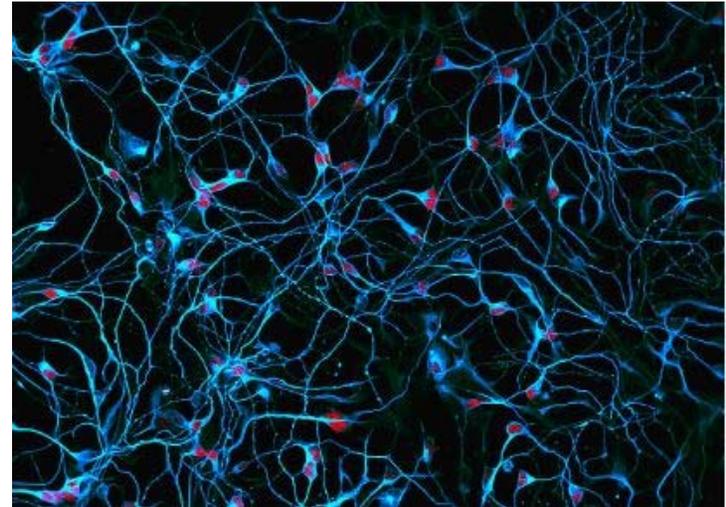
This presentation contains forward-looking statements, including, without limitation, statements relating to the proposed spin-off of Biogen's hemophilia business, such as the completion and timing of the proposed spin-off, its anticipated benefits, its tax treatment, and expected business operations, plans, strategy, and capital structure for Biogen and the new publicly traded company following completion of the proposed spin-off. These forward-looking statements may be accompanied by such words as "anticipate," "believe," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "potential," "project," "target," "will" and other words and terms of similar meaning. You should not place undue reliance on these statements.

These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements, including, without limitation, risks that the proposed spin-off will be completed in a timely manner or at all; risks of failure to satisfy any conditions to the proposed spin-off; risks of failure of the proposed spin-off to qualify as a tax-free transaction for U.S. federal income tax purposes; uncertainty of whether the anticipated benefits of the spin-off can be achieved; risks associated with any disruption to Biogen's business due to execution of the proposed spin-off; risks associated with litigation that may arise as a result of the proposed spin-off; risks of unexpected costs or delays; and risks and uncertainties associated with the development and commercialization of products and product candidates that may impact or alter anticipated business plans, strategies, objectives, and capital structure. The foregoing sets forth many, but not all, of the factors that could cause actual results to differ from Biogen's expectations in any forward-looking statement. Investors should consider this cautionary statement, as well as the risk factors identified in Biogen's most recent annual or quarterly report and in other reports Biogen has filed with the Securities and Exchange Commission. These statements are based on Biogen's current beliefs and expectations and speak only as of the date of this presentation. Biogen does not undertake any obligation to publicly update any forward-looking statements, whether as a result of new information, future developments or otherwise.

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# Transformative Era for Biogen

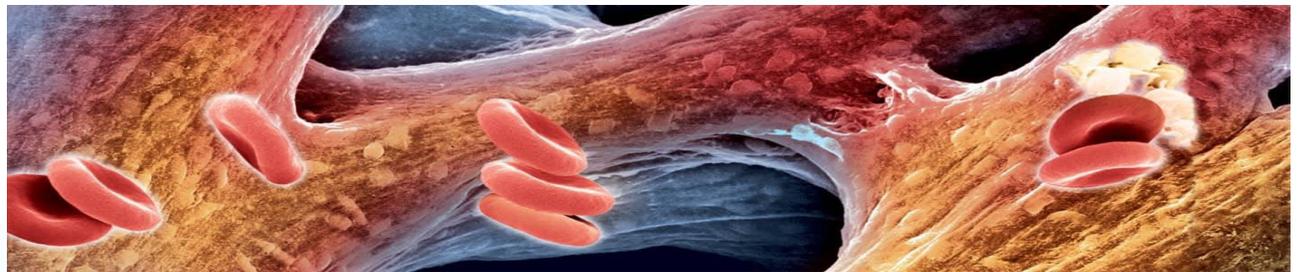
- ✓ Realize **full potential** by allowing each company to operate independently with **management teams dedicated to their respective and distinct disease areas**
  - Biogen will commit its energy and resources to the development of novel therapies for patients suffering from neurological and neurodegenerative diseases
  - The new company will dedicate its attention to commercializing ELOCTATE and ALPROLIX and developing the multiple exciting opportunities in its hemophilia portfolio



# Rationale for Proposed Separation

**As a stand-alone business, a dedicated and talented management team will:**

- Focus on strategic priorities specific to the hemophilia patient population and market
- Allocate capital and resources to continue commercializing ELOCTATE and ALPROLIX and drive innovation and development of pipeline assets
- Pursue enhanced value for patients, healthcare providers and other key stakeholders



# Overview of New Hemophilia Company

- Focus on the discovery and development of therapies for the treatment of hemophilia
- Continue to develop and commercialize ELOCTATE and ALPROLIX, indicated for the treatment of hemophilia A and B, respectively
- Additional life-cycle management initiatives expected, including immune tolerance induction study with ELOCTATE
- Pipeline to include additional longer acting therapies utilizing the XTEN technology that are designed to further prolong and improve protection from bleeding, preclinical bispecific antibodies, and lentivirus based gene therapies in both Hemophilia A and B
- Intends to explore further business development opportunities

 Biogen.



 **ALPROLIX**<sup>®</sup>  
[Coagulation Factor IX  
(Recombinant), Fc Fusion Protein]

 **ELOCTATE**<sup>®</sup>  
[Antihemophilic Factor  
(Recombinant), Fc Fusion Protein]

# Hemophilia: Significant Market Opportunity



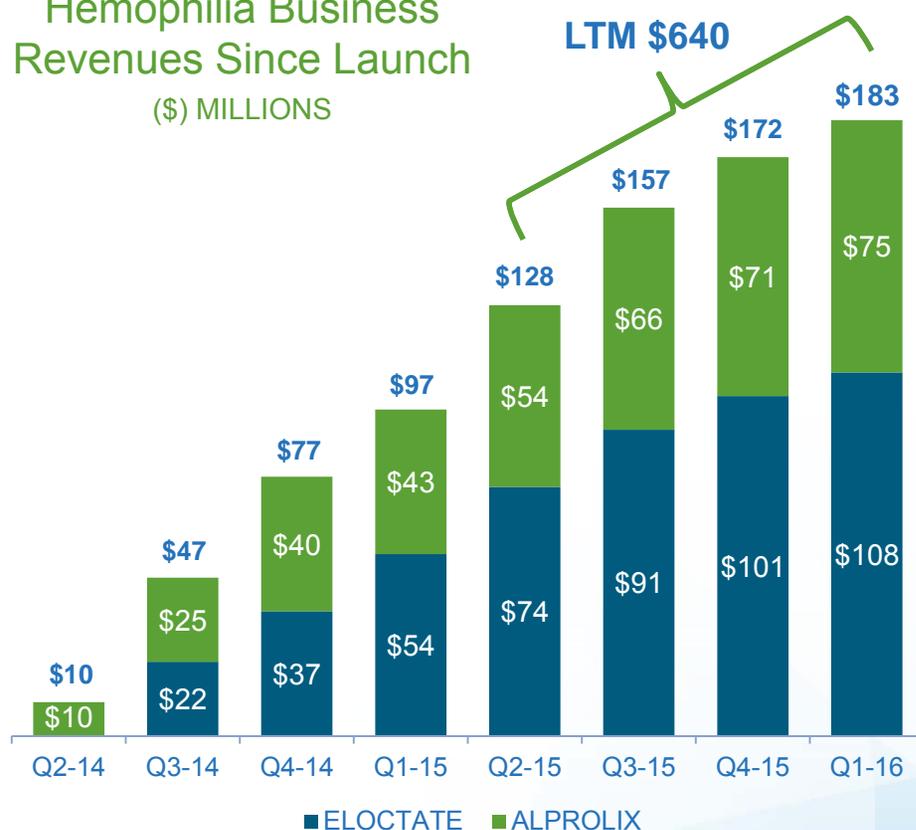
ALPROLIX is approved in the U.S., Canada, Japan, Australia, and New Zealand.  
Received positive CHMP opinion in the E.U.

ELOCTATE is approved in the U.S., Canada, Japan, Australia, and New Zealand.  
It is also approved in the E.U. under the trade name Elocta



# New Hemophilia Company: Key Marketed Products

Hemophilia Business Revenues Since Launch  
(\$) MILLIONS



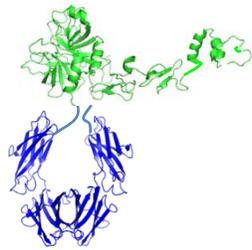
- ALPROLIX and ELOCTATE represent the **first meaningful improvements in hemophilia treatment in ~20 years**
- As of 3/31/16, ALPROLIX and ELOCTATE combined generated **\$640 million in revenues over the last 12 months**
  - \$554 million in revenues in FY 2015
  - \$183 million in revenues 1Q 2016
- **Leading switch-to therapies** in both Hemophilia A & B<sup>1</sup>



<sup>1</sup>Biogen data on file  
LTM = last twelve months

# New Hemophilia Company: Pipeline

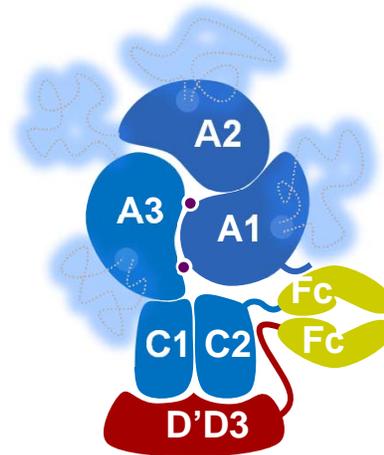
## Life-Cycle Management Initiatives



### FVIII Fc fusion

- Fc portion of fusion proteins, utilized in both ELOCTATE and ALPROLIX, may offer additional benefits beyond half-life extension
- Investigating immune tolerance induction with ELOCTATE

## Next Generation Long-Acting Factors



### rFVIII Fc-VWF-XTEN

- Long-acting hemophilia product candidate utilizing the XTEN technology to reduce infusion frequency and protection from bleeds

## Gene Therapy



### Gene Therapy

- Working on gene therapy for the treatment of hemophilia A and B utilizing lentiviral vectors



Other key assets include bispecific antibodies in preclinical development

# Spin-off Details

## Structure

- Spin-off expected to be implemented by means of a distribution of 100% of the shares of a new publicly traded entity to Biogen stockholders
- Spin-off is intended to be tax-free for U.S. federal income tax purposes

## Management

- John G. Cox, Biogen's current Executive Vice President, Pharmaceutical Operations & Technology, will serve as the Chief Executive Officer of the new company
- The full management team and board of directors will be named at a later date
- Plans are for the new company to be headquartered in the Boston area

## Relationships & Commitments

- The new company will continue to develop and commercialize ELOCTATE and ALPROLIX under Biogen's existing collaboration agreement with Swedish Orphan Biovitrum AB (publ)(Sobi)
- The new company also will continue Biogen's commitment, along with Sobi and the World Federation of Hemophilia, to produce, donate and supply up to 1 billion IUs of clotting factor

## Transitional Services

- Biogen is expected to provide certain transition services to the new company and remain the manufacturer of ALPROLIX and ELOCTATE for the next three to five years

## Timing

- Expected to be completed by end of 2016 or early 2017, subject to the satisfaction of certain conditions, including final approval of Biogen's board of directors, receipt of a favorable opinion with respect to the tax-free nature of the transaction, and the effectiveness of a Form 10 registration statement that will be filed with the SEC