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 28, 2021

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 September 28, 2021, Catalyst Biosciences, Inc. (the "Company") posted an update to its corporate presentation (the "Presentation") on its website, ir.catalystbiosciences.com/presentations-events. 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.
104	Cover Page Interactive Data File (formatted as Inline XBRL).

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, 2021

/s/ Clinton Musil
Clinton Musil
Chief Financial Officer

CATALYST BIOSCIENCES

Corporate Overview

28 September 2021

CatalystBiosciences.com

Forward looking statements

Certain information contained in this presentation and statements made orally during this presentatic substantial risks and uncertainties. All statements included in this presentation, other than statement looking statements. Forward-looking statements include, without limitation, statements about the pro "Company") and the benefits of its protease engineering platform, potential commercial opportunities potential to treat hemophilia subcutaneously; plans to enroll the Crimson 1 Phase 3 registration stud bleed data for this study; plans to enroll the MAA Phase 1/2 study of MarzAA and report PK and trea and advantages of the Company's complement product candidates, including CB 2782-PEG as a pc a potential treatment for CFI deficiency, and complement degraders; plans for the Company's collab CFI complement product candidates, and plans to enroll the CB 4332 observational trial and to cond

Actual results or events could differ materially from the plans, intentions, expectations and projectior Various important factors could cause actual results or events to differ materially, including, but not li delayed or terminated as a result of COVID-19 and other factors, that trials may not have satisfactor from earlier trials, that the Company will need to raise additional capital, which may not be available develop or manufacture the Company's products will be higher than anticipated, including as a resul from COVID-19 and other factors, the risk that Biogen will terminate its agreement with the Company Factors" section of the Company's Annual Report on Form 10-K filed with the Securities and Exchan filed with the SEC on August 5, 2021, and in other filings with the SEC. The forward-looking stateme of the date of this presentation and the Company does not assume any obligation to update any forv

CATALYST BIOSCIENCES

The Protease Medicines Company

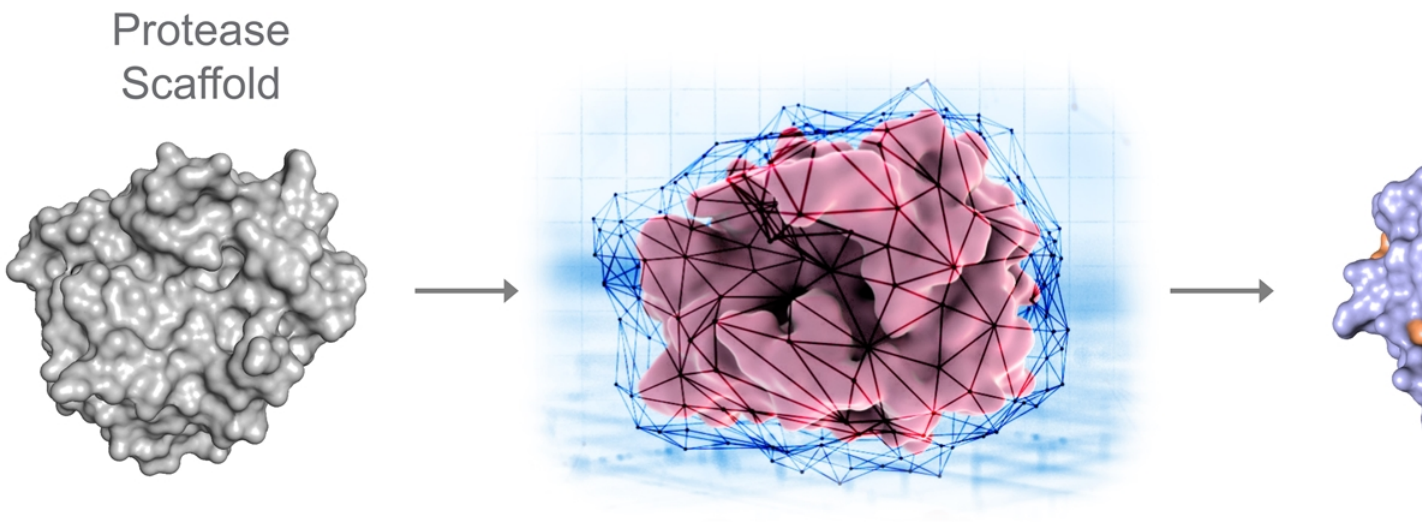
Harnessing the catalytic power of proteases

- Novel differentiated medicines
- Robust complement portfolio
- Clinical-stage assets
- Unique expertise in protease engineering

Catalyst protease platform

Unique expertise enables design of optimized & dif

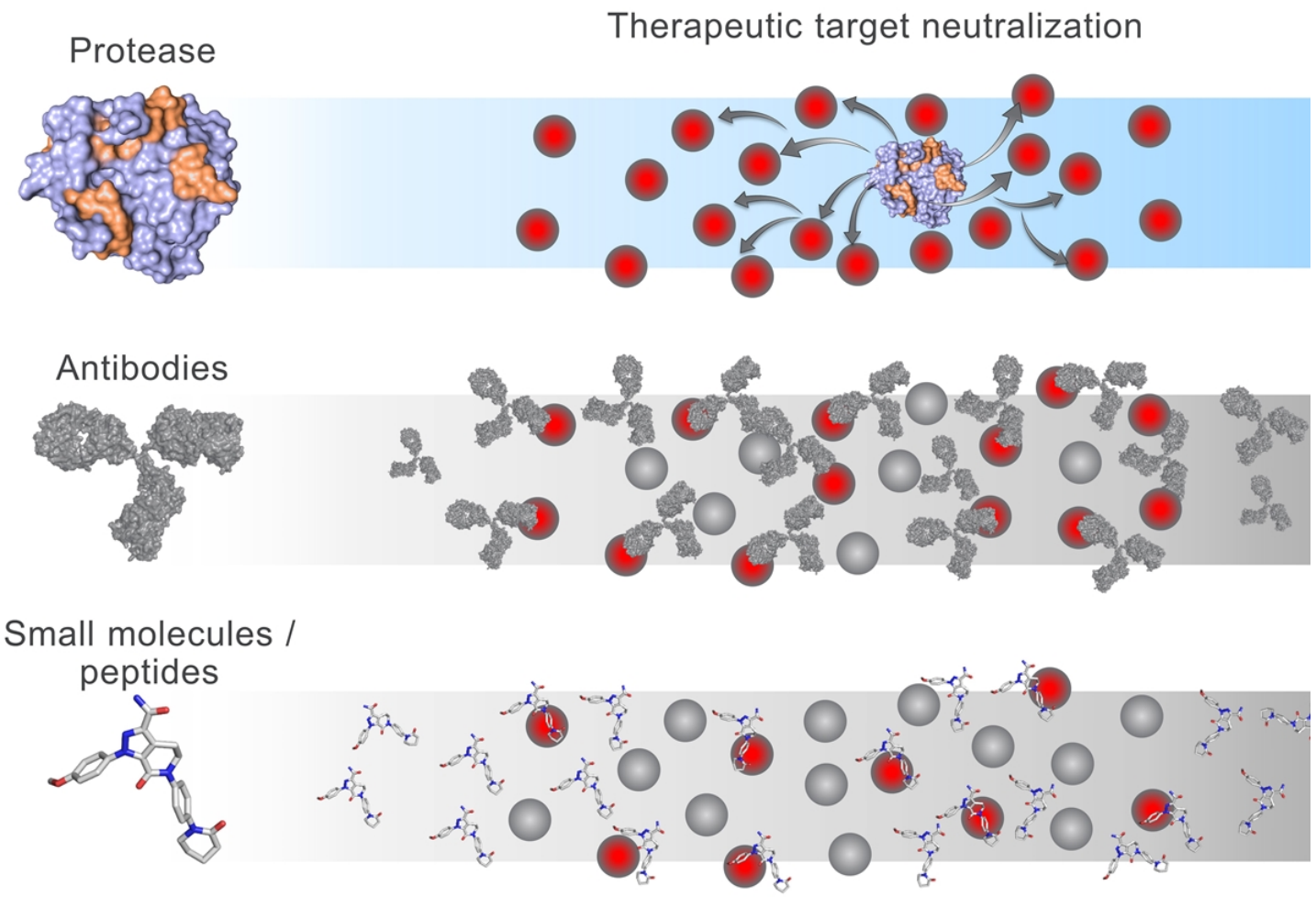
Discovery Platform



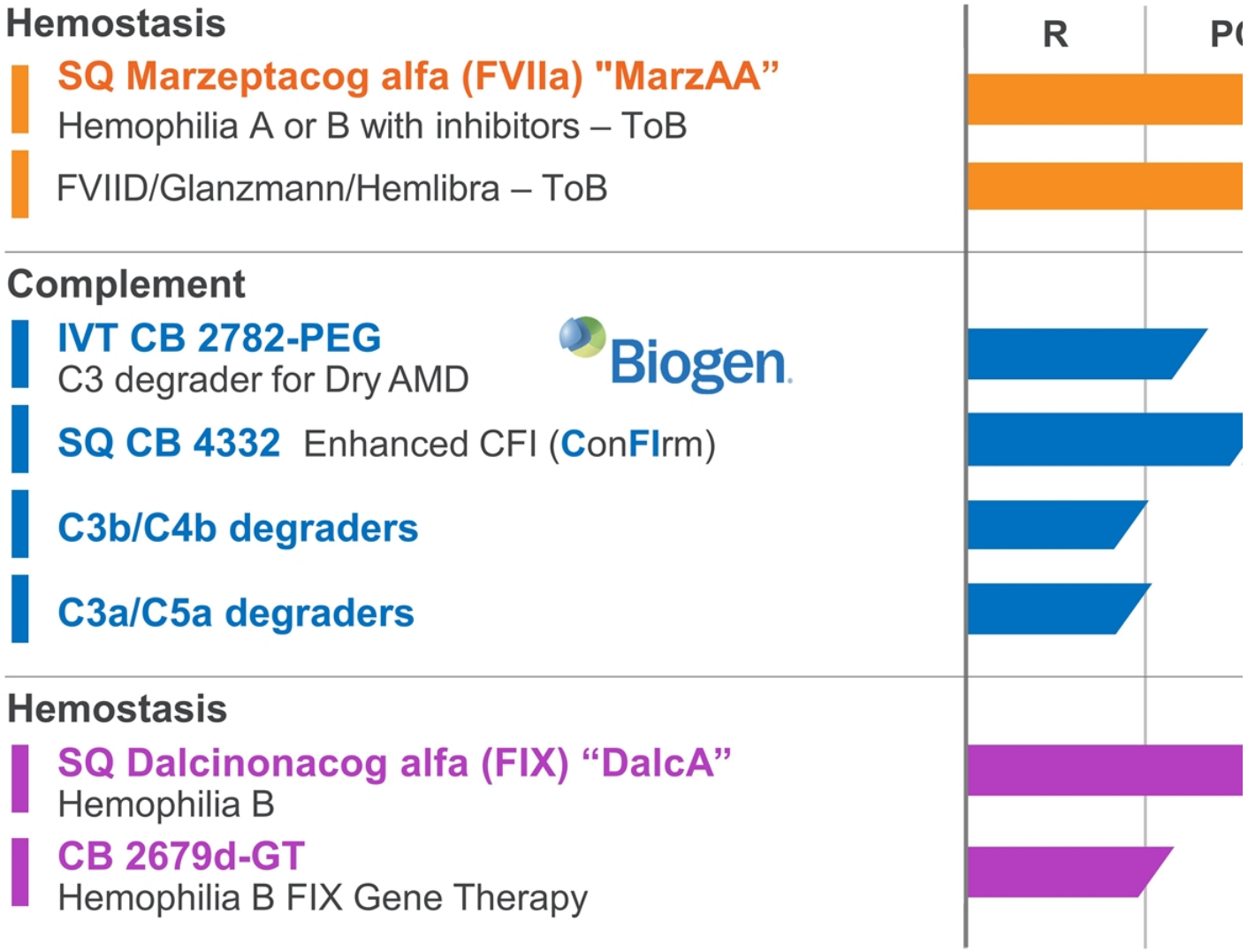
- Structure Guided Design
- Molecular Evolution
- Engineered Regulatior
- Pharmacokinetic Impr

Proteases are ideal for high abundancy ta

A better way to regulate biological processes compared



Pipeline

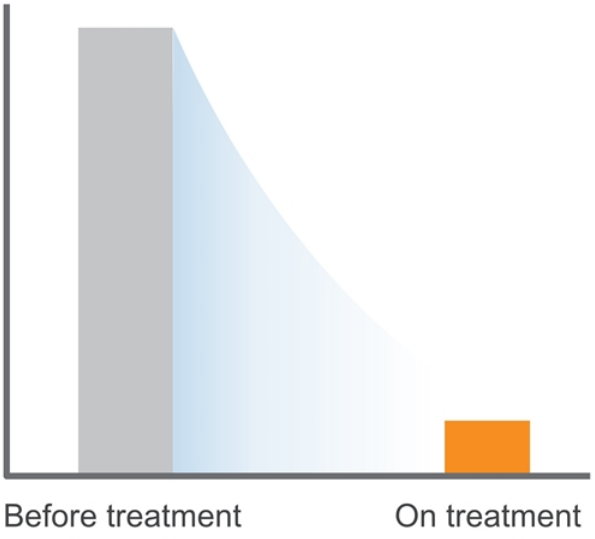


Catalyst protease platform

Validated across three programs

Marzeptacog alfa (activated)

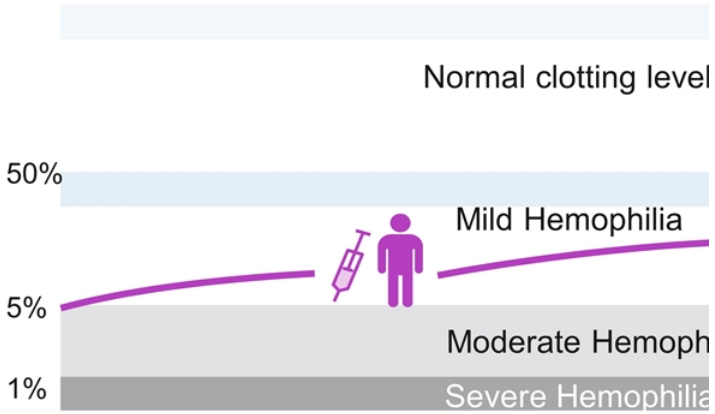
90% reduction in annualized bleed rate



Engineered rFVIIa protease

Dalcinonacog alfa

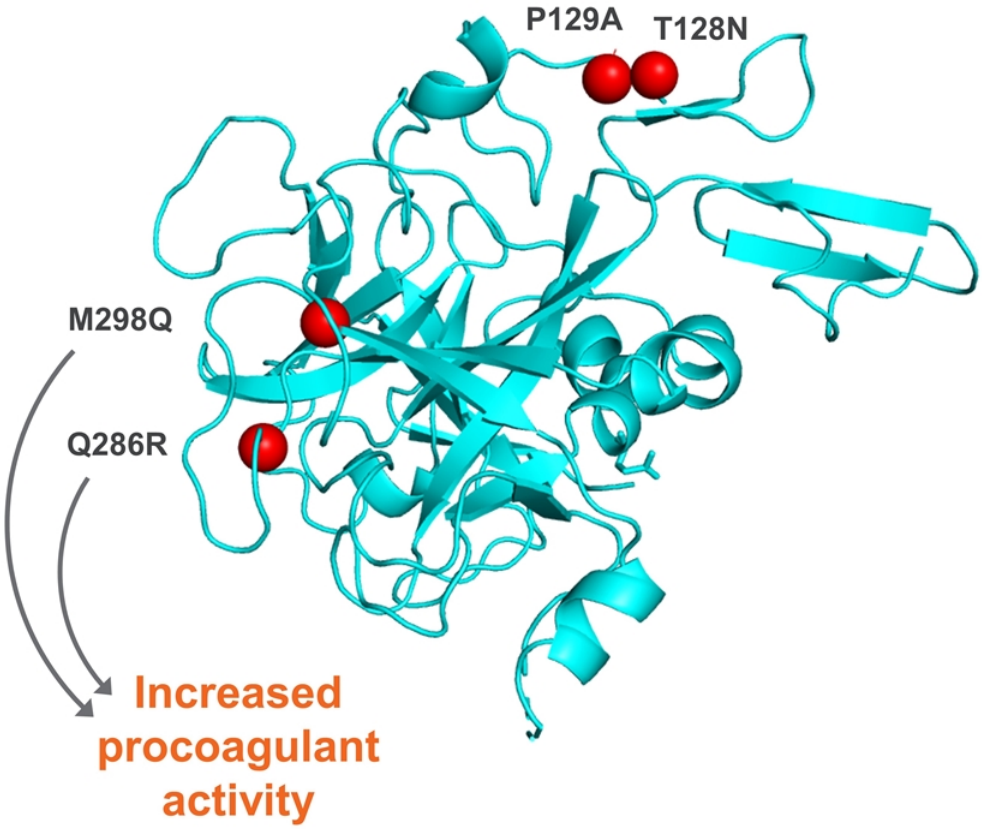
Achieved sustained & high target levels of FIX



Engineered rFIX protease

Marzeptacog alfa (activated) – MarzAA: SC

Designed to address a clear unmet need in hemophilia &



9-fold higher ac

+ Potency allows f
+ NovoSeven RT i

Preclinical effic

+ HA mouse after

P2 proof of con with inhibitors -

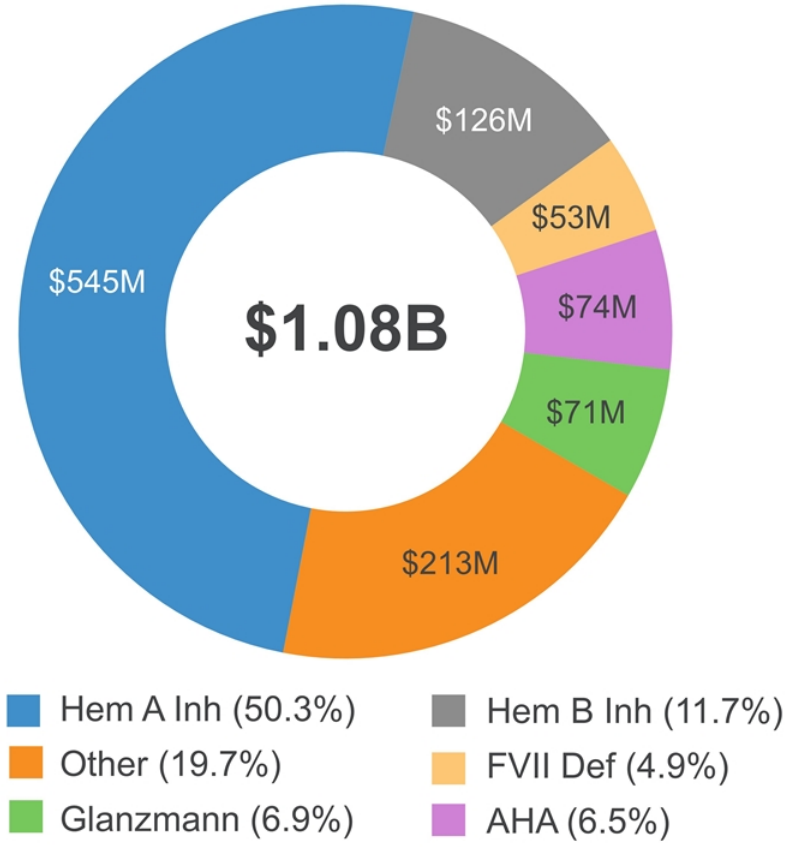
+ 46 patients treat
  3 SQ doses/day

Multiple regulat

+ FTD: HA/HB witl
+ ODD: HA/HB wit

SQ MarzAA is a large commercial opportu

Global NovoSeven sales breakdown by indication (2020)

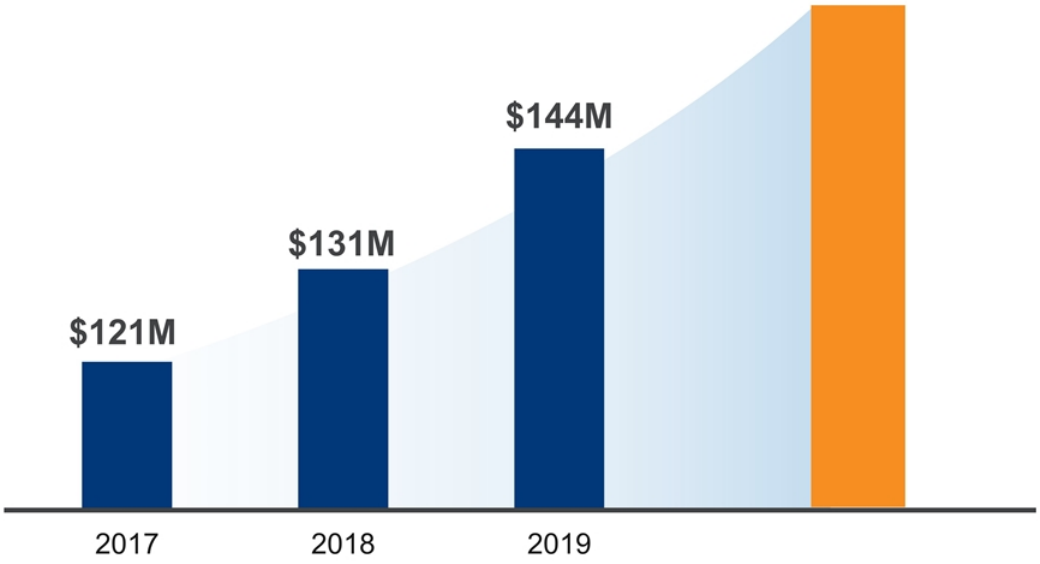


SQ MarzAA

+ SQ is patie
  to fast & e
+ Ideal for p
  access iss
+ Long half-l
  control of b
+ *In vitro* dat
  Hemlibra®
+ Prophylaxi

 Source: Adivo Associates market research; Catalyst Biosciences market research. Data on file.

MarzAA could provide SQ prophylaxis for



Global NovoSeven on demand sales Glanzmann Thrombasthenia, FVIID

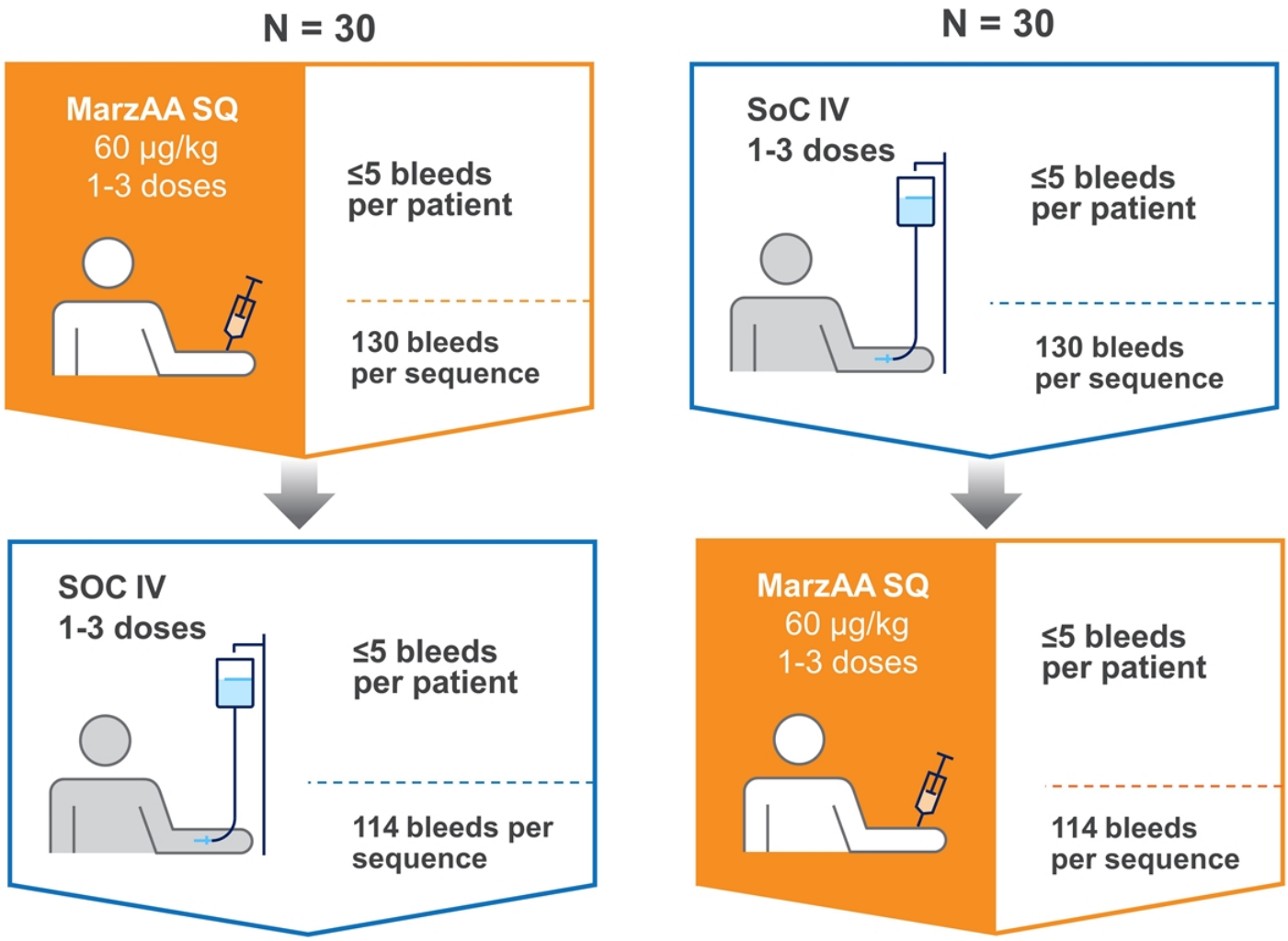
Unmet need in prophylaxis

Gr
Th
pa

Source: Catalyst Biosciences, Adivo Associates Market Research, Data on file. *Note: 2019 estima
patients may have multiple bleeding events per year needing factor treatment

Crimson 1 Phase 3 study: Treatment of ep

Hemophilia A or B with inhibitors, ABR ≥ 8



MAA-202 Phase 1/2 study design

FVII deficiency, Glanzmann Thrombasthenia and HA

Phase 1 PK

MarzAA IV
each cohort

Single dose

MarzAA SQ

Single dose escalation

Multiple dose Q3H

Phase 2 ToB

MarzAA SQ
1-3 doses

FVIID ≥30 bleeds

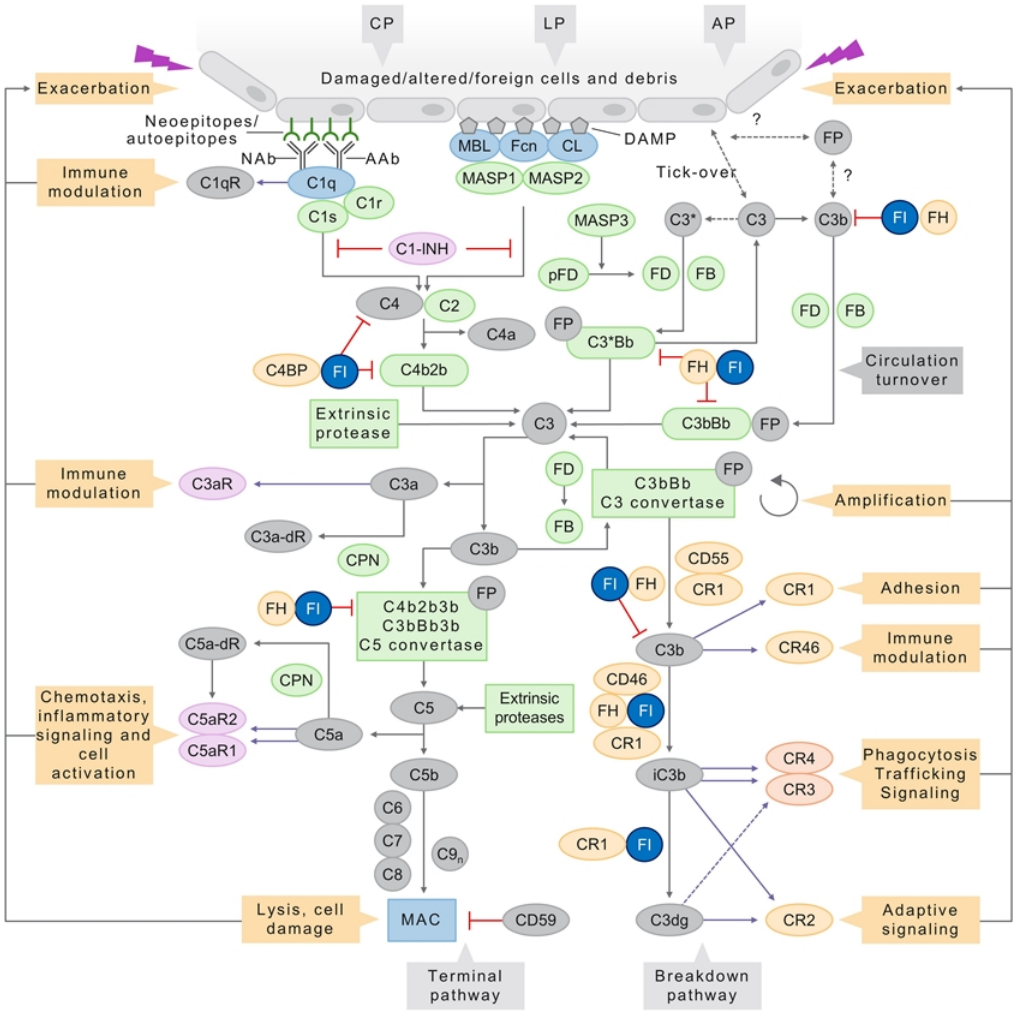
GT ≥30 bleeds

HA ≥15 bleeds

Growing Complement Pathw
Protease Platform

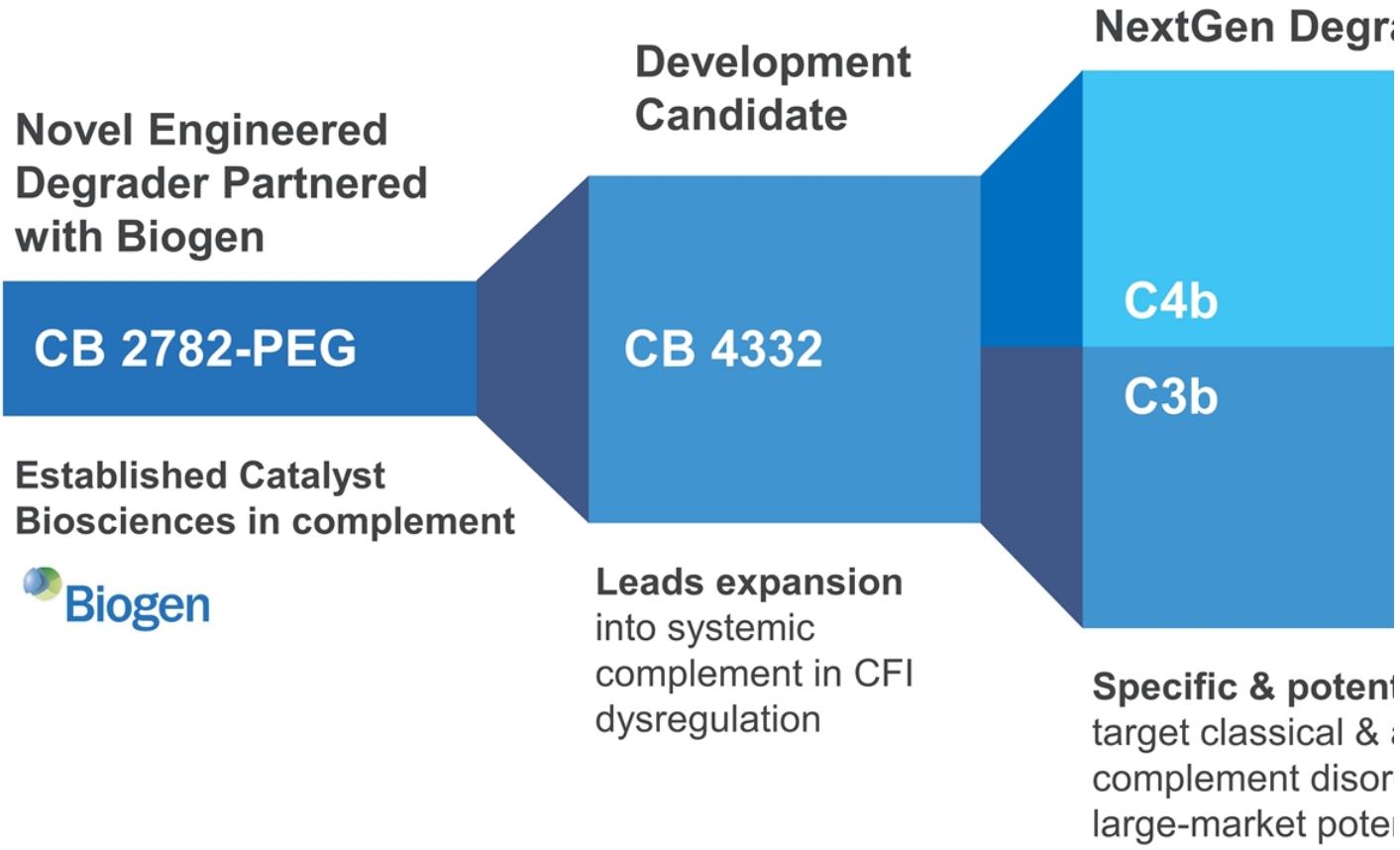
Complement is a perfect fit to develop pro

The complement pathway is driven by a protease ca

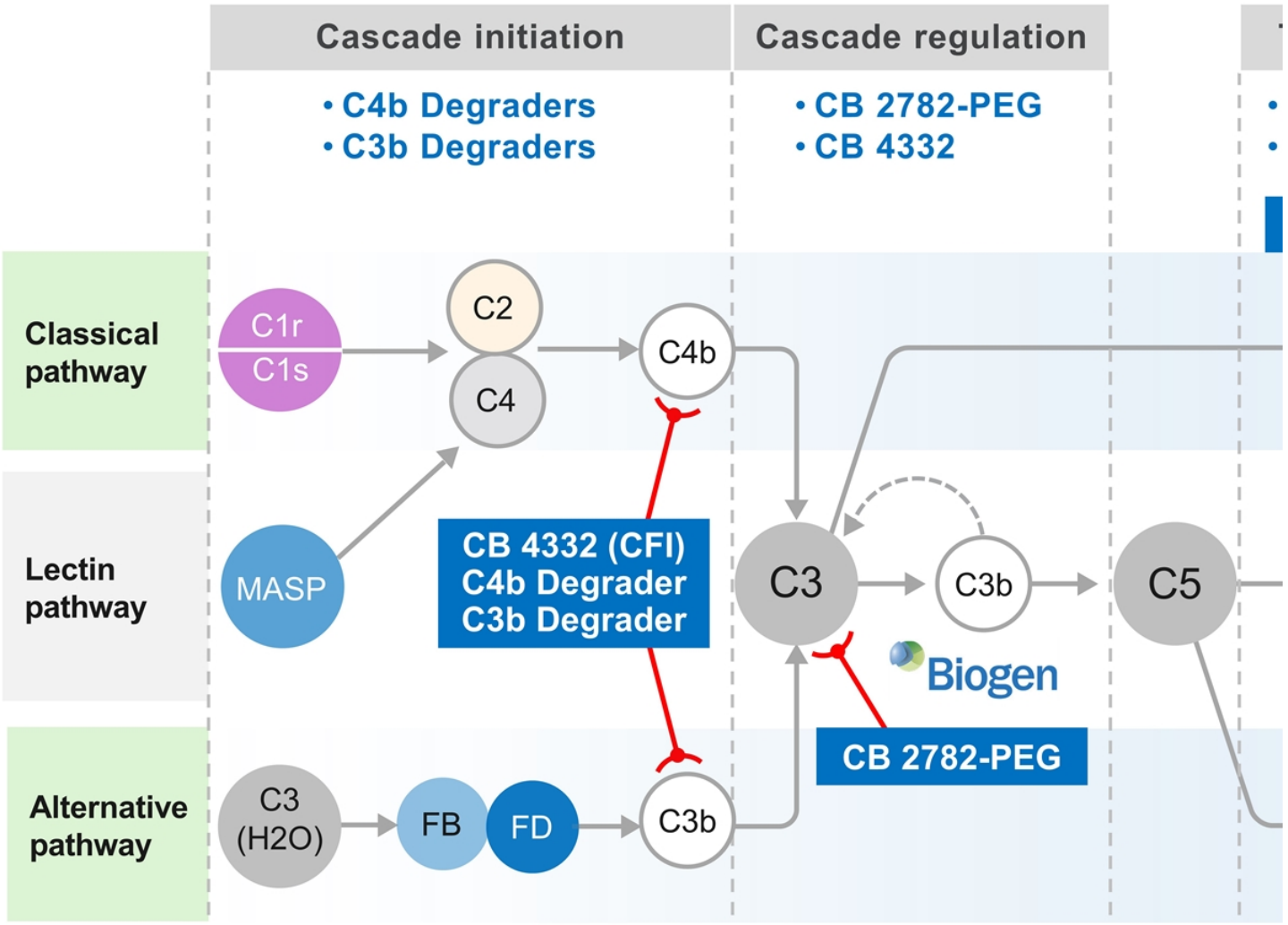


 Source: Figure adapted from Mastellos *et al.*, Clinical promise of next-generation complement ther

Multiple, high-value complement program



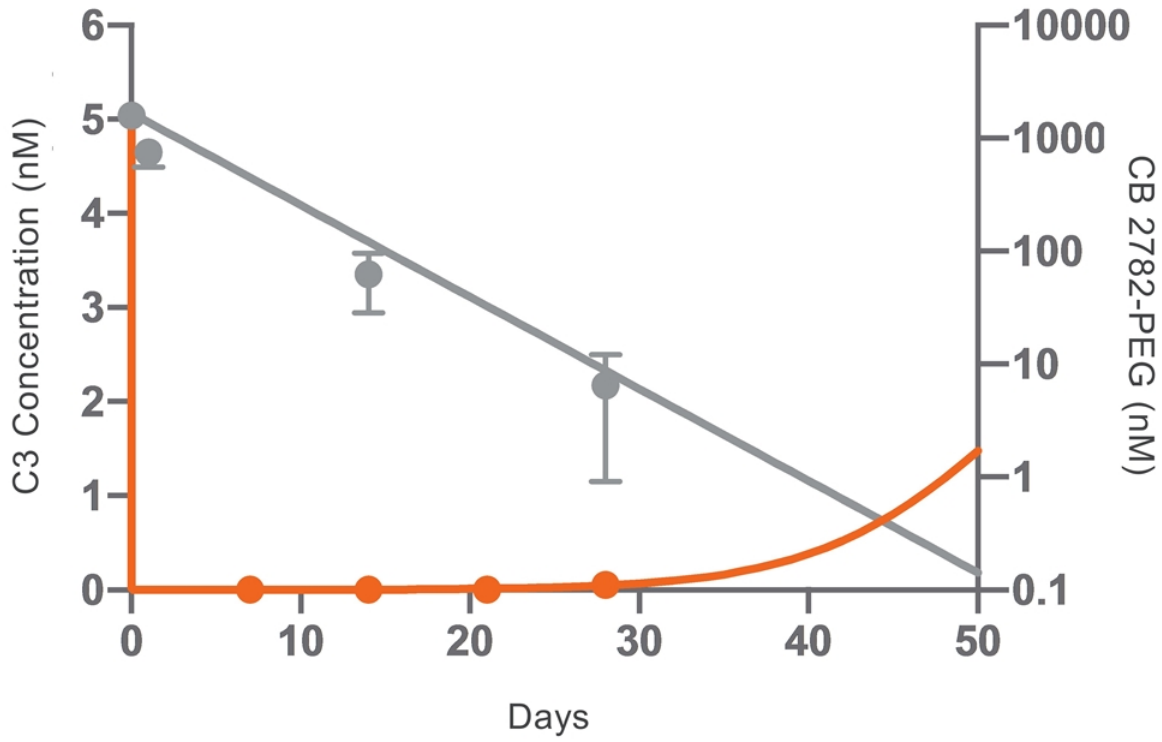
Unique targeted approach to complement



CB 2782-PEG: Best-in-class C3 degrader f

Protease advantage demonstrated *in vivo*

CB 2782-PEG degrades C3 levels in the eye for at least 28 days in a non-human primate model



CB 2782-PEG: Long acting anti-C3 proteas

Geographic atrophy is a high unmet need

+ Advanced stage of dry age-related macular degeneration (dAMD)
+ dAMD affects ~1M people in the US & >5M WW, no currently approved therapy
+ Global market ~ >$5B
+ C3 is a clinically validated target (randomized P2) for dAMD

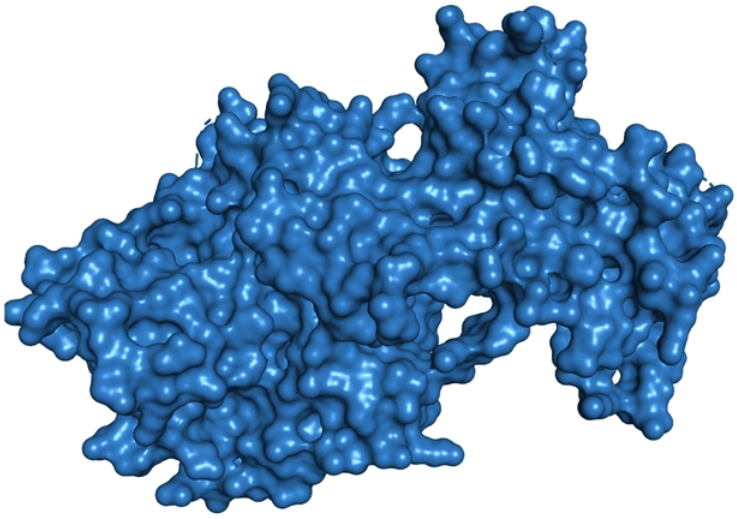
Best-in-class C3 degrader for dry AMD

+ Generated from Catalyst's proprietary **protease engineering platform**
+ Potent, selective & long act degrades C3 into inactive fragments
+ NHP PK & PD data* predic **best-in-class** human intrav **dosing 3 or 4 times a yea**

 *Furfine *et al.* ARVO 2019

CB 4332: SQ Enhanced Complement Facto

Development candidate to restore regulation



+ **Engineered for an extended half-life**
  + Once weekly SQ therapy – no PEG
+ ***In vitro & ex vivo* activity comparable to native CFI**
  + Classical & alternative pathway regulation
+ **High yield production process**

 [1]Bienaime *et al*. Kidney Int. 2010; [2]Ferreira *et al*. Nefrologia. 2016; Note: CFI = Complement factor

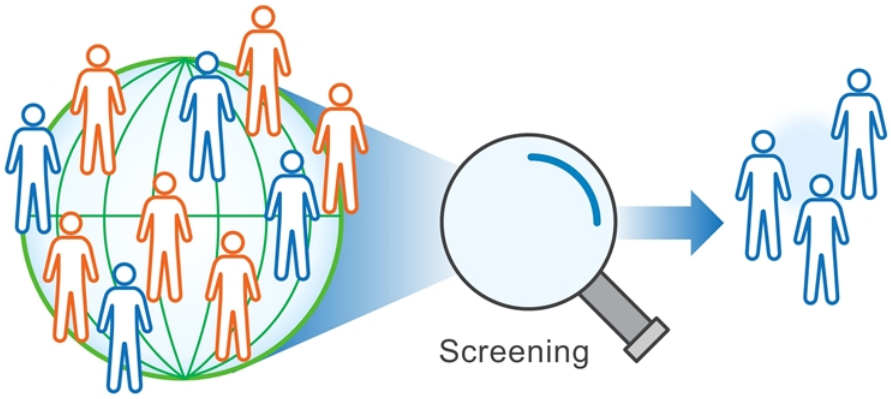
CB 4332: To address CFI deficiency at the

Designed to provide unique advantages

Unmet needs in CFI deficiency
Blocks complement-initiated cell destruction in the circulation
Directly addresses root cause of disease
Addresses extravascular hemolysis
Preserves normal immune functions, *e.g.* to fight off infections
Convenient weekly SQ administration

Screening & natural history of disease stu

ConFIrm & ConFIdence: preparing for Phase 1/2



Identifies Target Popula
Study / Discovers Undia

ConFIrm study

ConFIdence st

Prospective Cli
of CFI-Deficien

- **Identification of CFI-deficient patients & key investigato**
- **Discover undiagnosed disease, create program awaren**

CB 4332: Phase 1/2 – First in human study

Study parts

Single Ascending Doses
(N = up to 12)

Multiple Ascending Doses
(N = up to 9)

Extended treatment to assess proof of concept
(N = up to 15)

Study design

+ Phase 1 open-label, s
  & extended duration p
+ Population: CFI-defici

Proposed starting d

+ 0.5 mg/kg

Goals

+ Safety & tolerability
+ PK characterization
+ Assessment of compl
  Bb/FB ratio, iC3b, C3
+ Establish a Recomme
  the CFI normal range

Diseases with CFI mutations have tremen

US / EU5 market opportunity

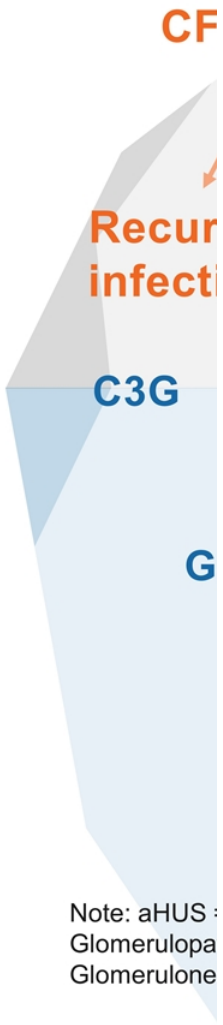
CFI Deficiency
First indication

$500M+
Market opportunity in CFI deficient populations

0 Specific systemic therapies in development for patients with dysregulated CFI

0 Therapies addressing the root cause of disease

0 Approved treatments for C3G, IC-MPGN, CFID

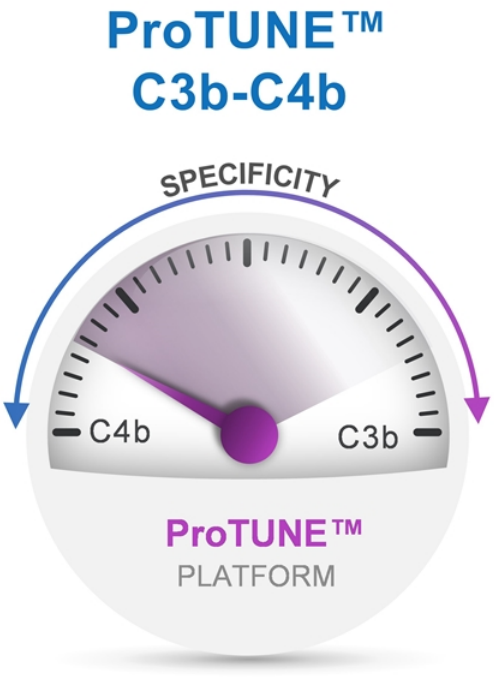


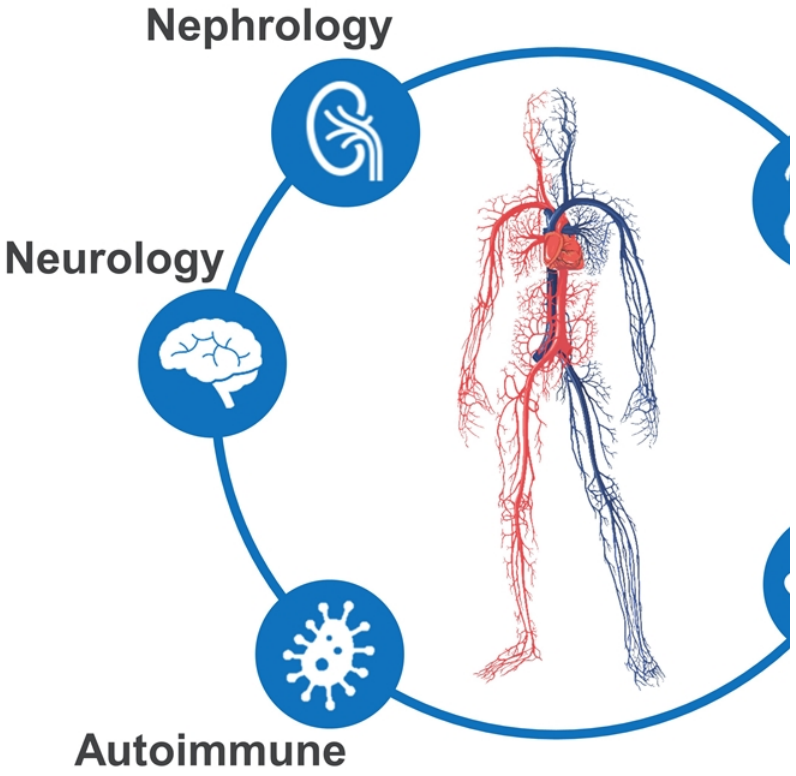
Note: aHUS =
Glomerulopa
Glomerulone

Bresin *et al*. JASN 2013; Fremeaux-Bacchi *et al*. ASN 2013; Rui-Ru *et al*. J Rare Dis Res 2018; S
Immunol 2016; Hou *et al*. Kidney Int 2014; Alba-Domiguez *et al*. J Rare Dis Res 2012. El Sissy *et*
2019; Naesens *et al*. J Allergy & Clin Immunol. 2020; Yan *et al*. Clin Epi 2020; Smith *et al*. Nature
2010; CBIO KOL interviews

Our protease platforms are tailored to spe

Tuning functionality to restore complement homeos

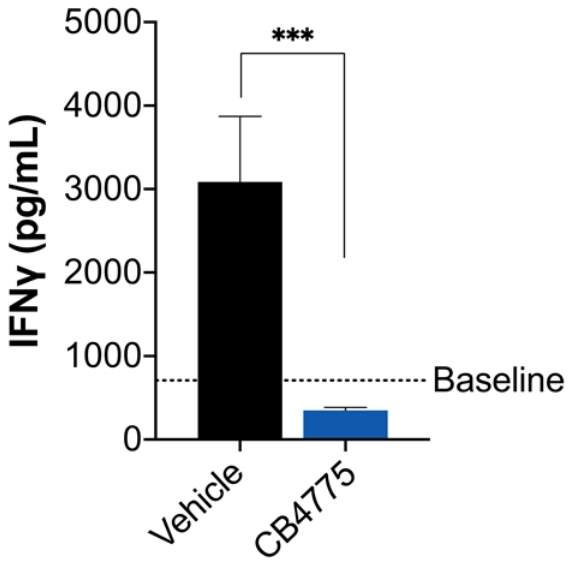


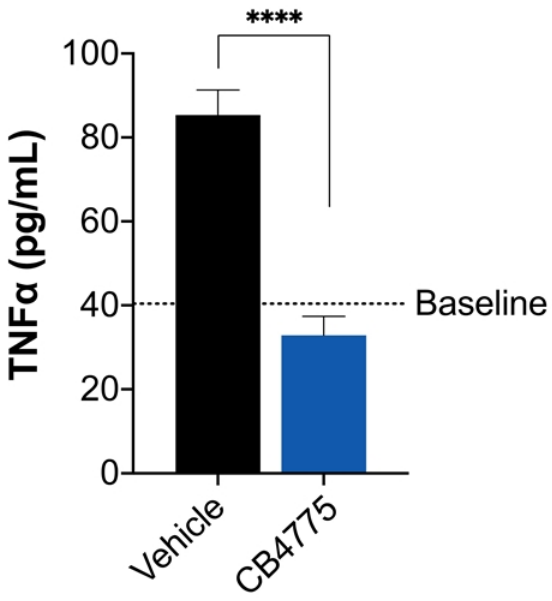


C3b/C4b degraders significantly reduce in

Significantly decrease in inflammatory markers inv

Inflammatory markers in IgA nephropathy





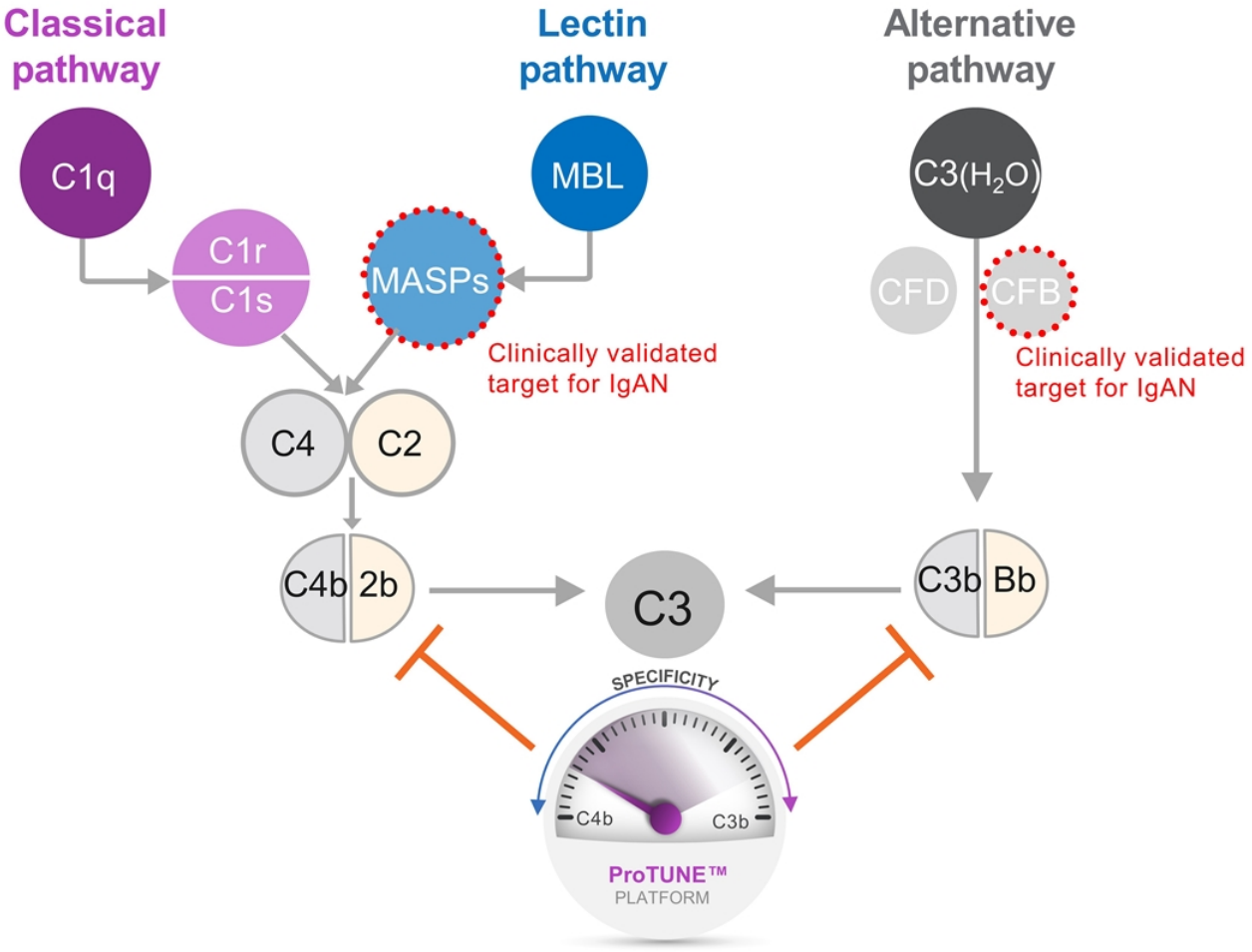
Rat model

Reduction of **IFNγ & TNFα** involved in kidney damage & prot

1. Yano, N. *et al.* Phenotypic Characterization of Cytokine Expression in Patients With IgA Nephrop
Th1/Th2 predominance & proinflammatory cytokines determine the clinicopathological severity of Ig
Values are mean +/- SEM, ***p<0.001 using One Way or Two-way ANOVA.

C3b/C4b degraders for IgA nephropathy p

Dual targeting of alternate & lectin pathways

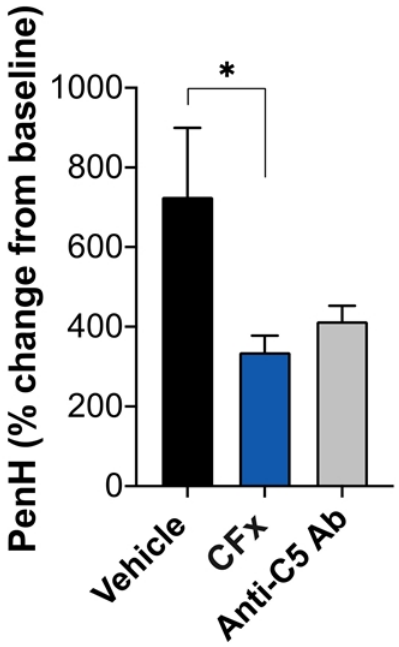


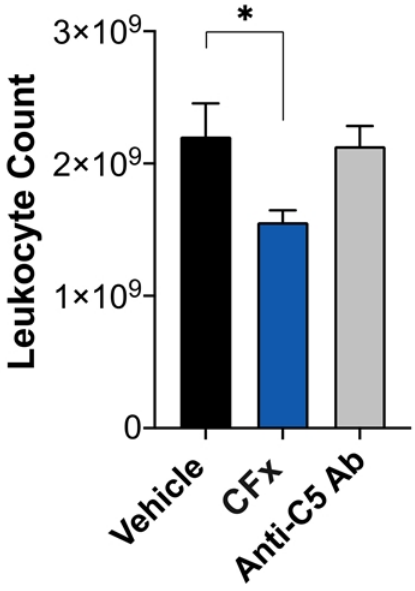
1. Medjeral-Thomas *et al*. Kidney International Reports (2018); 2. Bi *et al*. BMC Nephrology (2019)

C3a/C5a degraders: Acute LPS-induced A

CFx improves respiratory function & reduces cell in

Respiratory functions & cell infiltration at 24 h



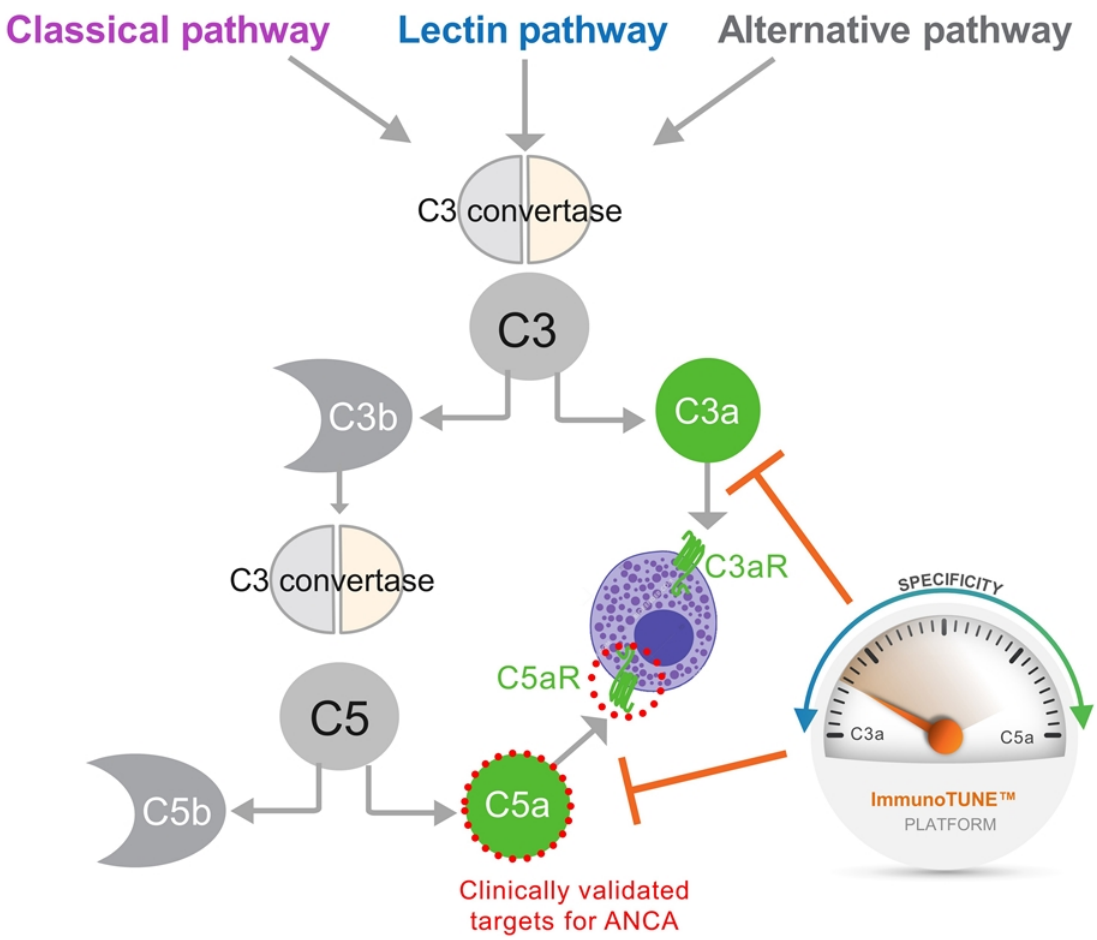


CFx 7-fold lower dose vs. anti-C5

- CFx **outperforms** anti-C5 antibody in reducing inflamma
- CFx **compares well** on respiratory functions with anti-C5

C3a/C5a degraders: Potential for ANCA-A

Dual targeting of both C3a & C5a with one protease



Diffe

+ De
C5
+ Ma
C5

Rati

+ Bo
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Clini

+ Inh
ins
AN

1. S. Moiseev *et al*. British Society for Immunology, Clinical and Experimental Immunology (2020);

Milestones

MarzAA (FVIIa) **CB 2782-PEG** (dAMD) **Systemic complement**

THANK YOU

Nasdaq: CBIO

CatalystBiosciences.com