SUBCUTANEOUS MARZEPTACOG ALFA (ACTIVATED) IS EFFECTIVE FOR ON-DEMAND TREATMENT OF SPONTANEOUS BLEEDING IN HEMOPHILIA A RATS

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TREATMENT OF SPONTANEOUS BLEEDING IN HEMOPHILIA A RATS WITH SC **MARZEPTACOG ALFA (ACTIVATED)**

Background and Scientific Approach

Background

- Individuals with hemophilia lack subcutaneous (SQ) options to treat acute bleeding
- Marzeptacog alfa (activated) (MarzAA) is a next-generation activated recombinant coagulation factor VII (rFVIIa), with increased potency and bioavailability enabling SQ administration

Method

- Hemophilia A (HA) rats have a bleeding phenotype comparable to humans with spontaneous unprovoked bleeding¹
- Upon detection of spontaneous bleeding, rats were treated with SQ MarzAA (or vehicle control) to replicate the clinical Phase 3 Study (Crimson 1).

Study Protocol

- 1. Genotype and enroll F8^{-/-} onto protocol
- 2. Monitor for bleeding 2 x day x 7 days/week
- 3. Diagnose bleeding based on clinical signs
- 4. Treat with SQ MarzAA or vehicle (randomized) 1, 2, or 3 doses Q3 hour as needed based on clinical signs
- 5. Assess outcome at 24 hours
 - + Scored as Poor, Fair, Good, or Excellent
 - + Good or Excellent = Treatment Success
 - + Poor or Fair = Treatment Failure



Additional information on MarzAA is available via: https://www.catalystbiosciences.com/science/scientific-presentations-publications/

SQ MARZAA CONTROLS SPONTANEOUS BLEEDING IN HA RATS

Only Two Rats Required More than One Dose of SQ MarzAA



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SQ MARZAA CONTROLS SPONTANEOUS BLEEDING IN HA RATS

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Clinical Confirmation in Progress

Conclusions

- + SQ MarzAA is effective for management of spontaneous bleeding in HA rats
- + Treatment with vehicle led to either lack of improvement or significant deterioration over the 24 hours following dosing in 5 of 6 rats
- + SQ MarzAA was superior to vehicle (p=0.007) for treatment of mild, moderate, and severe spontaneous bleeds

Perspectives

- + Because spontaneous bleeding can occur even on prophylaxis, there is a need for a therapy that is easy, safe and fast to administer to manage and control episodic or breakthrough bleeding
- + Clinically exploring MarzAA for on-demand treatment in hemophilia is warranted

DISCLOSURES

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