REBALANCE the EQUATION

Exploring alternative investigational treatment approaches in hemophilia.^{1,2}





Ongoing clinical trials are evaluating TFPI inhibition as an alternative investigational treatment approach in hemophilia with the aim of restoring hemostatic balance.¹⁻³

Treatment for patients with hemophilia is typically centered around factor replacement and mimetics. Could the future include **rebalancing—an investigational, non-factor approach to hemostasis**?²⁻⁴

ANTICOAGULANTS

TFPI=tissue factor pathway inhibitor; APC=activated protein C; AT=antithrombin.

Q&A: Investigational rebalancing therapies

Although research into the rebalancing approach has been ongoing for the last few decades, the concept is relatively new to the hemophilia community and is still unapproved for use.^{1,2,4-6}

"HOW IS REBALANCING DIFFERENT?"

Rather than add recombinant factor like in factor replacement therapy, investigational rebalancing therapies aim to restore hemostasis through an alternative, non-factor approach—by inhibiting natural anticoagulants.^{2-4,7,8}

"WHY DO I NEED TO KNOW ABOUT REBALANCING?"

The rebalancing approach is being studied for its potential to achieve hemostasis, regardless of hemophilia type A or B, or the presence of inhibitors.^{2,3,9}



If your patients have more questions, they can learn more about rebalancing and other therapies at sdm.wfh.org

This website is published by the World Federation of Hemophilia (WFH) and has been provided here with permission.

© 2023 World Federation of Hemophilia https://sdm.wfh.org/

REBALANCE the EQUATION





How can we potentially rebalance hemostasis? Limiting anticoagulants may be an option.^{4,9}

In hemophilia, FVIII or FIX is missing or reduced, tipping the scale toward bleeding. Instead of replacing or mimicking these procoagulants, the rebalancing approach targets key anticoagulants like TFPI, APC, and AT, to limit their inhibitory effects.^{3,9-11}

Research is underway to determine if inhibiting anticoagulants may restore balance in hemostasis. $^{\!\!\!2,3,8}$

Pfizer has been committed to innovations in hemophilia care for more than 25 years.⁶

Pfizer has a long history of supporting the hemophilia community, and we remain committed to innovation and continued research. While significant progress has been made, we believe more can be done to improve treatment and ease patient burdens.





REFERENCES: 1. Mahlangu JN. Progress in the development of anti-tissue factor pathway inhibitors for haemophilia management. *Front Med.* 2021.8:670526. doi:10.3389/fmed.2021.67052 2. Batty P, Blatney J, Boban A, et al. Novel treatments in haemophilia and other bleeding disorders: a periodic EHC review. EHC Novel Treatment Review. 2024;1(1):46-47. 3. Ellsworth P, Ma A. Factor-mimetic and rebalancing therapies in hemophilia A and B: the end of factor concentrates? *Hematology Am Soc Hematol Educ Program*.
2021;2021(1):219-225. doi:10.1182/hematology.2021000253 4. Ozelo MC, Yamaguti-Hayakawa GG. Impact of novel hemophilia therapies around the world. *Res Pract Thromb Haemost*. 2022;6(3):e12695. doi:10.1002/rth2.12695 5. Chowdary P. Inhibition of tissue factor pathway inhibitor (TFPI) as a treatment for haemophilia: rationale with focus on concizumab. *Drugs*. 2018;78(9):881-890. doi:10.1007/s40265-018-0922-6 6. Data on file, Pfizer 2024. 7. Chowdary P. Anti-tissue factor pathway inhibitor (TFPI) therapy: a novel approach to the treatment of haemophilia. *Int J Hematol*. 2020;111(1):42-50. doi:10.1007/s12185-018-2548-6 8. Kizilocak H, Young G. Diagnosis and treatment of hemophilia. *Clin Adv Hematol Oncol*. 2019;17(6):344-351. 9. Mast AE, Ruf W. Regulation of coagulation by tissue factor pathway inhibitor: implications for hemophilia therapy. *J Thromb Haemost*. 2022;20(6):1290-1300. doi:10.1111/jth.15697 10. Polderdijk SGI, Baglin TP, Huntington JA. Targeting activated protein C to treat hemophilia. *Curr Opin Hematol*. 2017;446-452. doi:10.1097/MOH000000000000364
11. Palta S, Saroa R, Palta A. Overview of the coagulation system. *Indian J Anaesth*. 2014;58(5):515-523. doi:10.4103/0019-5049.144643