
**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 13, 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 13, 2016, Catalyst Biosciences, Inc. delivered a presentation at the Rodman & Renshaw 18th Annual Global Investment 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 13, 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.

Date: September 14, 2016

CATALYST BIOSCIENCES, INC.

/s/ Nassim Usman

Nassim Usman, Ph.D.

President and Chief Executive Officer

EXHIBIT INDEX

**Exhibit
Number**

Description

99.1 Corporate Presentation presented September 13, 2016.

Catalyst Biosciences

Essential Medicines for Hemophilia. Greater Convenience. Superior Outcomes



Non-Confidential Company Update
12 September 2016



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

- Current 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

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
- Prophylactic treatment – Prevent bleeding and joint damage

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

Key Trends

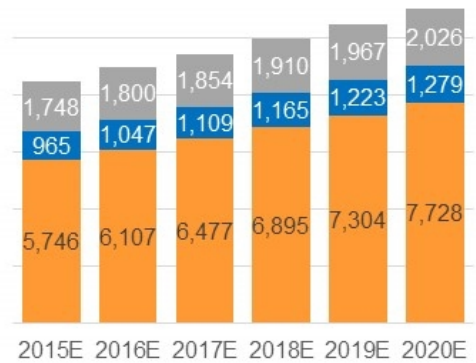
- Increasing prevalence
- Increasing adoption of prophylaxis
- Subcutaneous dosing

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

- 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, Plexxikon, 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

Next Generation Hemostasis Programs

	Research	Preclinical	Phase 1/2	Phase 2/3	Commercial Rights
FVIIa: Marzeptacog alfa (activated) - CB 813d Hemophilia A&B with Inhibitors, Surgical Bleeding, Subcutaneous prophylaxis					
FIX: CB 2679d/ISU304 Hemophilia B, Subcutaneous prophylaxis					 
FXa Universal Pro-coagulant					

Anti-Complement Programs For Out-licensing

Anti-C3: CB 2782 Renal Transplant Delayed Graft Function (DGF), Ischemia Reperfusion injury (IRI), Cardiovascular					
Anti-C3: Ophthalmic Dry Age-related Macular Degeneration (AMD)					



"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

- IV 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



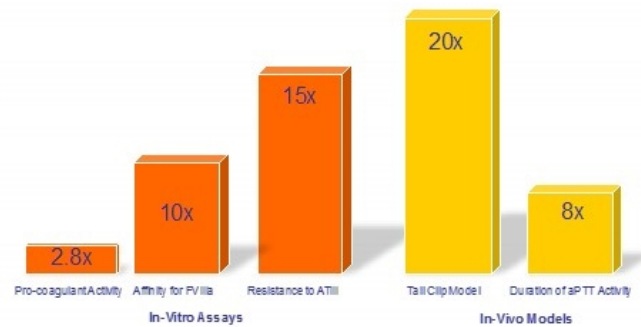
Pediatric use of subcutaneous delivery is common for diabetes and regularly administered at home and school

Proactive / Prophylactic Use Subcutaneous Delivery

- SQ 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

- 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
- Current FIX market >\$1B
- Preclinical IND-enabling development completed
- Phase 1/2 IV and subcutaneous trial to initiate in Q1 2017

CB 2679 Potency Advantage

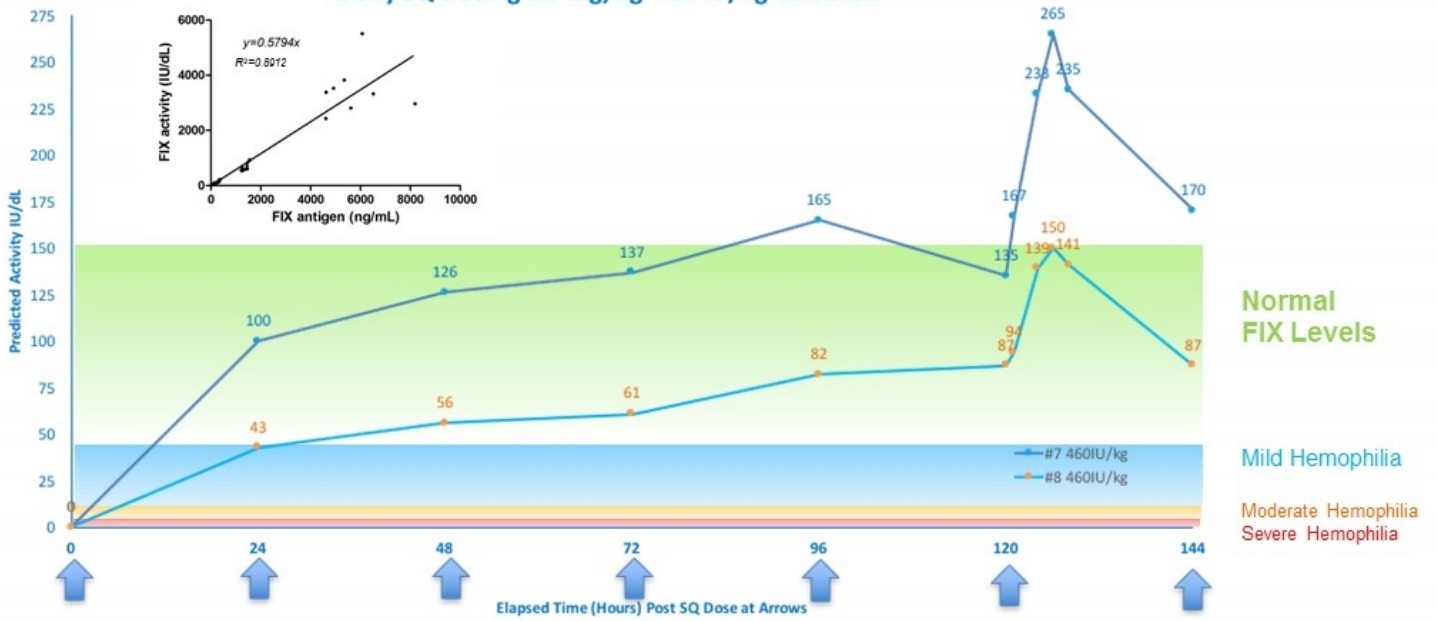


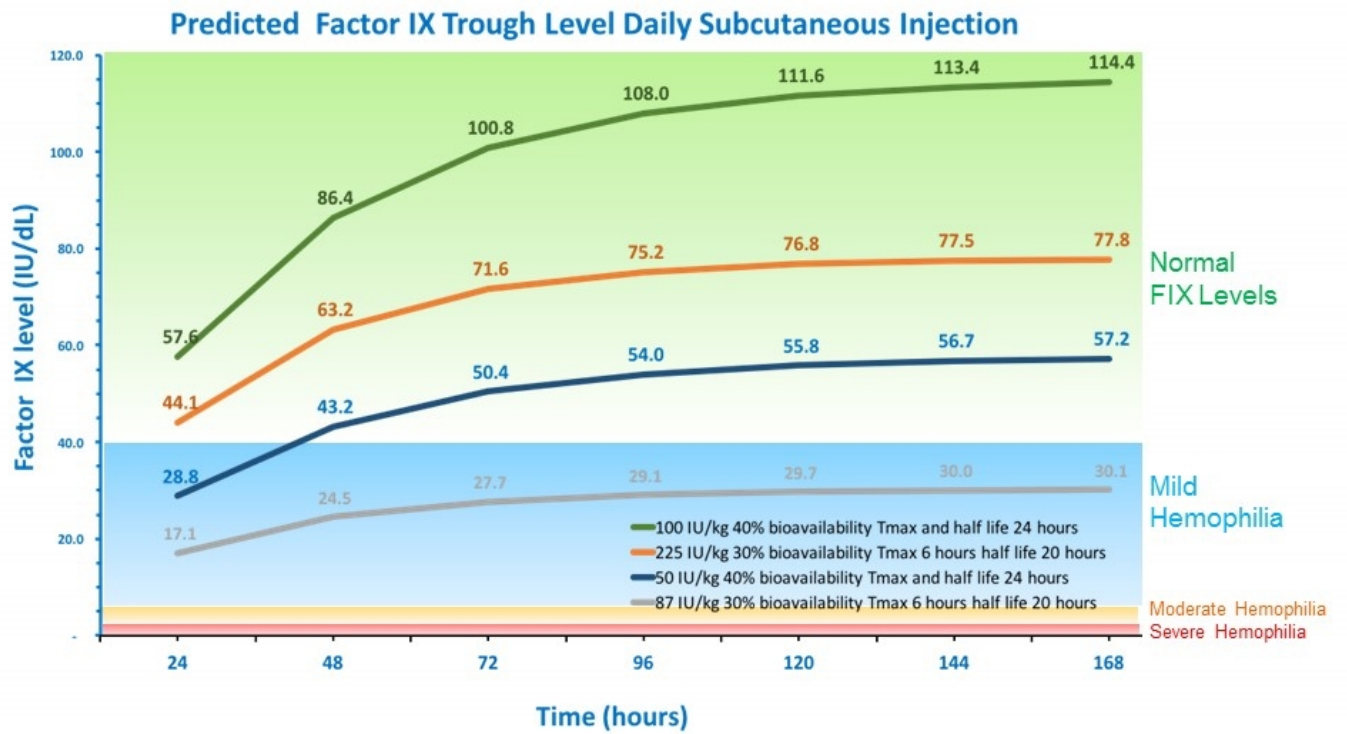
Catalyst-ISU Alliance Terms

- 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

- Hemophilia B Mouse Studies
 - ASH abstract to be presented in December
 - SQ bioavailability demonstrated human SQ prophylaxis feasibility
- Mini-pig Studies
 - IV half-life = 11 hours
 - SQ half-life = 33 hours
 - Bioavailability = 47 – 58%
 - Day 6 Calculated trough activity of 87 and 170 IU/dL
- Sustained blood levels of at normal FIX levels
 - Level of CB 2679d greater than 50% achievable in Human with daily SQ 50 IU/kg
- Phase 1/2 Clinical trial to initiate in Q1 2017
 - IV to SQ to multi-dose SQ crossover design
 - Open label will allow for real time evaluation of pharmacodynamic efficacy

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





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
 - IV 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>

7.0x
In Vitro

~5.0x
In Vivo
PD

~6.0x
In Vivo
Efficacy

7-fold Increase in Catalytic Activity

Measured by the rate of Factor Xa generation *in vitro*, both in the presence and absence of tissue factor

5-fold Increase in TEG

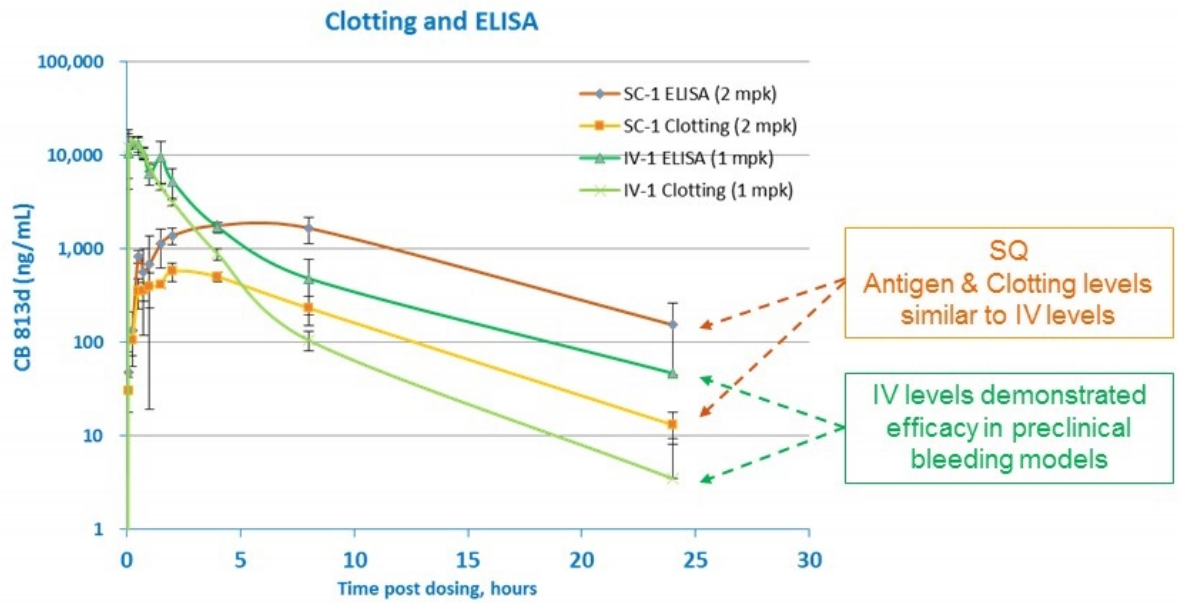
(Thromboelastography)* Acute peak effect parameters for marzeptacog alfa (activated) 10 µg/kg, were similar to 50 µg/kg wt-FVIIa

6-9-fold Longer Duration of Effect in bleeding study

Single injection of marzeptacog alfa (activated) maintains 50% inhibition of bleeding after tail clip injury for 6-9-fold longer than NovoSeven in hemophilia A mouse

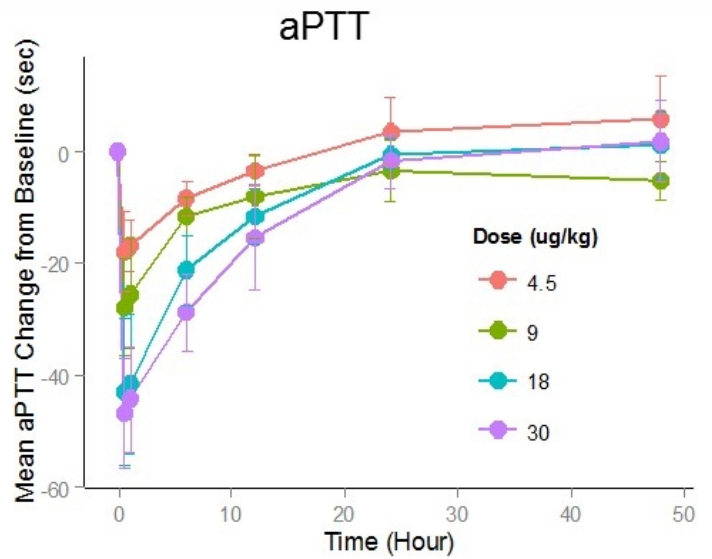
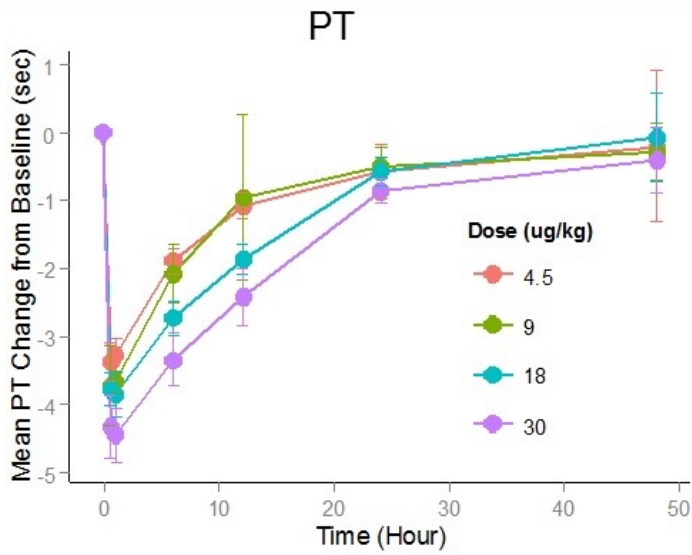
Pitman *et al.* Blood, Nov 2011; 118: 2252 (Pfizer); *time to clotting onset, rate and strength of clot formation

- Hemophilia B Mouse
 - aPTT reduction with SQ dosing
 - Achieved FVIIa levels similar to those that showed efficacy in prior preclinical bleeding models
- Normal Mouse
 - FVIIa levels demonstrate SQ dosing feasibility
- Hemophilia A Dog
 - Daily SQ dosing to be presented at an upcoming scientific meeting



Comparison of IV and SQ AUC show
SQ bioavailability is ~40% for antigen and ~20% for active FVIIa

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



- Single IV 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, F1+2, 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

- Clinical stage, development-focused hemostasis Company
 - Next-generation FVIIa & FIX enabling subcutaneous prophylaxis (SQ)
- Marzeptacog alfa (activated) – (Factor VIIa CB 813d) for hemophilia A & B inhibitor patients in ~\$1.6B market
 - Proof of mechanism, IV safety & tolerability demonstrated in severe hemophilia patients in P1
 - SQ dosing feasibility demonstrated in preclinical models
 - SQ dosing trial anticipated to begin in 2017 with continuation as a pivotal trial
- CB 2679d, best-in-class Factor IX in hemophilia B in ~\$1B market
 - Preclinical studies (manufacturing and toxicology) completed
 - SQ dosing feasibility demonstrated in preclinical models
 - Fully-funded through clinical SQ Proof-of Mechanism Phase 1/2 trial beginning in Q2 2017
- Factor Xa for hemophilia and surgical bleeding with strong pre-clinical efficacy

Catalyst Biosciences

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www.catalystbiosciences.com

