
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): September 27, 2016

CATALYST BIOSCIENCES, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

000-51173
(Commission
File Number)

56-2020050
(IRS Employer
Identification No.)

260 Littlefield Ave.
South San Francisco, California
(Address of principal executive offices)

94080
(Zip Code)

(650) 266-8674
Registrant's telephone number, including area code

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 7.01 Regulation FD Disclosure.

On September 27, 2016, Catalyst Biosciences, Inc. delivered a presentation at the Ladenburg Thalmann 2016 Healthcare Conference in New York City. A copy of the presentation is attached hereto as Exhibit 99.1 and incorporated herein by reference.

The information in this Item 7.01 of this Current Report on Form 8-K (including Exhibit 99.1) is being furnished and shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that Section. The information in this Current Report shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Corporate Presentation presented September 27, 2016.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CATALYST BIOSCIENCES, INC.

Date: September 28, 2016

/s/ Nassim Usman
Nassim Usman, Ph.D.
President and Chief Executive Officer

EXHIBIT INDEX

Exhibit
Number

Description

99.1 Corporate Presentation presented September 27, 2016.

Catalyst Biosciences

Nasdaq: CBIO

Essential Medicines for Hemophilia • Greater Convenience • Superior Outcomes



Non-Confidential Company Update 27 September 2016



Forward Looking Statements

This presentation includes forward-looking statements relating to the Catalyst Biosciences, Inc. (the "Company"). Forward-looking statements include statements about the potential markets for the Company's product candidates, the potential advantages of the Company's product candidates, product development plans and timelines, potential safety and efficacy of the Company's product candidates, potential sales of product candidates, if approved, the Company's intellectual property and any statement of belief or assumptions underlying any of the foregoing. These statements reflect the current views of the Company's senior management with respect to future events. Forward-looking statements address matters that involve risks and uncertainties, such as the timing of, costs associated with and outcomes of development, clinical and regulatory activities, risks associated with third-party arrangements, including the risk that Catalyst must negotiate with Pfizer about obtaining manufacturing technology and know-how related to marzeptacog alfa (activated), potential adverse effects arising from the testing or use of the Company's drug candidates, risks related to the Company's ability to develop, manufacture and commercialize product candidates, to obtain regulatory approval of product candidates and to obtain marketplace acceptance of product candidates, to avoid infringing patents held by other parties and to secure and defend patents of the Company, and to manage and obtain capital, including through any future financing or the conversion of outstanding convertible promissory notes. Further information regarding these and other risks is included in the Company's Form 10-K for the year ended December 2015 and Form 10-Q for the quarter ending June 30, 2016 filed with the Securities and Exchange Commission on March 9, 2016 and Aug 4, 2016 respectively, under the heading "Risk Factors".

Hemostasis FVIIa, FIX & FXa

- Approved products generate ~\$3.3 billion/year in sales
- Catalyst **Next-Generation** products have the potential for sales growth in subcutaneous prophylaxis, new markets & new indications

- Essential Medicines for Hemophilia
- Greater Convenience
- Superior Outcomes

Management Team

- Nassim Usman, Ph.D. – President & Chief Executive Officer
 - MIT, Ribozyme Pharma, Sirna Therapeutics, Morgenthaler Ventures
- Howard Levy, M.B.B.Ch., Ph.D., M.M.M. – Chief Medical Officer
 - Lilly, Novo Nordisk, Sangart, Inspiration, CSL Behring
- Fletcher Payne – Chief Financial Officer
 - IBM, Cell Genesys, Abgenix, Dynavax, Rinat, Plexikon, CytomX
- Andrew Hetherington, M.B.A. – VP Manufacturing Operations
 - GSK, Bayer, Novartis
- Jeffrey Landau, M.B.A. – VP Business Development
 - Jazz Pharmaceuticals, Orphan Medical, Eli Lilly, Onyx, Threshold

Hemophilia Overview

Disease

- Hereditary, life-long orphan disease; growing population ~ 400,000 patients WW*
- Patients have severe deficiency (<1%) of a clotting factor needed to form stable clots
 - Hemophilia A -> need FVIII
 - Hemophilia B -> need FIX
 - Patient with antibodies (inhibitors) against their replacement factor -> need bypass agent: FVIIa or FEIBA
- Limb- or life-threatening bleeding
- Joints are destroyed by repeated macro and micro bleeds

Joint Bleeds



Market Characteristics

- Recombinant factors, FVIII or FIX, or FVIIa/FEIBA are the dominant treatments
- Drugs administered intravenously by patient or caregiver
- P1/2 trials are in hemophilia patients with pharmacodynamic efficacy endpoints
- Single pivotal open-label Registration trial
- Commercial - small sales force

Key Unmet Needs

- Convenience – Subcutaneous delivery
- Prophylaxis – Prevent bleeding and joint damage

*Bolton-Maggs & Pasi, The Lancet 2003, v361 p1831

Key Trends

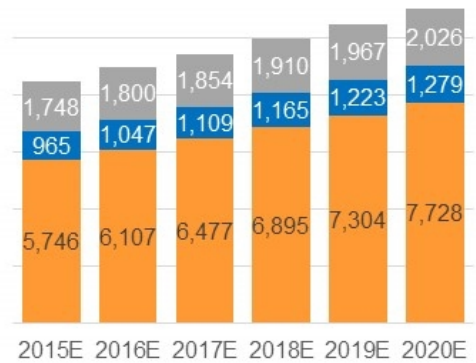
- Increasing prevalence
- Increasing adoption of prophylaxis
- Subcutaneous dosing

Future Implications

- No more bleeds
- Greater convenience
- Ease of pediatric treatment

Hemophilia Growing Market

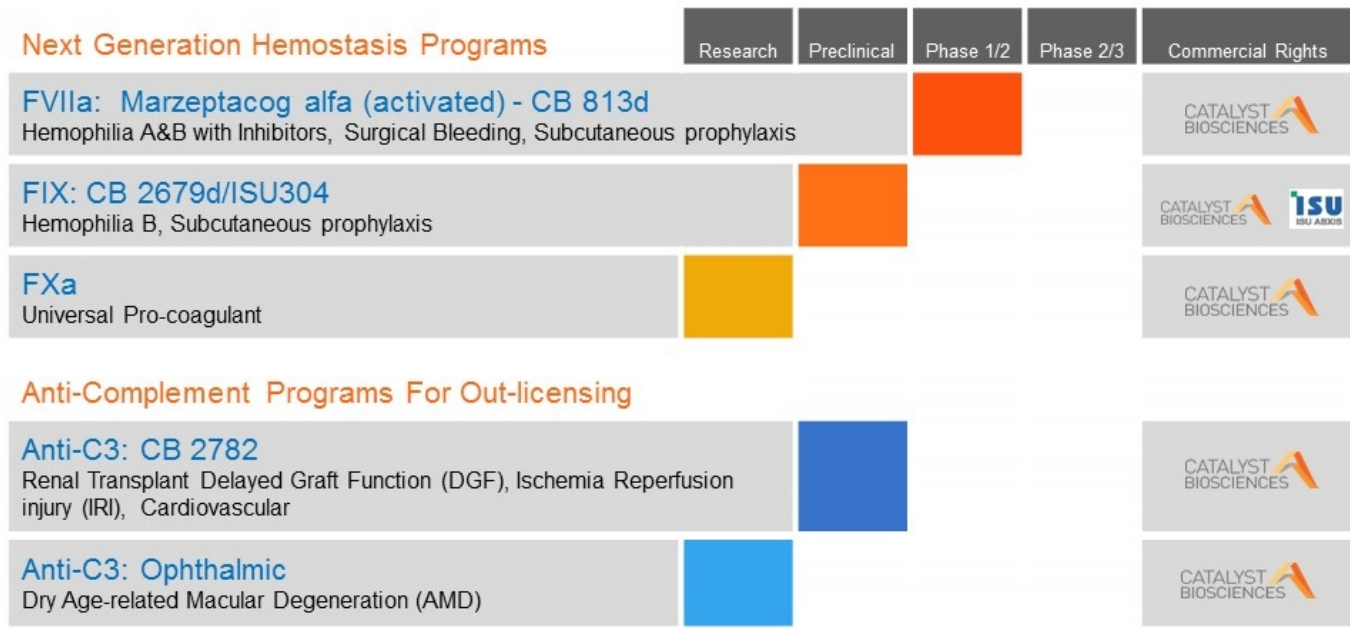
Global Hemophilia Market
Revenue (\$M)
CAGR 2015-2020E = 5.5% ⁽¹⁾



■ Hemophilia A ■ Hemophilia B ■ Inhibitors

Source: (1) Morgan Stanley Equity Research

Catalyst Biosciences Pipeline





"I started helping Mom and Dad with the treatment...I don't want to try to get the needle in the vein yet. Maybe when I'm ten."

Intravenous Delivery

- Intravenous infusion through painful needle stick
- Requires supervision and skilled insertion of needle into vein
- Dosage varies by agent and type of bleed
- Challenging for patient, family, school
- Requires replacement factor, rest, compression and elevation



Pediatric use of subcutaneous delivery is common for diabetes and regularly administered at home and school

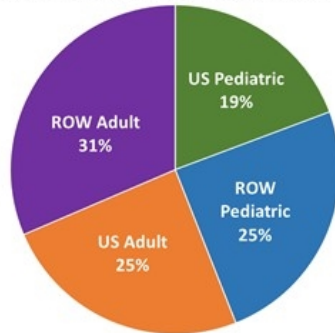
Proactive / Subcutaneous Prophylaxis Delivery

- Subcutaneous injections are easier
- Home therapy - family or patient
- Prophylactic use should result in fewer bleeds; reduce damage to joints and muscles
- Fewer demands on healthcare system; reduce hospital stays & outpatient visits

Pediatrics Represent a Significant Population KOL's Want a Simpler Dosing Regimen

Pediatric Population >40%

2024 Patient Population Distribution



8 MM Patient Demographic:	2024	%
US Pediatric	1,883	19%
ROW Pediatric	2,410	25%
US Adult	2,396	25%
7 MM Adult	3,068	31%
Total 8 MM Hemophilia B	9,757	100%

Source GlobalData

Competitive Products

CB 2769d / IUS304



ALPROLIX™
[Coagulation Factor IX
(Recombinant), Fc Fusion Protein]



Dosing Type & Frequency

~1 mL SQ* Daily

Intravenous Twice a Week

Intravenous ~Once a Week

Intravenous ~Once a Week

What do Key Opinion Leaders Say...

- "I would give SQ to 100% of my new patients"
- "Venous access in kids is a big issue, guessing 50% will be interested in converting over to SQ"
- "Kids who want to lead more active lives will be great on SQ"

*SQ = Subcutaneous dose

Current FIX Market Opportunity >\$1B

CB 2679d Sales Opportunity ~\$350M

Market Segments	Sales Estimate
US Pediatric Patients	\$209M
US Adult Patients	\$44M
EU + Japan + Argentina	\$96M
Total CB 2679d	\$350M

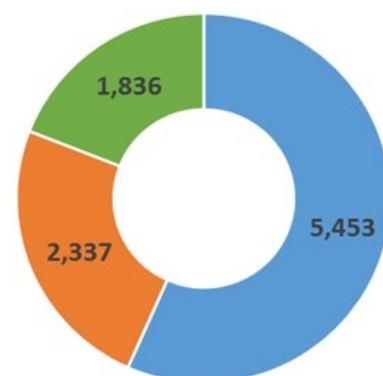
Sales Assumptions:

- US Market:
 - GlobalData estimated price based on recombinant FIX
 - 30% adoption in US pediatric segment
 - 5% adoption in US Adult segment
- Non-US Market:
 - GlobalData average price based on French price point
 - 8% blended adoption all patients

Sensitivity:

- Upside:
 - Upward of 50% US pediatric adoption

2024 Hemophilia B Population Eight Major Markets = 9,626

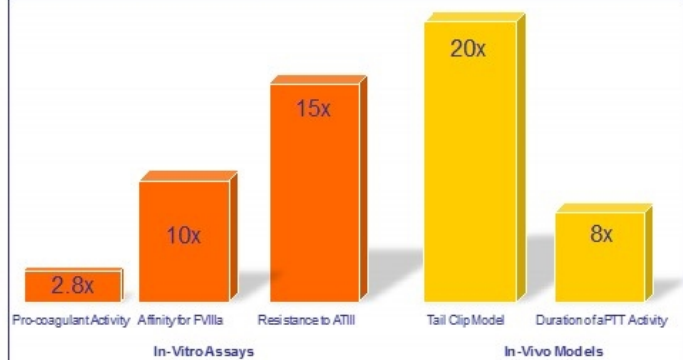


- EU + Japan + Argentina Hemophilia B Patients
- US Hemophilia B - Adults
- US Hemophilia B - Pediatric

Source GlobalData

- Designed as best-in-class high potency recombinant FIX product
- Significantly more potent than:
 - BeneFIX®, RIXubis, IXinity (wt FIX)
 - Alprolix®, FIX-Fc Biogen/SOBI
 - FIX Albumin Fusion, CSL
 - FIX-Glycopegylated, Novo Nordisk
- Preclinical IND-enabling development completed
- Phase 1/2 intravenous and subcutaneous trial to initiate in Q1 2017

CB 2679 Potency Advantage



Catalyst-ISU Alliance Terms

- Upfront & milestone payments to Catalyst
- ISU Abxis responsible for all costs through proof-of-concept Phase 1/2
- **Catalyst controls global development & commercialization post-Phase 1/2 (ex-Korea)**
- Profit sharing on products worldwide

FIX: CB 2679d/ISU304 Subcutaneous Program

- Hemophilia B Mouse Studies
 - ASH abstract to be presented in December
 - Subcutaneous bioavailability demonstrated human subcutaneous prophylaxis feasibility
- Dog studies
 - Data to be presented at upcoming scientific meeting
 - PK and pharmacodynamics demonstrated probable human subcutaneous prophylaxis efficacy
- Mini-pig Studies
 - Intravenous half-life = 11 hours
 - Subcutaneous half-life = 33 hours
 - Bioavailability = 47 – 58%
 - Day 6 Calculated trough activity of 87 and 170 IU/dL [%]
- Sustained blood levels of normal FIX levels
 - Level of CB 2679d greater than 50% achievable in Humans with daily subcutaneous 50-100 IU/kg

FIX CB 2679d Target Product Profile

CB 2679d / ISU304

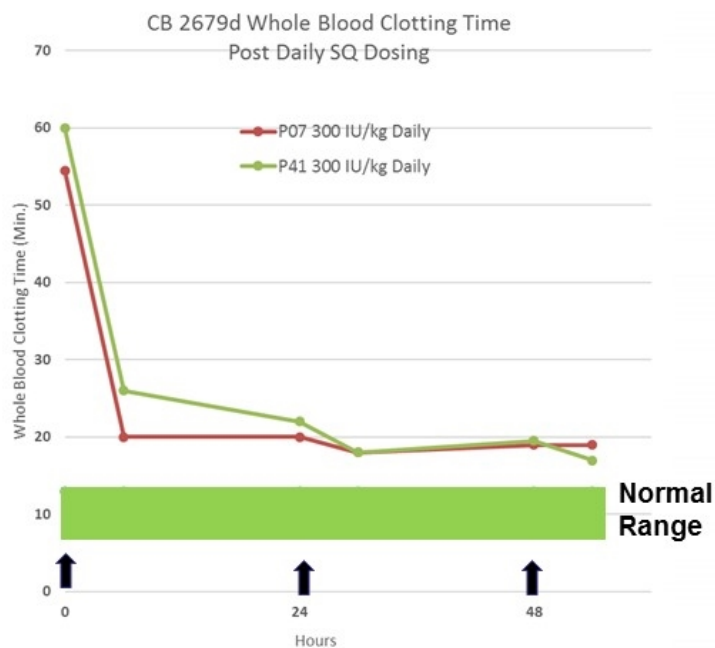
- Indication: Prophylaxis only
- Route of Administration: Subcutaneous
- Volume: <1 mL
- Dose: ~50 to 100 IU/kg
- Frequency of dosing: Daily
- Target Efficacy: Annualized Bleed Rate \leq 2/year
- Bioavailability: >30%
- Steady-State FIX Levels: >40%
- Clinical Design & Timeline
 - Phase 1/2: N = 12 Subjects;
IV – multi-dose SQ Crossover, open label daily dose design
 - Start: Q1 2017
 - Data: Q2-Q3 2017

CATALYST
BIOSCIENCES

CB 2679d / ISU304



Whole Blood Clotting Time with Daily Subcutaneous Dosing of CB 2679d in Hemophilia B Dogs



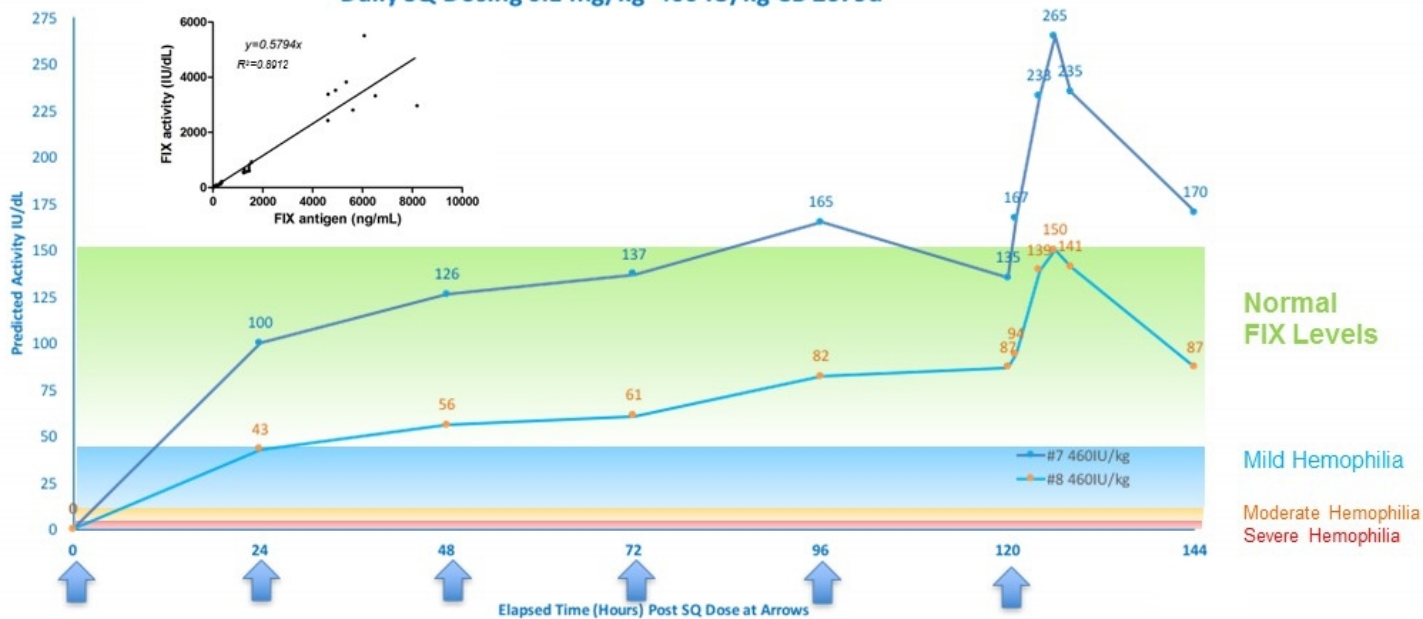
*Complete dosing data to be presented at upcoming scientific conference

FIX Dog Daily Subcutaneous Study:

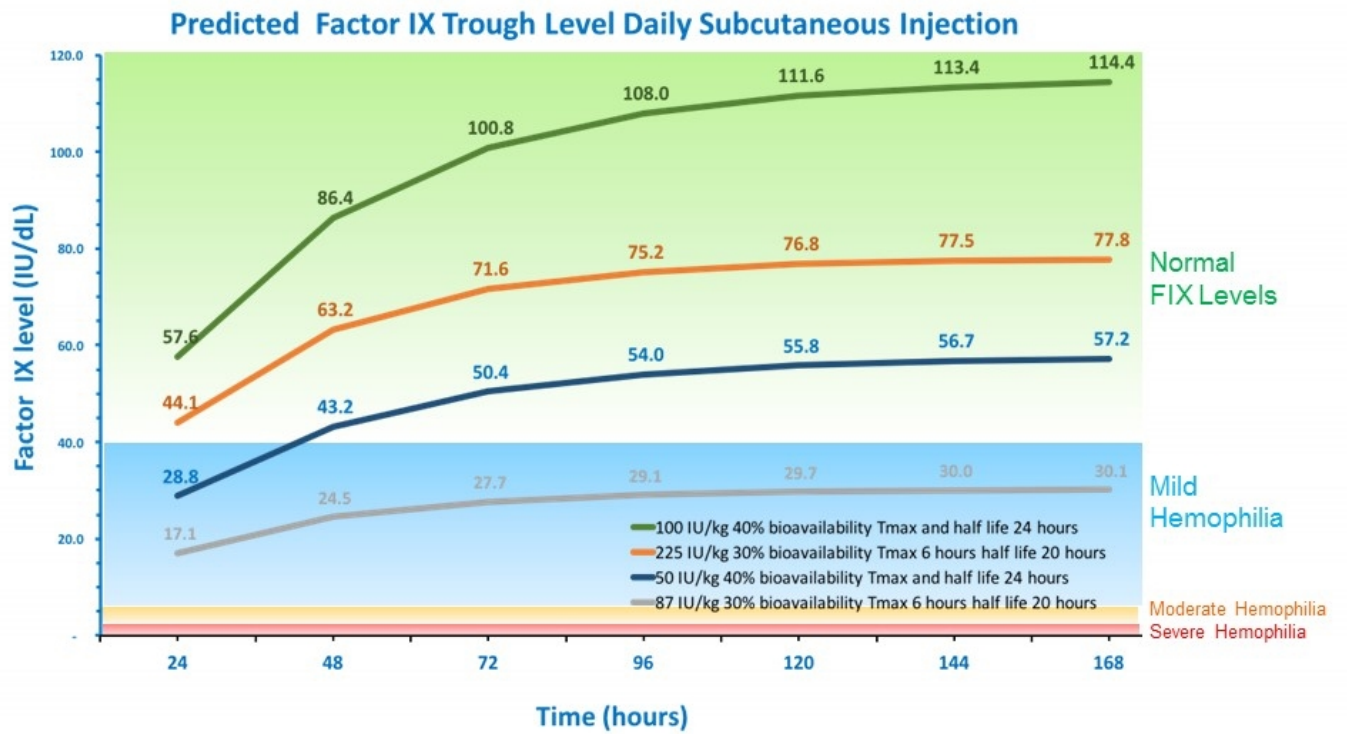
- Hemophilia B (FIX) deficient dogs
- Daily subcutaneous dosing of 300 IU/kg
- Demonstrates dramatic reduction in Whole Blood Clotting Times to ~20 minutes from ~55-60 minutes pre dosing
- Data supports advancing to clinical trial of daily subcutaneous dosing of CB 2679d for prophylaxis

Normal Minipig Predicted Activity Daily CB 2679d

Predicted FIX Activity from Measured Antigen Level
Daily SQ Dosing 0.1 mg/kg 460 IU/kg CB 2679d



Modeling of Daily Subcutaneous FIX in Man



FVIIa: Marzeptacog alfa (activated)

Inhibitor Market

- Approximately 25% of hemophilia patients develop inhibitors against the replacement factors*
- About 10% of all hemophilia patients have active inhibitors*

Current Market Leader

- NovoSeven RT® significant market share of inhibitor patients; 2015 sales of ~\$1.6B
 - Intravenous delivery
 - Difficult for pediatric patients
 - >45% of US patients are 2-19 years of age*
 - Multiple doses required to stop a bleed

*GlobalData Hemophilia A & B Recombinant Factor Replacement Therapy report, Dec. 2015

Marzeptacog alfa (activated) – Product Profile Highlights

- Leading next-generation FVIIa with prophylaxis & subcutaneous delivery potential
- Significant improvements (6-9 fold) in potency and duration of effect vs NovoSeven
- Phase I *in severe hemophilia patients (± inhibitors)* demonstrated Proof-of-Mechanism with excellent safety and tolerability**
 - Safe and well tolerated; no serious TEAEs
 - Improved correction of PT and aPTT (vs NovoSeven) for ~24 h

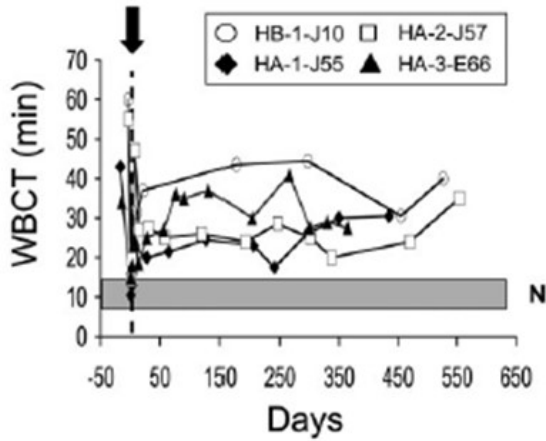
**<http://clinicaltrials.gov/ct2/show/NCT01439971?term=FVIIa&rank=2>

Marzeptacog alfa (activated) Subcutaneous Program

- Hemophilia B Mouse
 - aPTT reduction with subcutaneous dosing
 - Achieved FVIIa levels similar to those that showed efficacy in prior preclinical bleeding models
- Normal Mouse
 - FVIIa levels demonstrate subcutaneous dosing feasibility
- Hemophilia A Dog
 - Daily subcutaneous dosing, full data to be presented at an upcoming scientific meeting
 - Reduction in WBCT to ~20-40 minutes consistent with successful dog FVIIa gene therapy study that prevented bleeding
 - Data supports daily subcutaneous dosing of marzeptacog alfa (activated) for prophylaxis

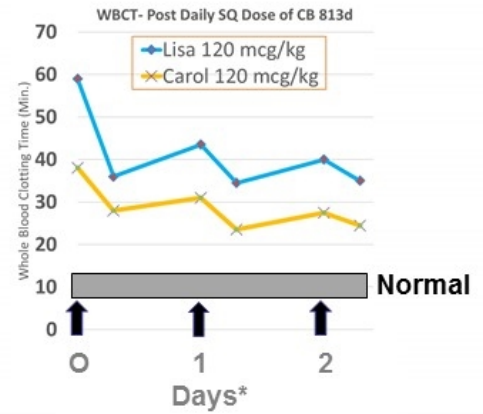
FVIIa Dog Gene Therapy:

- Whole Blood Clotting times between ~20-40 minutes had no spontaneous bleeding for more than one year



FVIIa Dog Daily Subcutaneous Study:

- Demonstrates reduction in WBCT to ~20-40 minutes; consistent with GT study
- Data supports daily subcutaneous dosing of marzeptacog alfa (activated) for prophylaxis

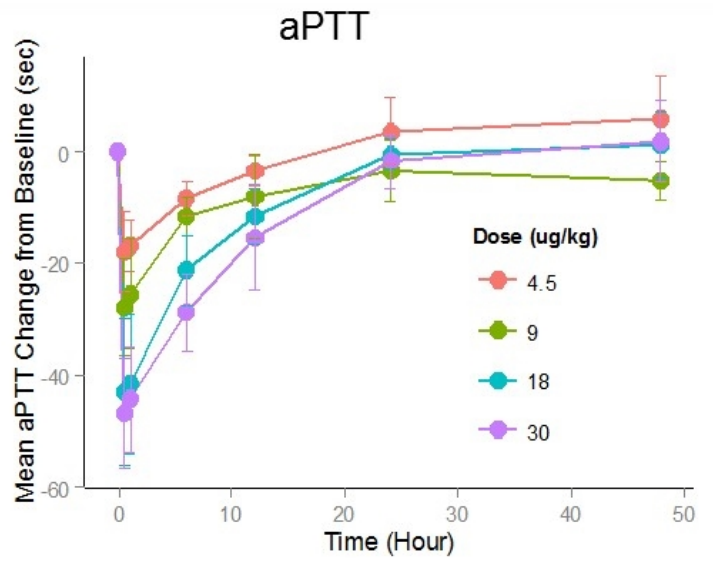
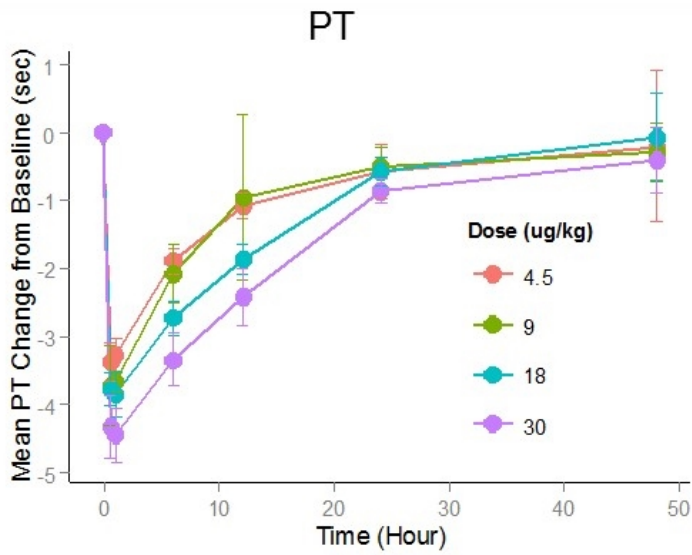


*Complete six day dosing data to be presented at upcoming scientific conference

- Single intravenous doses at 5 levels up to 30 µg/kg were very well tolerated when administered to 25 hemophilia A and B patients in Phase 1
 - No thrombosis or bleeding events
 - Evidence of pharmacologic activity was observed with dose-dependent changes of PT, aPTT and TGA for up to 24 hours
 - High potency suggests the potential for subcutaneous dosing
 - “The results for safety and pharmacologic activity support further clinical development of marzeptacog alfa (activated) for treatment of individuals with hemophilia and inhibitors to FVIII or FIX”*
- Subcutaneous dosing trial anticipated to begin in 2017 with continuation as a pivotal trial

*Gruppo *et al.* ISTH Abstract 1878 ISTH 2015 Safety, pharmacokinetics and pharmacodynamics of PF-05280602 (recombinant FVIIa variant): results from a single ascending dose phase I study in hemophilia A and B subjects

Substantial dose dependent reduction of PT & aPTT at all IV doses



- Clinical stage, development-focused hemostasis Company
 - Next-generation FVIIa & FIX enabling subcutaneous prophylaxis
- Marzeptacog alfa (activated) – Factor VIIa (formerly CB 813d) for hemophilia A & B inhibitor patients in ~\$1.6B market
 - Proof of mechanism, intravenous safety & tolerability demonstrated in severe hemophilia patients in P1
 - Subcutaneous dosing feasibility demonstrated in preclinical models
 - Subcutaneous dosing trial anticipated to begin in 2017 with continuation as a pivotal trial
- CB 2679d, best-in-class Factor IX for hemophilia B in ~\$1B market
 - Preclinical studies (manufacturing and toxicology) completed
 - Subcutaneous dosing feasibility demonstrated in preclinical models
 - Fully-funded through clinical Subcutaneous Proof-of Mechanism Phase 1/2 trial that starts in Q1 2017
- Factor Xa for hemophilia and surgical bleeding with strong pre-clinical efficacy

Catalyst Biosciences

Nasdaq: CBIO

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www.catalystbiosciences.com

