PB0719

The Novel Bispecific Antibody HMB-001 Enhances the Haemostatic Response in Models of Glanzmann Thrombasthenia by Targeting FVIIa to Activated Platelets

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OC 78.3

HMB-001 - A Novel Bispecific Antibody Accumulating and Targeting Endogenous FVIIa to Activated Platelets for Subcutaneous Prophylaxis in Multiple Bleeding Disorders Including Glanzmann Thrombasthenia

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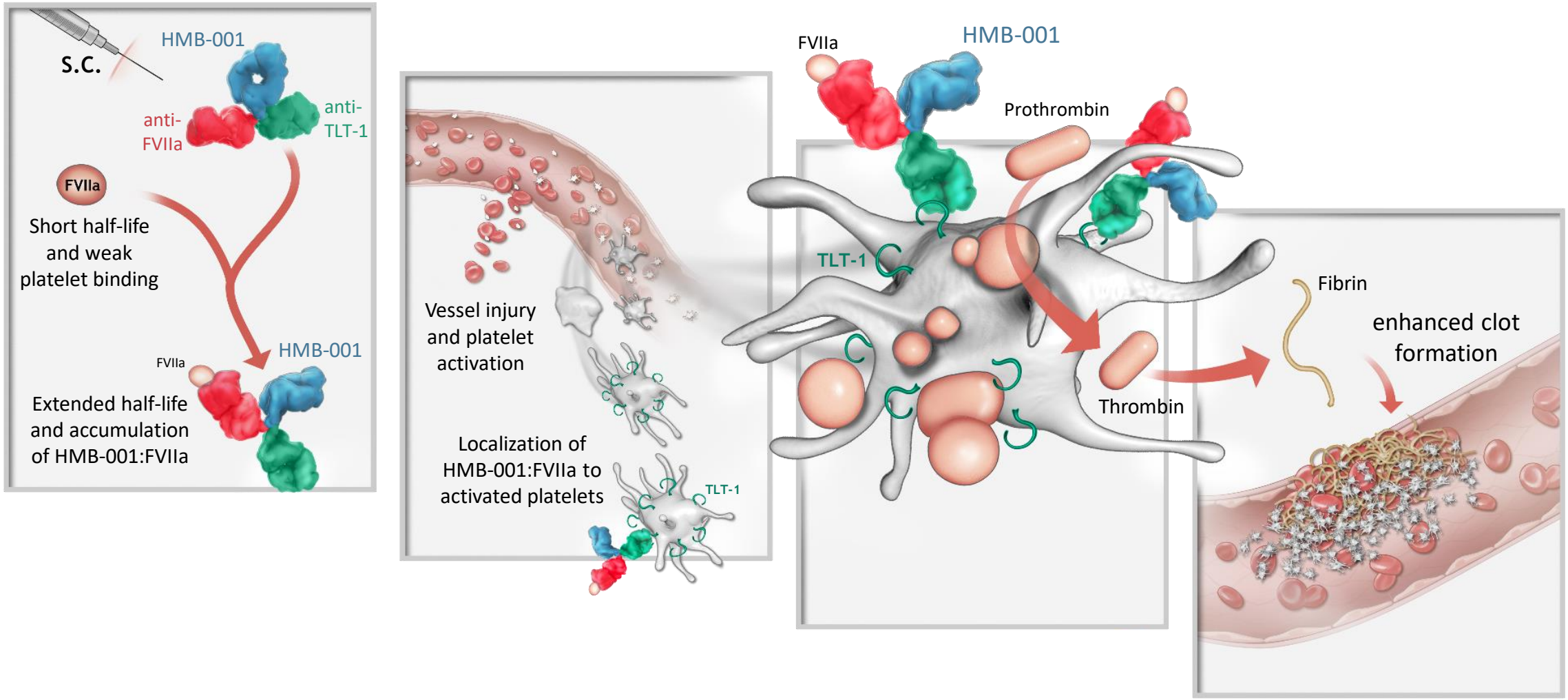
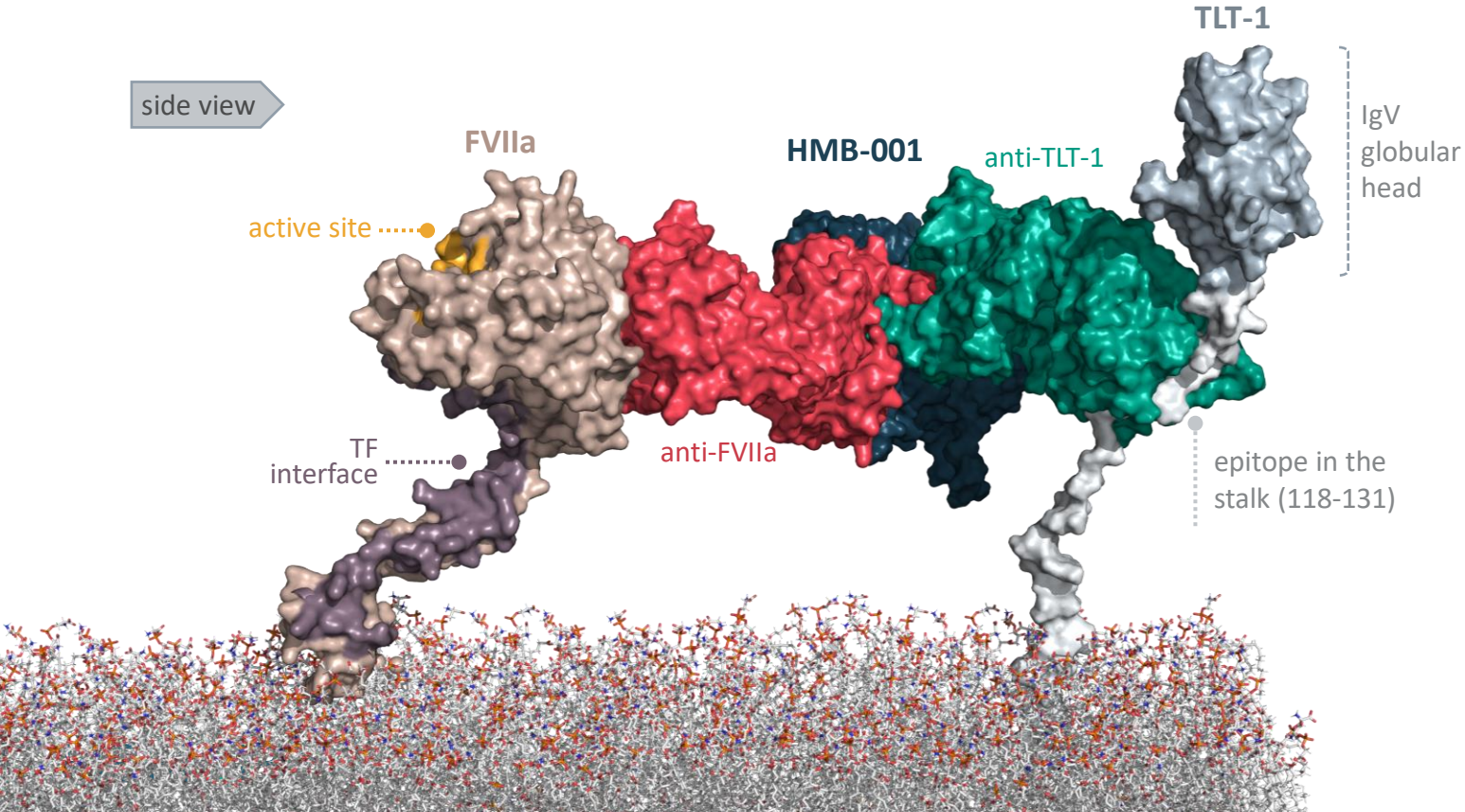
HMB-001 | A novel bispecific antibody targeting FVIIa & TLT-1

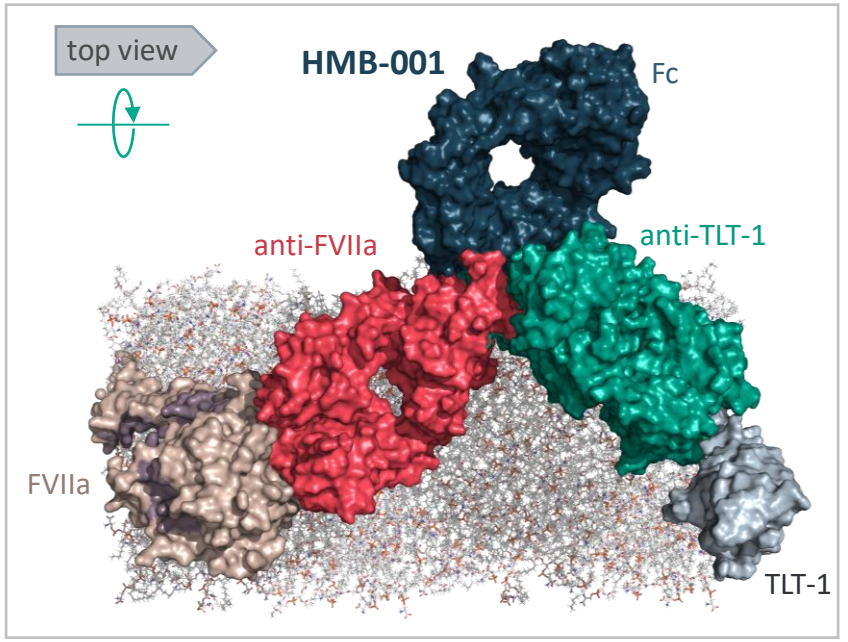
HMB-001 binds and accumulates endogenous FVIIa and, following vessel lesion, localizes FVIIa to the surface of activated platelets



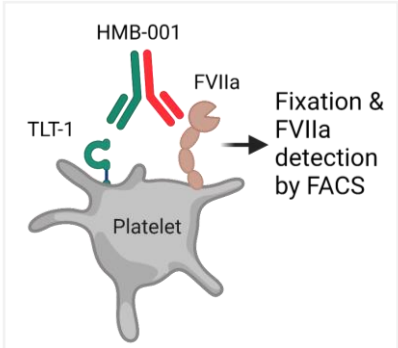
HMB-001 | A novel bispecific antibody targeting endogenous FVIIa and TLT-1 on the activated platelet

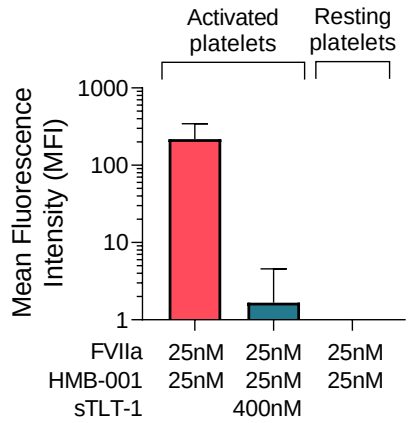
Complex structure	Resolution
HMB-001 anti-FVIIa Fab:FVIIa:sTF	3.5 Å
HMB-001 anti-TLT-1 Fab:TLT-1 stalk peptide	1.5 Å





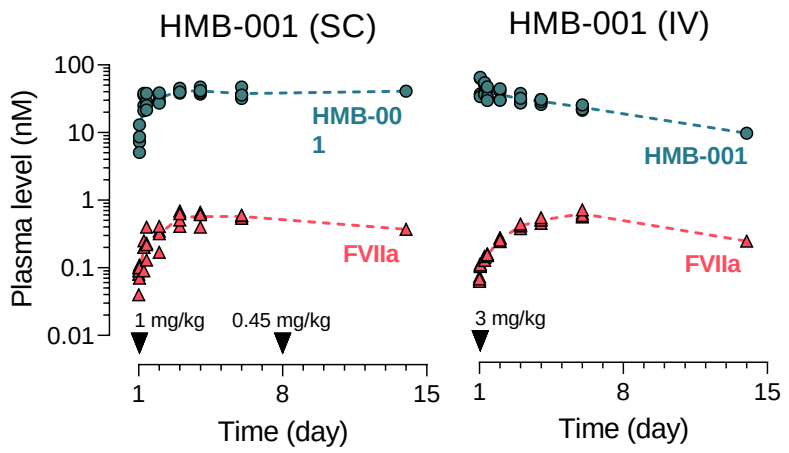
Activated platelet delivery of FVIIa by HMB-001





HMB-001 | Accumulation of endogenous FVIIa and ~10-fold potentiation of FVIIa activity via TLT-1 targeting

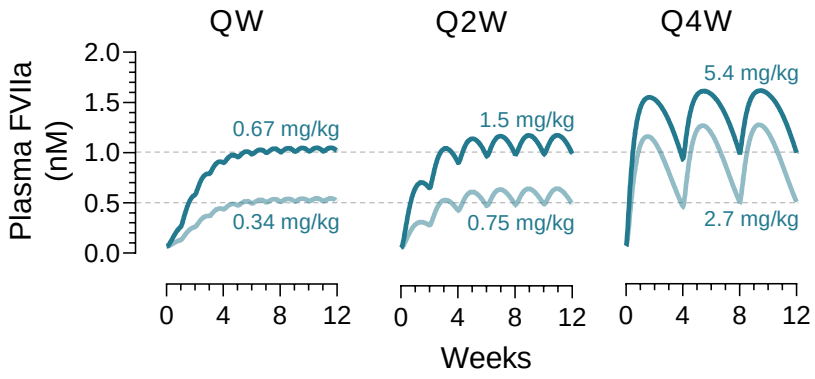
HMB-001 administration results in the accumulation of endogenous FVIIa



PK in cynomolgus monkey

Study design

- Study in healthy NHP (cynomolgus monkey)
- SC/IV administration of HMB-001 (n = 4)
- Measurement of HMB-001 (ELISA) and FVIIa (FVIIa:clot assay)



Predicted PK in humans

Study design

- Population PK/PD model describing HMB-001 and FVIIa based on PK in NHP
- Allometric scaling applied to simulate multiple-dose scenarios in the human setting

HMB-001 potentiates fibrin-dependent platelet aggregation of GT platelets