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): June 18, 2020

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

Delaware	**000-51173**	**56-2020050**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

611 Gateway Blvd, Suite 710, South San Francisco, CA 94080
(Address of principal executive offices)

(650) 871-0761
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report.)

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))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	**CBIO**	**Nasdaq**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure.

On June 17, 2020, Catalyst Biosciences, Inc. (the "Company") posted an update to its corporate presentation (the "Presentation") on its website, ir.catalystbiosciences.com/presentations-events. The Presentation was also presented by the Company on June 18, 2020 at the Raymond James Health Innovation Conference. A copy of the Presentation is attached hereto as Exhibit 99.1.

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 No.	Description
99.1	Presentation slide deck.

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: June 18, 2020

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

Exhibit 99.1

CATALYST BIOSCIENCES

Corporate Overview
18 June 2020

CATALYST BIOSCIENCES

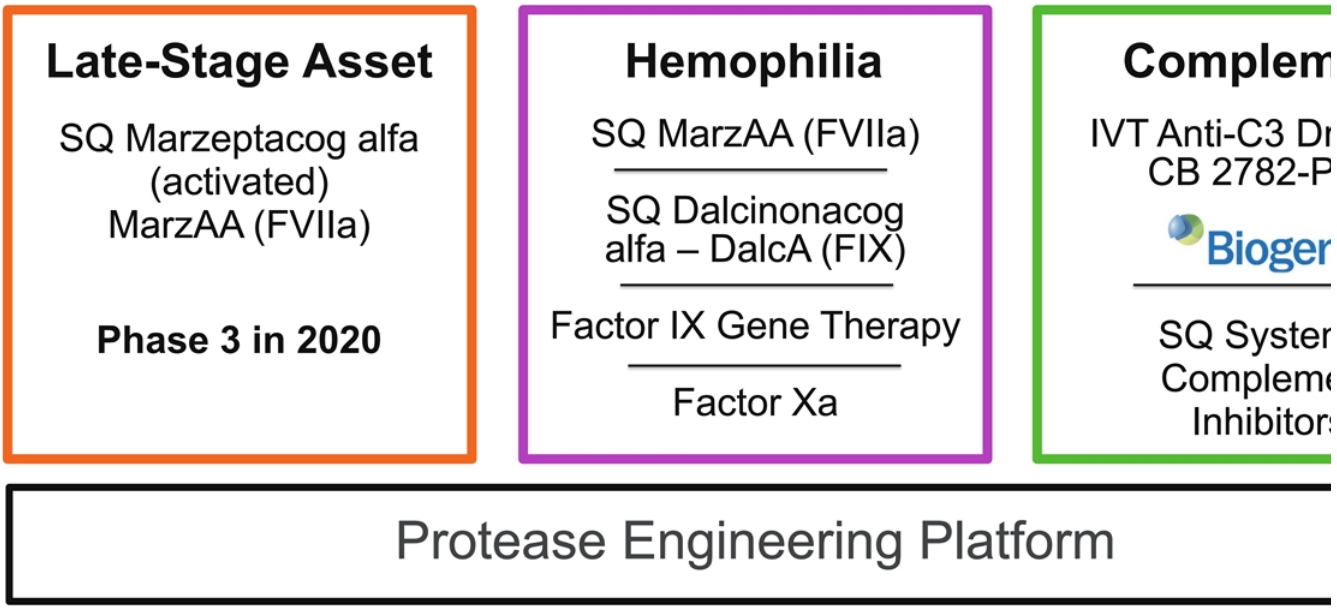
Forward looking statements

This presentation includes forward-looking statements that involve substantial risks and uncertainties. All statements included in this presentation, other than statement of historical facts, are forward-looking statements. Examples of such statements include, but are not limited to, potential markets for MarzAA, DalcA and CB 2782-PEG, potential benefits of subcutaneous dosing, potential use of MarzAA as a subcutaneous therapy for patients with hemophilia A or B with inhibitors, treatment of bleeding, Factor VII deficiency, Glanzmann's Thrombasthenia and other bleeding disorders, potential use of DalcA as a subcutaneous therapy for patients with hemophilia B, potential benefits of CB 2679d-GT as gene therapy, the use of engineered proteases to treat diseases, including dAMD, by mediating the complement cascade, clinical trial results, plans for a registrational trial for MarzAA and a Phase 1/2 trial in Factor VII deficiency, Glanzmann's Thrombasthenia and treatment of bleeding in Hemlibra subjects in Q4 2020, plans to declare development candidates for CB 2679d-GT and in the complement program in Q4 2020, and potential milestone and royalty payments from Biogen. Actual results or events could differ materially from the plans, expectations and projections disclosed in these forward-looking statements.

Various important factors could cause actual result
materially, including, but not limited to, the risk that
and studies may be delayed as a result of the COV
other factors, that trials may not have satisfactory
potential adverse effects may arise from the testing
or DalcA, including the generation of antibodies, w
observed in patients treated with DalcA, that clinica
longer than anticipated to be completed, that costs
develop or manufacture the Company's products w
anticipated, that Biogen will discontinue developme
PEG, competition and other factors that affect our
collaborations on commercially reasonable terms a
described in the "Risk Factors" section of the Comp
report on Form 10-K filed with the Securities and E
Commission on February 20, 2020, and the Compa
report on Form 10-Q filed on May 11, 2020, and in
the Securities and Exchange Commission. The Co
assume any obligation to update any forward-looki
except as required by law.

CATALYST BIOSCIENCES

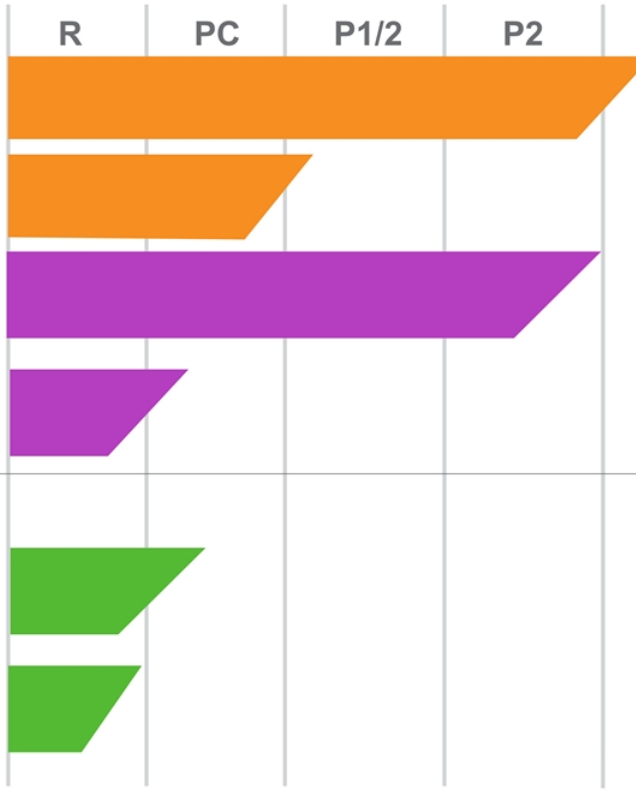
Essential Medicines – Superior Outcomes



Protease Engineering Platform

Pipeline

Hemostasis



SQ Marzeptacog alfa "MarzAA" – (rFVIIa)

Hemophilia A or B w Inhibitors – ToB

FVIID/Glanzmann/Hemlibra – ToB

SQ Dalcinonacog alfa "DalcA"
Hemophilia B (rFIX)

FIX-Gene Therapy
Hemophilia B (CB 2679d-GT)

Complement

IVT CB 2782-PEG
anti-C3 protease for Dry AMD

Biogen

SQ Systemic complement inhibitors – CB DC

Investment highlights

Novel subcutaneous factors with orphan drug designation, MarzAA & DalcA – P2 efficacy in prophylaxis studies complete

Anti-C3 Dry AMD

SQ systemic com
regulator researc

Multibillion-dollar market opportunities

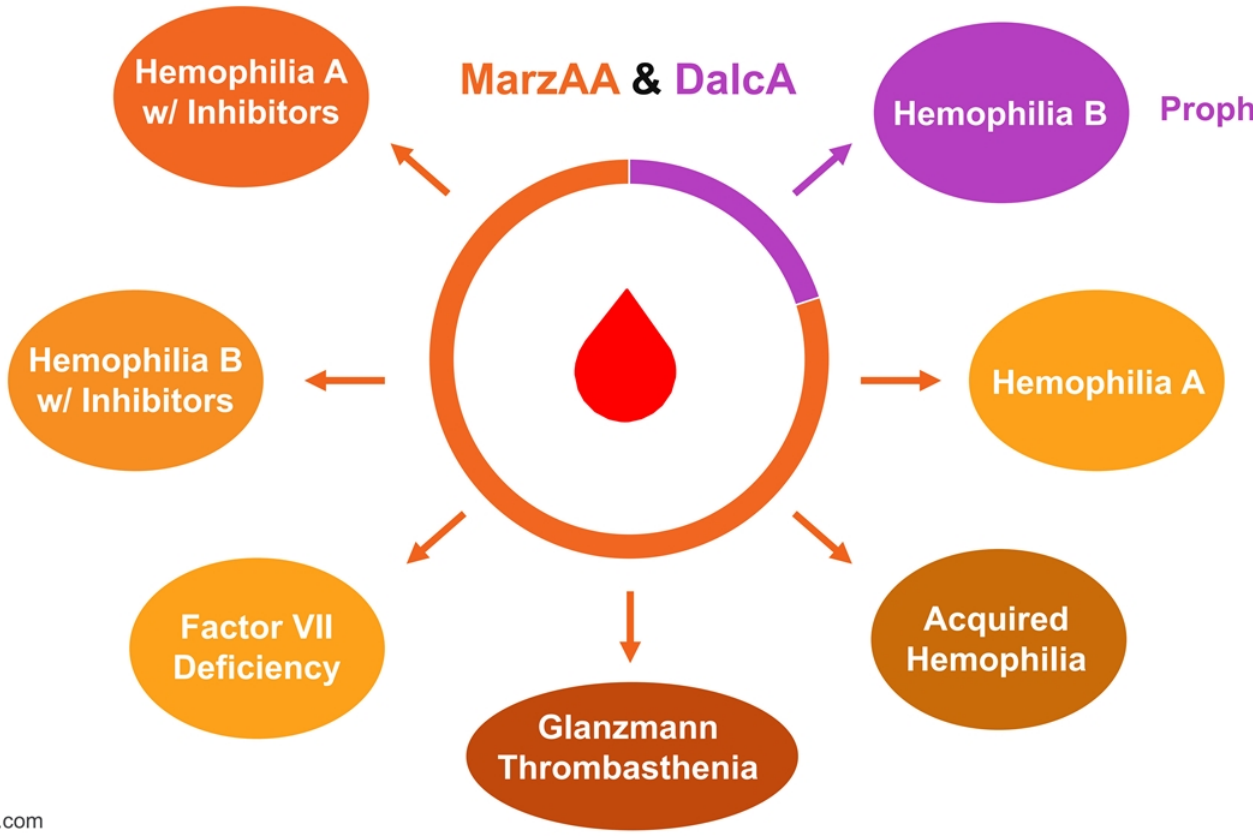
Experienced tear

Strong balance sheet, $104.5 M cash – Q1

177 worldwide pa
CBIO retains full
of all compounds

Addressing unmet needs in orphan bleeding disorders

SQ treatment of episodic bleeding and prophylaxis – $4B+ market



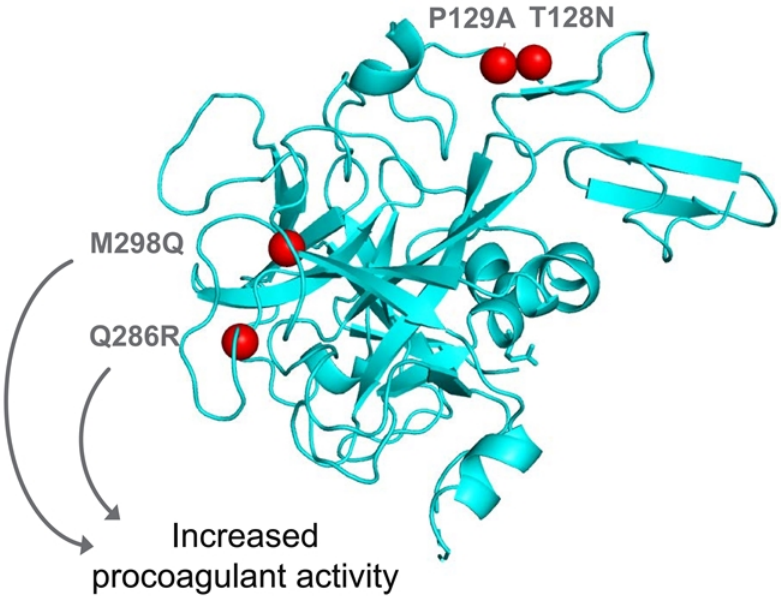
The Catalyst Biosciences subcutaneous solution

Our highly potent ca

+ Quick & simple self-a injection
+ SQ dosing is the futu other rare hematolog complement mediate
+ Significantly increases
+ Much higher & more s for prophylaxis
+ Enables SQ treatmen
+ Ideal for children and

Marzeptacog alfa (activated): MarzAA rFVIIa

Addresses a clear unmet need in hemophilia & other bleeding disorders



Four amino acid substitutions

+ Multiple advantages over NovoS
+ 9-fold higher activity *vs* NovoSev
+ Potency allows for SQ dosing

Only SQ bypass agent for on dema

+ Simple, small volume SQ admini
+ Improved bioavailability & prolon

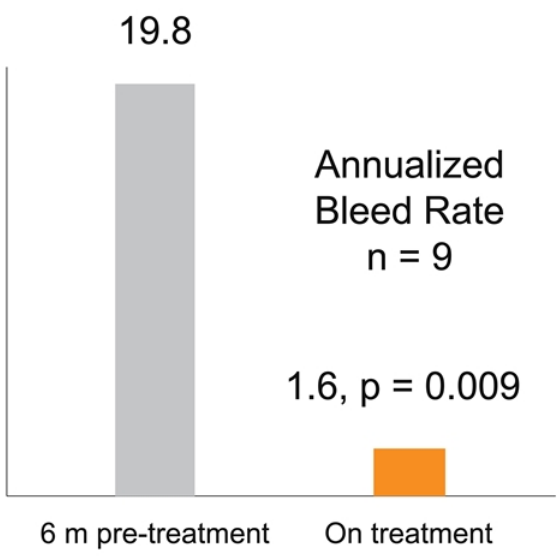
Orphan Drug Designation in US an

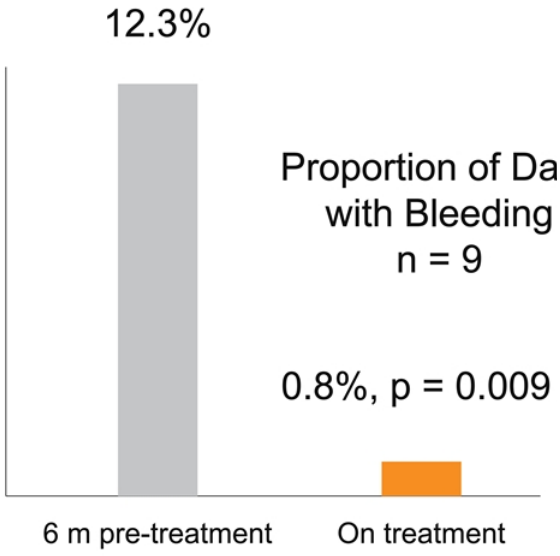
MarzAA Phase 2 demonstrates efficacy in prophylaxis

Greater than 90% reduction in all bleeding – Median ABR = 0

7 of 9 subjects had no bleeding at final dose level

Safe & well tolerated, ~1% ISR (6/517 doses) & no ADA





Mahlangu *et al.* EAHAD 2020

In a world of SQ prophylaxis

Patients & KOLs want SQ treatment of a bleed

Individuals on Hemlibra® have breakthrough bleeds

NovoSeven® is safe but is administered IV

FEIBA should not be used with Hemlibra and is given IV

MarzAA has optimal pro

- ✓ Fast & easy to administe
- ✓ Achieves therapeutic lev
- ✓ Stops bleeding in multipl preclinical models
- ✓ Can be combined with H *in vitro* without increased thrombogenicity

MarzAA P3: On demand treatment of episodic bleeding

Nasdaq: CBIO

CRIMSON-1 Registration Study – A Global Clinical Trial

Phase 1 & 2 trials demonstrated the clinical impact of SQ MarzAA

- MAA-102 rapidly achieved target activity levels
- MAA-201 demonstrated efficacy in prophylaxis, safe & well tolerated with no ADA
- Clinically support P3 SQ MarzAA treatment of episodic bleeding

Open label trial evaluating the safety & efficacy of SQ MarzAA in episodic bleeding

- Primary endpoint: Hemostatic efficacy using a standard 4-point assessment scale
- ~230 bleeding episodes to be treated in ~75 HA/HB individuals with inhibitors
- Anticipate first patient enrolled by end of 2020

Opportunity in multiple bleeding disorders

- ✓ Hemophilia A or B with inhibitors
- ✓ Hemlibra breakthrough bleeds
- ✓ Factor VII deficiency
- ✓ Glanzmann thrombasthenia
- Acquired hemophilia

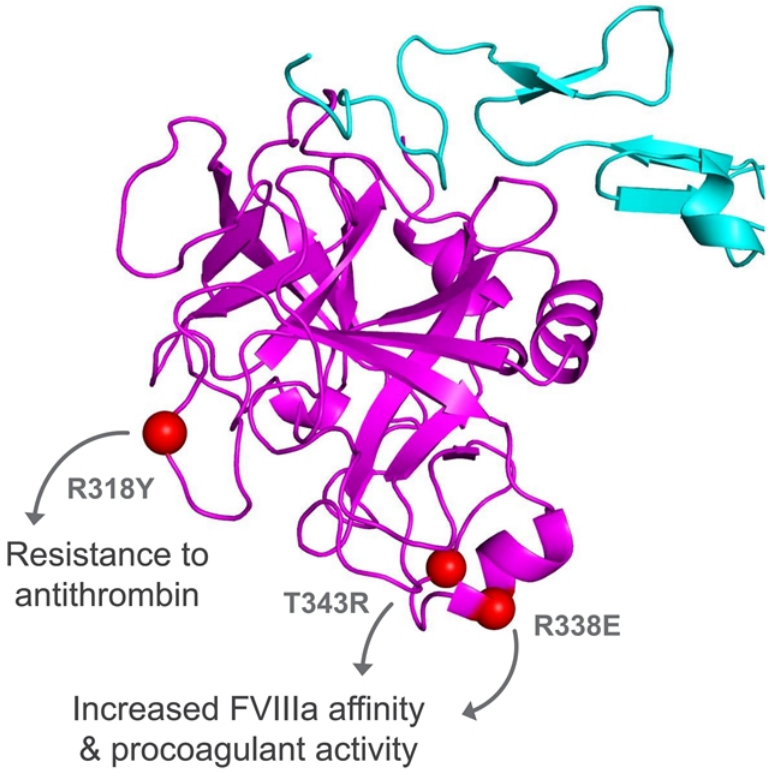
MarzAA development plan in 2020

Phase 3 HA/HB w Inhibitors – ToB

Phase 1/2 study in FVIID, Glanzmann & Hemlibra ToB

- Large commercial opportunity across multiple rare bleeding disorders
- Phase 1 PK/PD data support on demand as well as prophylactic treatment of bleedi
- Phase 2 demonstrated clinical efficacy & tolerability for prophylaxis indications
- Efficacy demonstrated for SQ on demand treatment of bleeding in pre-clinical model
- MarzAA can be safely combined with Hemlibra in human plasma *in vitro*

Dalcinonacog alfa: novel FIX replacement for SQ delivery



Three amino acid substitutions

+ Increased catalytic activity
+ Higher affinity for FVIIIa
+ Resistance to antithrombin inhibitic
+ 22-fold increased potency *vs* Bene

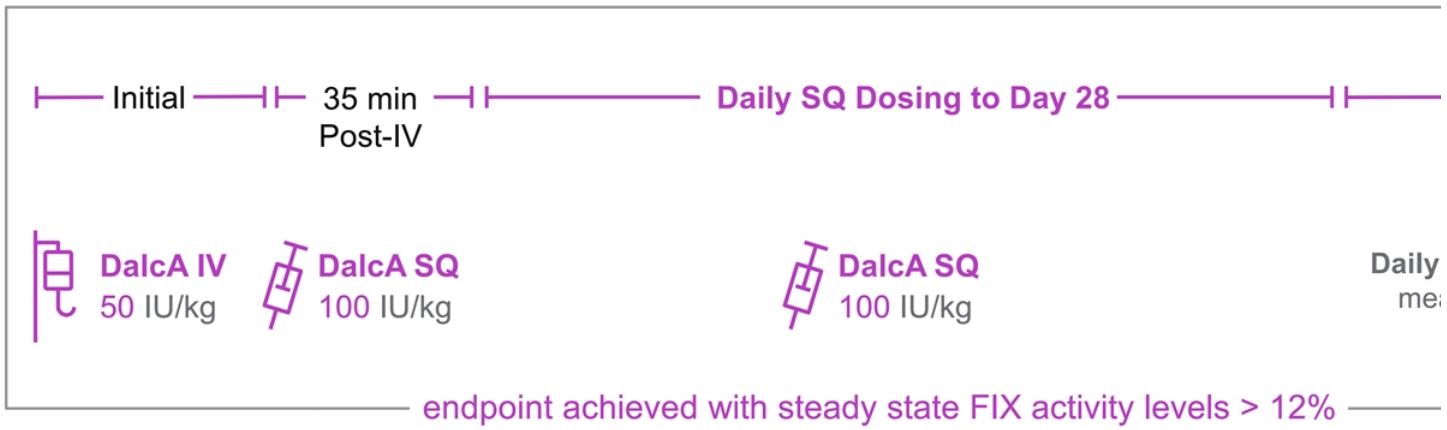
Differentiated from marketed IV FIX

+ Simple, small volume SQ administr
+ Enhanced pharmacokinetics with p
+ Excellent extravascular distribution
+ Potential to maintain continuous pr

Orphan Drug Designation in US & E

Dalcinonacog alfa phase 2b SQ clinical trial

Trial completed

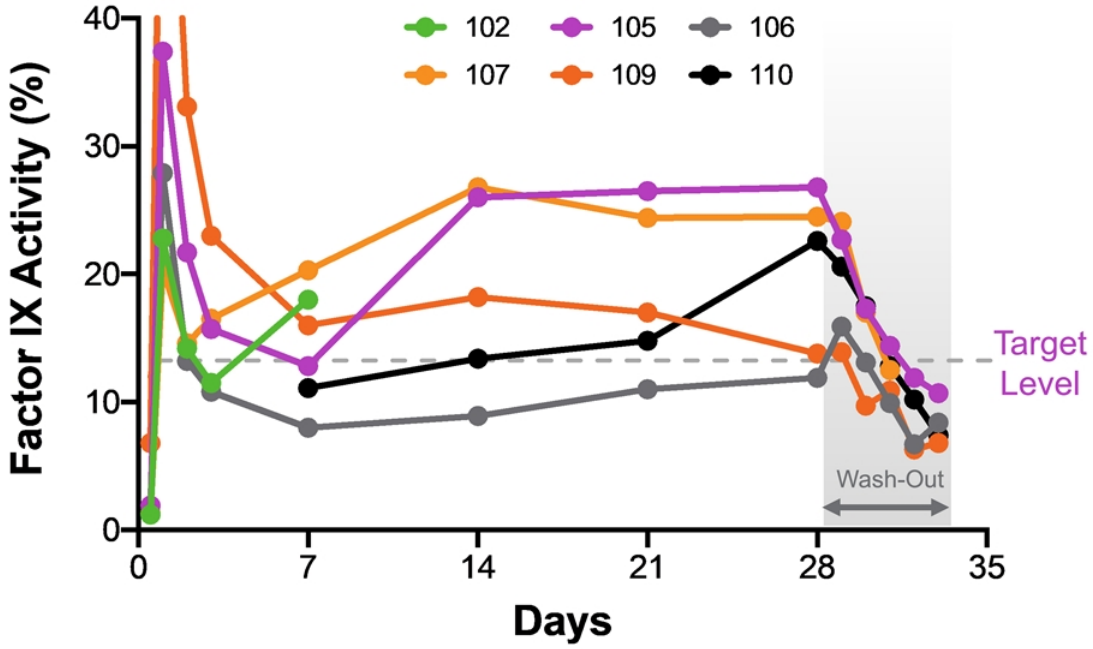


+ Primary endpoint: **Steady state FIX activity** level above 12% with daily dosing
+ Secondary endpoints: **safety including weekly ADA testing**, pharmacokinetics, pharmacodynamics, bleeding events

+ 6 severe Hemophilia B subjec
+ Rare propeptide mutation excl
+ HLA profile associated with n/ excluded

DalcA P2b efficacy & safety demonstrated

Target levels >12% achieved with 100 IU/kg dosing for 28 Days



+ Dosed 6 severe
  - 102 withdrev
+ **Steady state F**
  27% achieved a
+ **No breakthrou**
+ **No neutralizin**
+ Consistent PK
+ Terminal half-lif

Dalcinonacog alfa

Potential to provide effective SQ prophylaxis for individuals with Hem

- Phase 2b trial complete
- Excellent protective therapeutic FIX activity levels achieved
- No bleeding events during treatment demonstrates effective prophylaxis
- No SAEs, systemic hypersensitivity, nAb to DalcA or wild-type FIX
- Mild to moderate ISR primarily with initial injections – transient & self-limiting
- Long half-life – demonstrates potential to lower dose / reduce dosing frequenc

FIX gene therapy: CB 2679d-GT for hemophilia B

CB 2679d-GT in combination with a novel chimeric AAV capsid provides significant improvements

+ Stable **high activity levels** in a mouse hemophilia B model – **no nAb**
+ Vector dose **reduced 10-fold** compared to current constructs
+ Potential for an improved efficacy & safety profile
+ AAV license and sponsored research agreement with Stanford University School of Medicine

Superior preclinical efficacy of CB 2679d-GT *vs* Padua

+ 4 to 5-fold reduction in bleeding time
+ Activity levels elevated throughout the study - **no nAb**

Wholly-owned & issued patents covering gene therapy

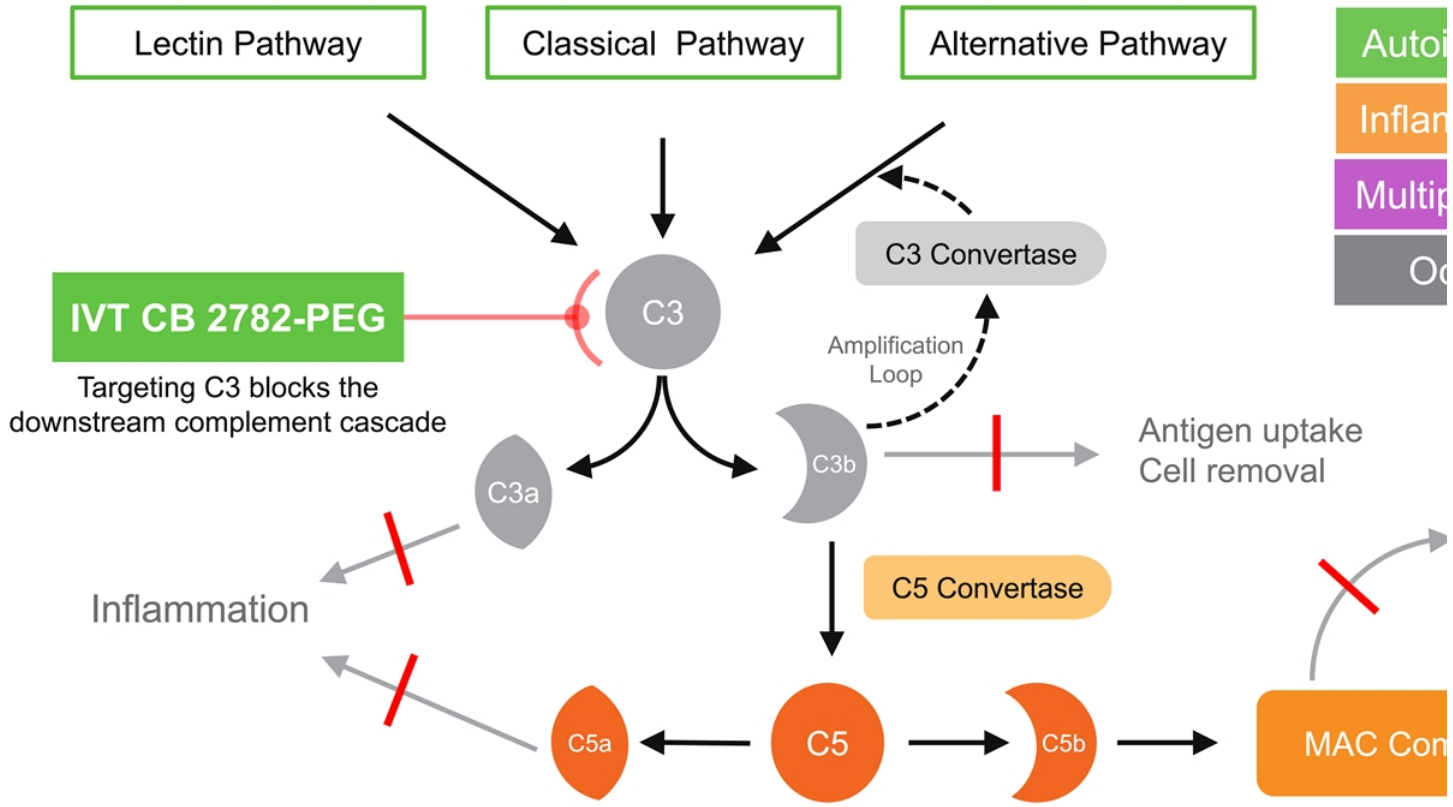
Stanfo
Universit

FIX Transgene	AAV Capsid	Study (vg/
CB 2679d-GT	**Novel Chimeric**	**8.0x1**
Padua	TAK-748*	7.4x1
Padua	TAK-748*	7.4x1

*Weiller *et al.* (2019) *Blood* Vol. 134, Sup

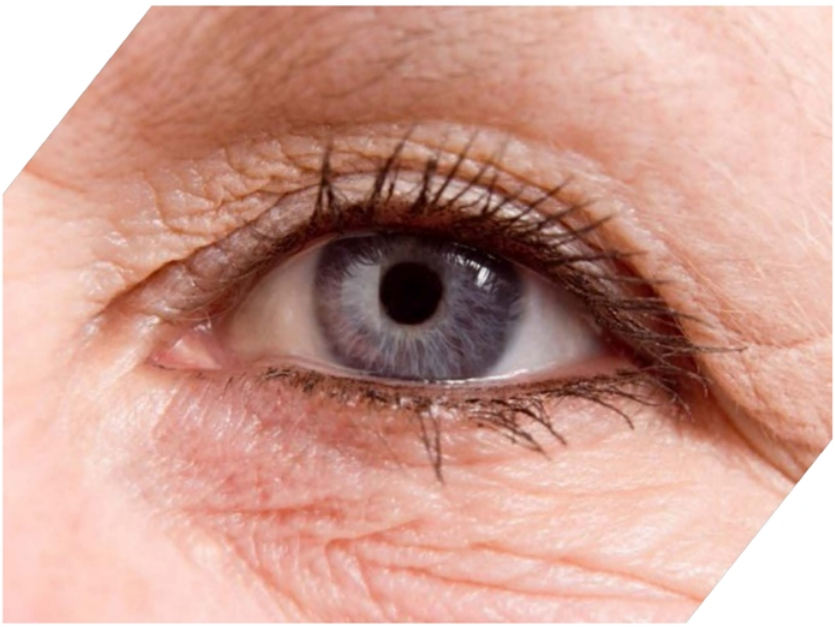
Blouse *et al.* EAHAD 2019 & 2020

Complement cascade is regulated by proteases



CB 2782-PEG: Complement factor 3 (C3) cleaving proteas

Geographic Atrophy in Dry AMD can result in blindness



- Geographic atrophy is an ad
  dry age-related macular deg
- Dry AMD affects ~1M people
  over 5M worldwide
- Global market estimated at >
- C3 is the only clinically (rand
  validated target for the treatn
- No currently approved drugs

Sources: National Eye Institute. Facts About Age-Related Macular Degeneration, Tufail 2015, The Eye Diseases Prevalence Research Group 2004, Gl

CB 2782-PEG long acting anti-C3 protease

Best-in-class anti-C3 profile for dry AMD

+ Generated from Catalyst's proprietary **protease engineering platform**
+ Potent, selective and long acting anti-C3 protease that degrades C3 into inactive fragments
+ Preclinical NHP PK & PD data* predict **best-in-class** human intravitreal dosing three or four times a year

Biogen Collaboration

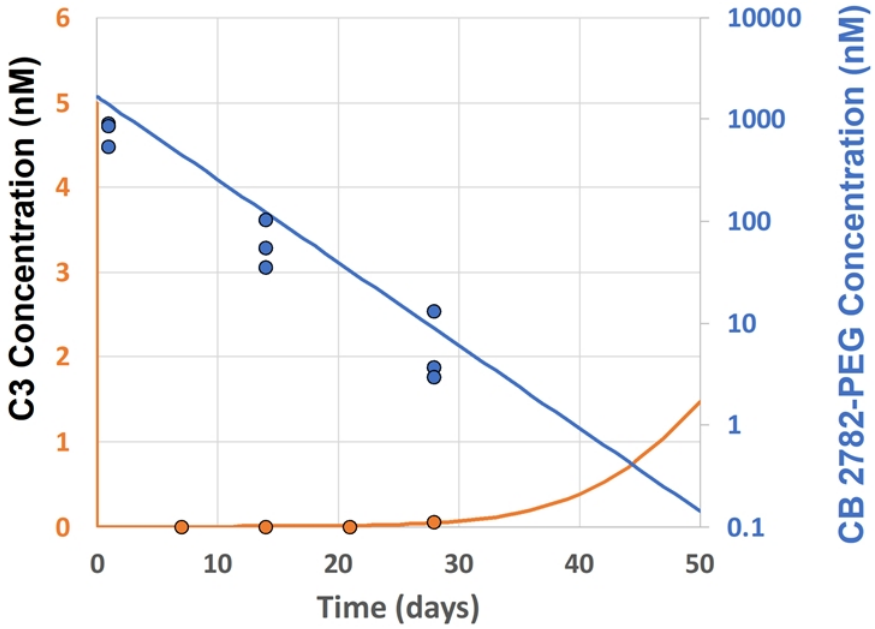
+ Announced December 19, 201
+ $15M upfront, up to $340M in and tiered royalties up to low d
+ Catalyst to perform fully funde and manufacturing activities
+ Biogen responsible for IND-en activities, worldwide clinical de commercialization

*Furfine *et al.* ARVO 2019

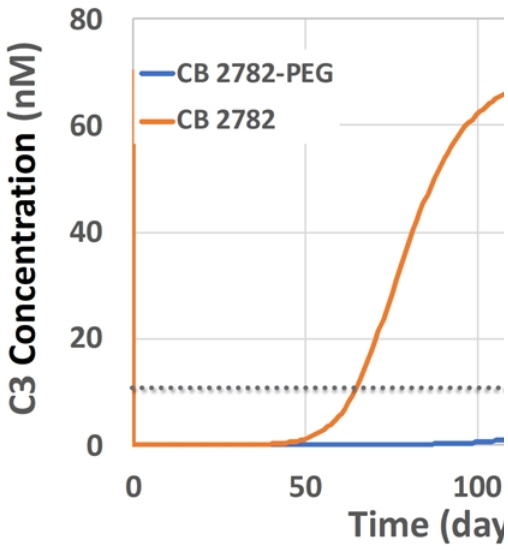
CB 2782-PEG long acting anti-C3 protease

Best-in-class anti-C3 profile for dry AMD with dosing every 3 to 4 months

Non-Human Primates



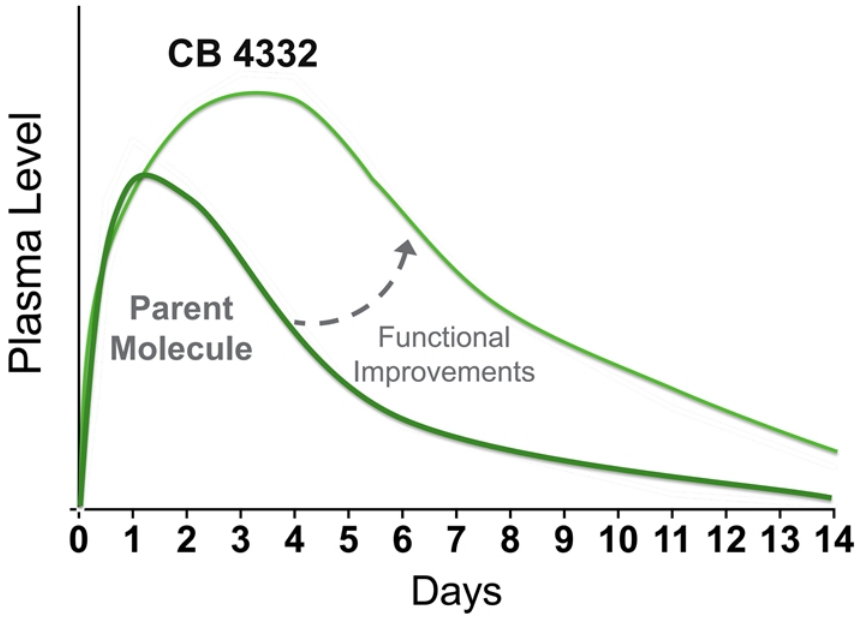
Human Modelin



Predicted >90% elimination of C3 at 4 months

CB 4332 SQ long-acting systemic complement regulator

Non-human primate PK supports weekly SQ dosing in humans



Expanding the complement

+ Leverages Catalyst's propr **engineering platform**

+ Designed for **SQ administ improved bioavailability**

+ **Simple** & **efficient** product

Milestones – 2020

	Q1	Q2	Q3	
MarzAA (FVIIa)	**EoP2**	**ToB PK/PD**	• MAA-102 data • Population PK	• Initiate p • Initiate F Deficien Thromba Hemlibra
DalcA (FIX)	**Interim P2b**	**Final P2b**		
CB 2679d-GT (FIX Gene Therapy)	**NextGen Vector**	• NHP Efficacy		• Develop Candida
CB 2782-PEG (dAMD)		Biogen		
CB DC (Systemic complement)				• Develop Candida

Team

President & CEO
Nassim Usman, Ph.D.

26 years in biotech

Chief Medical Officer
Howard Levy, M.B.B.Ch., Ph.D., M.M.M.

18 years in hematology

Chief Financial Officer
Clinton Musil, M.B.A

16 years in biotech & i-banking

SVP, Translational Research
Grant Blouse, Ph.D.

13 years in biotech

SVP, Business Development
Jeffrey Landau, M.B.A.

18 years in biotech

SVP, Technical Operations
Andrew Hetherington, M.B.A.

20 years in biotech

Summary

Disruptive approach to billion-dollar markets – protease engineering platform

FVIIa: SQ MarzAA ~$2.2B market

+ P1 PK/PD & preclinical data supports ToB
+ P2 efficacy & safety demonstrated
+ P3 patient enrollment in Q4 2020

FIX: SQ DalcA >$1.8B market

+ Phase 2b efficacy & safety demonstrated
+ Potential for less frequent dosing

FIX Gene Therapy: CB 2679d-GT

+ Proprietary preclinical gene therapy asset with superior activity vs current clinical constructs

Anti-C3 dAMD: IVT CB 2782-

+ Biogen collaboration
+ $15M upfront, up to $340M ir
  low double digits tiered royalt

SQ systemic complement inh

+ Large $B+ rare-disease oppo
+ Multiple indications & applica
+ 1st Development Candidate i

Well capitalized

+ Cash runway into 2022

THANK YOU

Nasdaq: CBIO

catalystbiosciences.com

CA
BI

MarzAA is only bypass agent for **both** SQ prophylaxis and SQ treatment of bleeds

Attractive commercial profile targeting an existing $2.2B bypass agent market

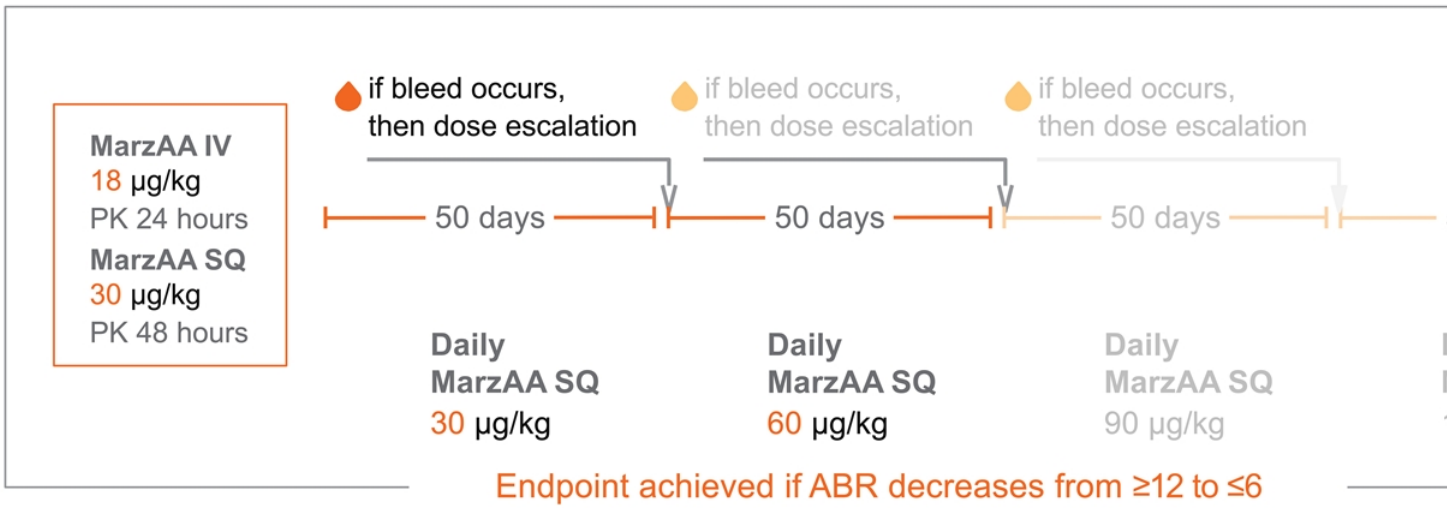
IV NovoSeven ($1.2B 2019 sales) validates rFVIIa in multiple rare bleeding disorders

+ Hemophilia A or B with inhibitors
+ Severe Factor VII Deficiency
+ Glanzmann Thrombasthenia
+ Acquired Hemophilia A

SQ MarzAA has a superior profil NovoSeven – over 100 clinicians patients surveyed

+ Physicians & patients overwheln prefer SQ MarzAA over IV Novo
+ **SQ MarzAA** can create & expan episodic bleed & prophylaxis ma

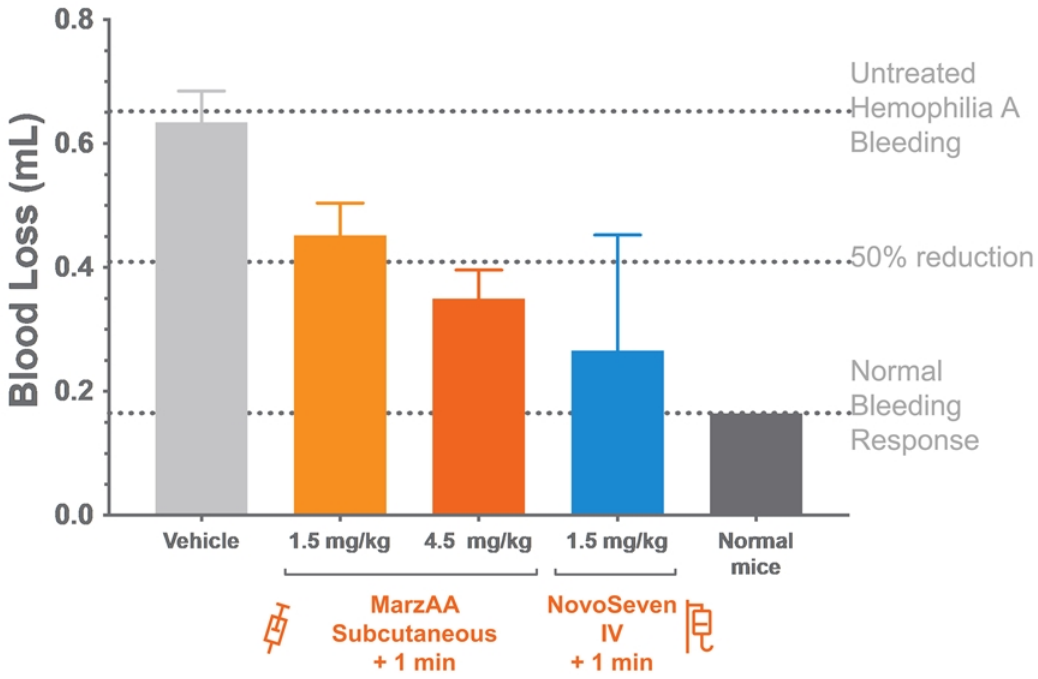
MarzAA phase 2/3 SQ clinical trial MAA-201



- Patients with documented annual bleeding rate (ABR) >12
- Open label SQ study with individual dose escalation if needed in Hemophilia A or B with inhibitors
- Primary endpoint: reduction in annualiz bleed rate **at final dose level**
- Secondary endpoints: safety and tolerability, inhibitor formation

SQ MarzAA reduces bleeding when dosed *After* the Injury

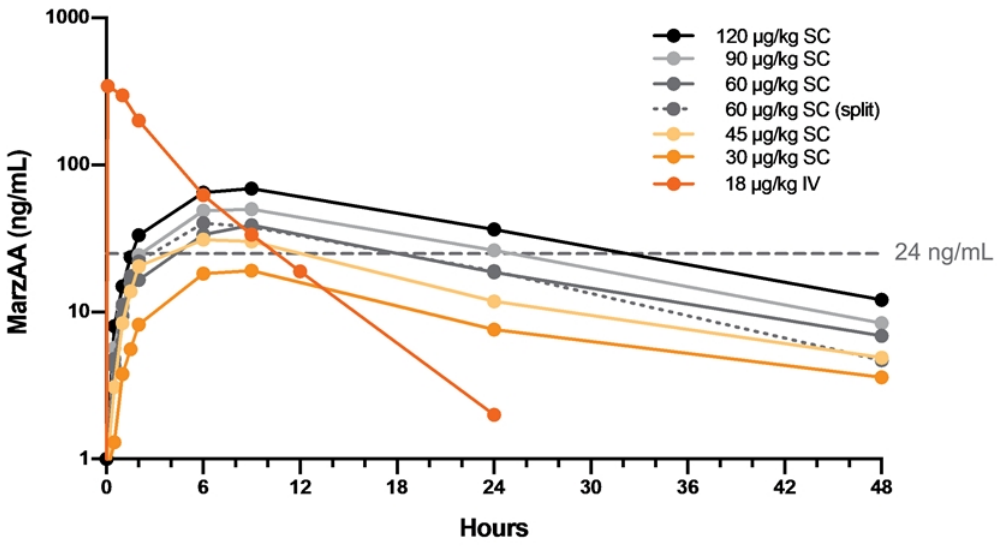
Acute mouse injury model with dosing *after* the injury



Reduced bleeding *A*

+ Hemophilic mice blee **more** than normal mi
+ **SQ treatment** of Mar traumatic bleeding ha significantly **reduces** **stops the bleed**
+ The effect is **dose de**
+ Reduction in blood lo **with IV NovoSeven**

MAA-102: PK MarzAA levels support SQ treatment of a ble



- Target of 24-120 ng/mL to
  based on continuous infus
  NovoSeven for surgery
- Target levels are rapidly a
- 25% and 50% of C_{max} at 1
  respectively
- Dose-proportional increas
  AUC
- Target levels can be maint
  with a single SQ dose of 6
- No ADA
- Multiple dosing cohorts co
  - 60 µg/kg 3-hourly; tw

Neuman, 2020