

# **Sutacimig -** A Novel Prophylactic Treatment for Glanzmann Thrombasthenia: Interim Analysis of a Phase 1/2 Study

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Speaker bureau	Sanofi, CSL Behring, Chugai/Roche, Takeda
Patients for drugs or devices No relevant conflicts of interest to declare	
Other	No relevant conflicts of interest to declare



## **Glanzmann Thrombasthenia**: platelet aggregation defect causing frequent bleeding events

## Severe platelet function disorder



Frequent bleeding events from low-volume bleeding to life-threatening hemorrhages<sup>1-2</sup>



No approved therapies for primary prophylaxis



Characterized by deficient or dysfunctional GPIIb/IIIa expression on platelets impairing platelet aggregation and platelet-fibrinogen binding during primary hemostasis **88%** of patients bleed weekly

> 50% bleed 3 x per week

80% miss school or work

**30%** develop alloimmunization to platelets

Current treatment options are limited by short half-lives, high costs, and complications with IV administration

Frequent bleeding events accumulate to create a significant clinical impact, including iron deficiency, and impaired quality of life.



#### Sutacimig Binds FVIIa and TLT-1 to Enhance Thrombin Generation



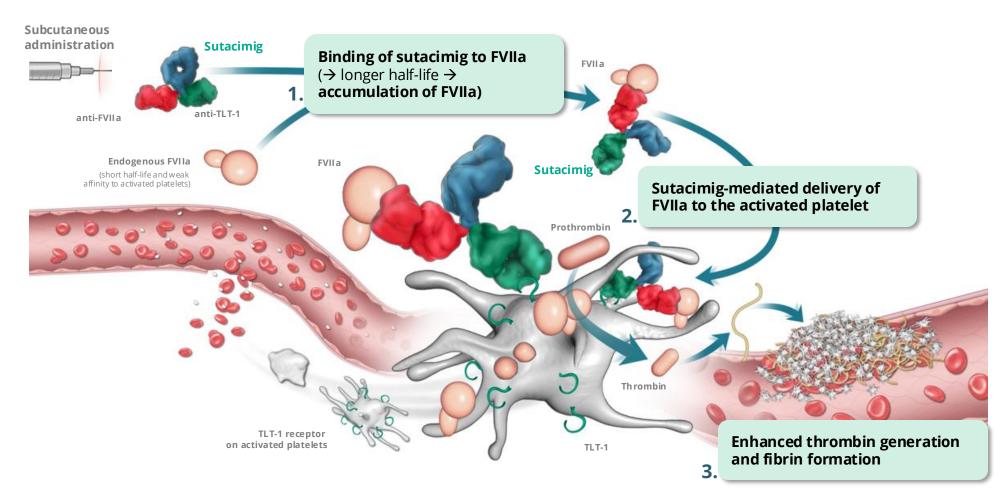
Bispecific antibody



Low-volume (<1 mL) SQ dose



TLT-1 potentiated FVIIa-mediated thrombin generation



Sutacimig binds and accumulates endogenous FVIIa and, following vessel lesion, localizes FVIIa to the surface of activated platelets via TLT-1 potentiation<sup>1</sup>



#### Multiple Ascending Dose Evaluation with Long-term Extension Enrollment complete

#### **Study objectives**

#### **Primary:**

- Safety/tolerability
- PK/PD

#### **Secondary:**

Efficacy

#### **Study population**

- Confirmed GT diagnosis
- History of bleeding requiring treatment
- Adults 18–67 years

#### **Safety population**

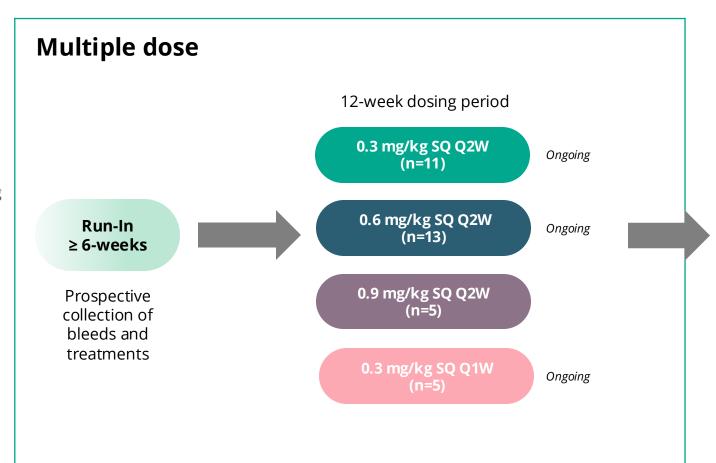
• N=34

#### **Efficacy population**

• N=33\*

## Results of SAD portion previously presented^

- N=7
- No DLT, max dose tested 1.25 mg/kg



## Long-term Extension up to 9 months

12 pts completed multiple dose 8 patients dosing in extension

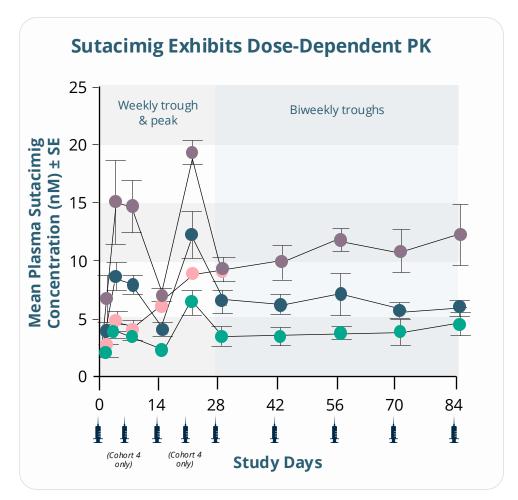


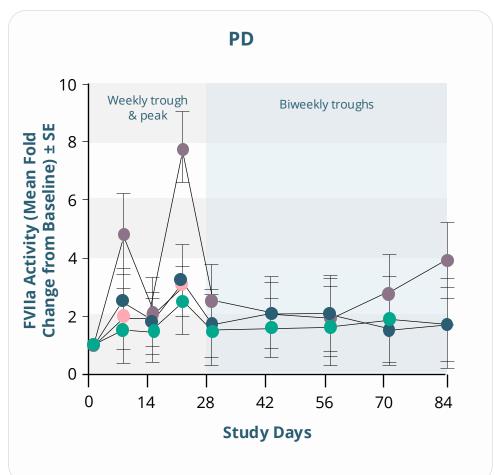
## Baseline Characteristics and Demographics

Demographics		N=34
Age	Median, years (range)	40.5 (18-66)
<b>Sex,</b> n (%)	Female	16 (47)
	Male	18 (53)
<b>Race,</b> n (%)	Asian	6 (18)
	Black or African American	2 (6)
	White	16 (47)
	Other	2 (6)
	Not reported	8 (23)
Baseline ATBR during run-in	Mean (range) Median (Q1, Q3)	54.9 (0, 372.0) 23.6 (5.5, 59.6)
Cause of bleed (%)	Spontaneous Traumatic Iatrogenic	68 25 7



#### Dose-Dependent Increase in Exposure and FVIIa Levels





- 0.3 mg/kg Q2W (n=10)
- 0.6 mg/kg Q2W (n=10)
- 0.9 mg/kg Q2W (n=5)
- 0.3 mg/kg Q1W (n=5)

- Dose-proportional exposure and PD (n= 30)
- FVIIa elevation in all dose cohorts
- 0.9 mg/kg peak PD approximately double that of 0.3 mg/kg and 0.6 mg/kg cohorts
- 0.3 mg/kg Q1W peak below 0.6 mg/kg cohort with trough levels similar to 0.9 mg/kg cohort



#### Interim Safety Summary

Median exposure: 2 months (range: 0.03–10.15)

	N (%)
Safety population	34 (100)
Any grade AE (all causality)	26 (77)
AE leading to discontinuation	1 (3)
<b>AE in ≥ 10%</b>	
Headache	6 (18)
Nasopharyngitis	6 (18)
D-dimer elevation	6 (18)
≥ Grade 3 AE (non serious)	5(15)
≥ Grade 3 AE (non serious)  Dental caries	5(15) 1 (3)
	,
Dental caries	1 (3)
Dental caries Iron deficiency anemia	1 (3) 1 (3)
Dental caries Iron deficiency anemia Post procedural hemorrhage	1 (3) 1 (3) 1 (3)
Dental caries Iron deficiency anemia Post procedural hemorrhage Back pain	1 (3) 1 (3) 1 (3)

- Majority AEs mild to moderate in severity
- No thromboses or discontinuations due to AE in ongoing dose levels
- Notable AEs:
  - DVT (0.9 mg/kg Q2W) on Day 46 at peak exposure (previously reported; patient with multiple potential risk factors, managed outpatient; patient discontinued due to AE)
  - Grade 3 melena Day 2, assessed as unrelated and resolved
  - Grade 3 post-procedural hemorrhage (following dental procedure, resolved with 5 mcg/kg administration of rFVIIa); iron deficiency anemia (D1-3, resolved)
  - D-dimer elevation in 6 participants (all low grade); 1 associated with previously reported DVT; all others associated with treated bleeding events; otherwise asymptomatic; no associated clinical thrombocytopenia (all platelet values > 120), or hypofibrinogenemia
- 4/34 participants developed neutralizing ADA;
   2/4 resolved with continued dosing; no associated safety events

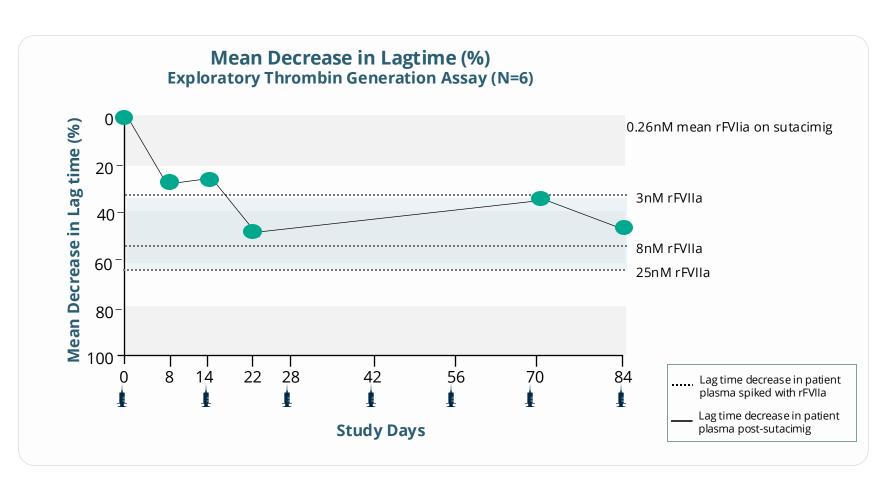


## Improvement in Thrombin Generation (Lag Time) Demonstrates TLT-1 Potentiation of FVIIa by Sutacimig

Baseline and post-sutacimig lag time compared to rFVIIa-spiked baseline sample lagtime

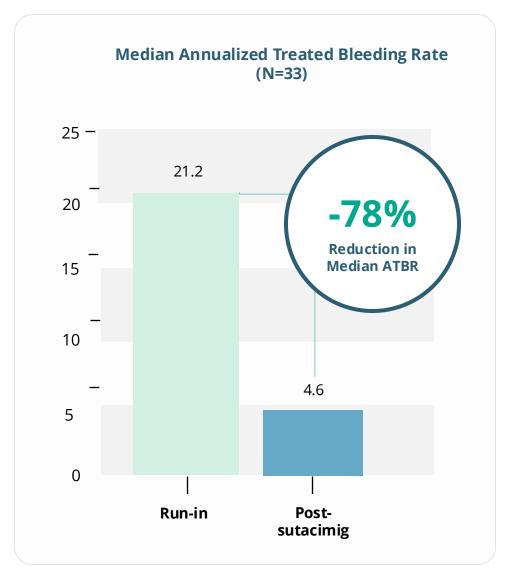
- GT patients exhibit extended lag time
- Lag time improvement on sutacimig comparable to improvement in baseline samples spiked with 3 nM to 8 nM rFVIIa
- Mean FVIIa post-sutacimig for these patients was 0.26 nM
- Demonstrates TLT-1 potentiation of FVIIa

Lag time improved ~50% in sutacimig-treated patients, comparable to clinically relevant rFVIIa





## Median Annualized Treated Bleed Rate on Weekly or Biweekly Sutacimig Up to 12 weeks of dosing; median exposure 8.5 weeks; all doses included



Dosing regimen	N
0.3 mg/kg Q2W	11
0.6 mg/kg Q2W	12
0.9 mg/kg Q2W	5
0.3 mg/kg Q1W	5

ATBR	Run-In	Post-sutacimig
Median	21.2	4.6
Interquartile range	4.8-55.6	0-27.4

Interim data cutoff as of April 1, 2025



### Clinical Impact of Sutacimig



#### **Participant**

37 year-old male with recurrent epistaxis, oral iron intolerance, and anti-GPIIb/IIIa antibodies on sutacimig treatment for 6 months

Cessation of epistaxis-induced transfusions on sutacimig 0.6 mg/kg Q2W



## Epistaxis history at baseline – in prior 3 months



6 months postsutacimig

- Daily epistaxis lasting >30 minutes
- Transfusions required
- Medical attention needed

- Decreased epistaxis frequency
- Transfusion-free for 6 months
- No medical attention needed for 6 months



#### **Participant**

50 year-old female with history of rFVIIa use for bleeding; baseline ATBR 46; on sutacimig treatment for 9.5 months

Successful post-procedure hemostasis with reduced rFVIIa sutacimig 0.6 mg/kg Q2W

ATBR reduction  $46 \rightarrow 0$ 

Successful hemostasis post dental procedure using >90% reduced dose of rFVIIa\*

90 mcg/kg (typical dose)

→ 5 mcg/kg



#### **Conclusions**

- Interim data from N=34 participants with Glanzmann thrombasthenia and baseline ATBR mean/median of 55/24 with 0.03 to 10 months exposure
- No thromboses or discontinuation due to AE in ongoing dose levels; majority of AEs mild or moderate; one DVT at prior 0.9 mg/kg dose level
- Dose-dependent peak PK, PD at ongoing dose levels with demonstration of FVIIa elevation 2-4-fold above baseline and improved thrombin generation (lag time)
- Sutacimig continues to demonstrate clinically meaningful >50% reduction in ATBR
- Safety and clinical activity at ongoing SC weekly or biweekly doses support potential as prophylactic agent in GT

#### **Next steps**

• Identification of a Phase 3 dose and regimen following additional treatment and follow-up



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## **ENROLLMENT COMPLETE:**Glanzmann thrombasthenia

Country	Phase 1/2 sites
Belgium	University Hospital Leuven
France	AP-HP Hôpital Bicêtre
	AP-HP Hôpital Necker
	AP-HM - Hôpital de la Timone
Italy	Careggi University Hospital
	IRCCS Ca' Granda Maggiore Hospital
Netherlands	University Medical Centre Utrecht
United Kingdom	Leeds Teaching Hospitals
	The Royal London Hospital
	Richmond Pharmacology
	Royal Free London
	Queen Elizabeth Hospital Birmingham
United States	University of California, San Diego
	Tulane University Medical Centre
	Mayo Clinic - Rochester
	University of Pittsburgh
	Washington Institute for Coagulation