Pfizer Logo

U.S. FDA Approves Pfizer's HYMPAVZI™ (marstacimab-hncq) for the Treatment of Adults and Adolescents with Hemophilia A or B Without Inhibitors

Friday, October 11, 2024 - 01:23pm

- *HYMPAVZI's approval is based on Phase 3 study results demonstrating substantial bleed reduction compared to routine prophylaxis and on-demand treatment in eligible patients with hemophilia A or B without inhibitors*
- *In the U.S., HYMPAVZI is the first once-weekly subcutaneous prophylactic treatment for eligible people living with hemophilia B, and the first to be administered via a pre-filled pen or syringe for eligible people living with hemophilia A or B*

NEW YORK--(BUSINESS WIRE)-- Pfizer Inc. (NYSE: PFE) announced today that the U.S. Food and Drug Administration (FDA) has approved HYMPAVZI™ (marstacimab-hncq) for routine prophylaxis to prevent or reduce the frequency of bleeding episodes in adults and pediatric patients 12 years of age and older with hemophilia A (congenital factor VIII deficiency) without factor VIII (FVIII) inhibitors, or hemophilia B (congenital factor IX deficiency) without factor IX (FIX) inhibitors.

HYMPAVZI is the first and only anti-tissue factor pathway inhibitor (anti-TFPI) approved in the U.S. for the treatment of hemophilia A or B and the first hemophilia medicine approved in the U.S. to be administered via a pre-filled, auto-injector pen. HYMPAVZI can offer a subcutaneous treatment option with a once-weekly dosing schedule and minimal preparation required for each individual administration.

"The approval of HYMPAVZI is a meaningful advancement for people living with hemophilia A or B without inhibitors for bleed prevention, with a generally manageable safety profile and a straightforward once-weekly subcutaneous administration," said Suchitra S. Acharya, M.D., Director, Hemostasis and Thrombosis Center Northwell Health, Program Head, Bleeding Disorders and Thrombosis Program, Cohen Children's Medical Center. "HYMPAVZI aims to reduce the current treatment burden by meeting an important need for these patients, including many who have required frequent, time-consuming intravenous treatment infusion regimens."

Hemophilia is a family of rare genetic blood diseases caused by a clotting factor deficiency (FVIII in hemophilia A, FIX in hemophilia B), impacting more than 800,000 people globally. [1] Diagnosed in early childhood, hemophilia inhibits the blood's ability to clot properly, increasing the risk of repeated bleeding inside the joints, which can lead to permanent joint damage. [2,3] Despite significant progress in hemophilia treatment in recent years, many people living with the disease continue to experience bleeding episodes and manage their condition with frequent intravenous infusions that may need to be administered multiple times a week. [4]

"HYMPAVZI is Pfizer's second hemophilia treatment to receive FDA approval this year and is the latest meaningful scientific advancement in our more than 40-year commitment to improve care for people living with

hemophilia," said Aamir Malik, Chief U.S. Commercial Officer and Executive Vice President, Pfizer. "We look forward to launching this latest medical breakthrough and to now offer three distinct classes of hemophilia medicines – an anti-TFPI, gene therapy, and recombinant factor treatments – that can meet the unique treatment needs of a wide range of patients."

Results from the Phase 3 BASIS trial (NCT03938792) supported the approval of HYMPAVZI in the U.S. in adults and adolescents with hemophilia A or B without inhibitors. In the study, HYMPAVZI reduced the annualized bleeding rate (ABR) for treated bleeds by 35% and 92% after a 12-month active treatment period compared to routine prophylaxis (RP) and on-demand (OD) treatment, respectively, in patients with hemophilia A or B without inhibitors. The safety profile for HYMPAVZI was consistent with Phase 1/2 results. The most commonly reported adverse reactions (?3% of patients) in the study were injection site reactions, headache, and pruritus.

"The hemophilia community continually seeks advancements in care that can improve quality of life for our community members," said Phil Gattone, President and CEO, National Bleeding Disorders Foundation. "We greatly appreciate Pfizer's innovative efforts in developing this novel treatment option that addresses some of the ongoing challenges faced by people with hemophilia A and B. The availability of this therapy represents a powerful step forward in advancing care for more individuals and families in the bleeding disorders community."

The Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) adopted a positive opinion for marstacimab for the routine prophylaxis of bleeding episodes in adults and adolescents 12 years and older with severe hemophilia A without FVIII inhibitors, or severe hemophilia B without FIX inhibitors. In addition to HYMPAVZI, Pfizer recently received regulatory approvals for its hemophilia B gene therapy BEQVEZ™ (fidanacogene elaparvovec) in the U.S., EU, and Canada, and announced positive results from a Phase 3 program investigating its hemophilia A gene therapy (giroctocogene fitelparvovec).

About HYMPAVZI (marstacimab-hncq)

Discovered by Pfizer scientists, HYMPAVZI is a rebalancing agent that targets the Kunitz 2 domain of tissue factor pathway inhibitor (TFPI), a natural anticoagulation protein that functions to prevent the formation of blood clots and restore hemostasis.

HYMPAVZI is approved in the U.S. for routine prophylaxis to prevent or reduce the frequency of bleeding episodes in adults and pediatric patients 12 years of age and older with hemophilia A (congenital factor VIII deficiency) without factor VIII inhibitors, or hemophilia B (congenital factor IX deficiency) without factor IX inhibitors.

About the BASIS study

The pivotal BASIS study is a global Phase 3, open-label, multicenter study to evaluate the efficacy and safety of HYMPAVZI in adolescent and adult participants ages 12 to <75 years with severe hemophilia A (defined as FVIII <1%) or moderately severe to severe hemophilia B (defined as FIX activity ?2%) with or without inhibitors.

The FDA approval is based on results from the BASIS study that included 116 people living with hemophilia without inhibitors who were treated with HYMPAVZI during a 12-month active treatment period (ATP) versus an RP and OD intravenous regimen with FVIII or FIX, administered as part of usual care in a six-month observational period. During the ATP, participants received prophylaxis (a 300 mg subcutaneous loading dose of

HYMPAVZI, followed by 150 mg subcutaneously once weekly) with potential for dose escalation to 300 mg once weekly.

HYMPAVZI reduced the ABR for treated bleeds by 35% and 92% after a 12-month ATP compared to RP and OD treatment, respectively, in patients with hemophilia A or B without inhibitors. In the OD group, superiority ($p<0.0001$) of HYMPAVZI was demonstrated across all bleeding-related secondary endpoints – spontaneous bleeds, joint bleeds, target joint bleeds, and total bleeds. In the RP group, HYMPAVZI demonstrated non-inferiority to these secondary efficacy endpoints.

The safety profile for HYMPAVZI was consistent with Phase 1/2 results and treatment was generally well-tolerated. The most commonly reported adverse reactions (?3% of patients) were injection site reactions, headache, and pruritus.

The inhibitor cohort of the BASIS trial is ongoing, with results expected in the third quarter of 2025. Pfizer is also conducting BASIS KIDS, an open-label study investigating the safety and efficacy of marstacimab in children 1 to <18 years of age with severe hemophilia A or moderately severe to severe hemophilia B with or without inhibitors.

About Hemophilia

Hemophilia is a family of rare genetic blood diseases caused by a clotting factor deficiency (FVIII in hemophilia A, FIX in hemophilia B), which prevents normal blood clotting. Hemophilia is diagnosed in early childhood and impacts more than 800,000 people worldwide. [1] The inability of the blood to clot properly can increase the risk of painful bleeding inside the joints, which can cause joint scarring and damage. People living with hemophilia can suffer permanent joint damage following repeated bleeding episodes. [2,3]

For decades, the most common treatment approach for hemophilia A and B has been factor replacement therapy, which replaces the missing clotting factors. Factor replacement therapies increase the amount of clotting factor in the body to levels that improve clotting, resulting in less bleeding. [5,6]

In a survey of people in the U.S. receiving prophylaxis for hemophilia A or B, nearly one-third of those that receive treatment and have high compliance – defined as taking 75% or more of their prescribed infusions – stated that the time-consuming nature of prophylaxis was the most significant challenge of the regimen. [7,8] Nearly 60% of those that took less than the prescribed number of infusions reported that the time commitment was the primary reason for missing infusions.

HYMPAVZI (marstacimab) U.S. Important Safety Information

Important: Before you start using HYMPAVZI, it is very important to talk to your healthcare provider about using factor VIII and factor IX products (products that help blood clot but work in a different way than HYMPAVZI). You may need to use factor VIII or factor IX medicines to treat episodes of breakthrough bleeding during treatment with HYMPAVZI. Carefully follow your healthcare provider's instructions regarding when to use factor VIII or factor IX medicines and the prescribed dose during your treatment with HYMPAVZI.

Before using HYMPAVZI, tell your healthcare provider about all of your medical conditions, including if you:

- have a planned surgery. Your healthcare provider may stop treatment with HYMPAVZI before your surgery. Talk to your healthcare provider about when to stop using HYMPAVZI and when to start it again if you have a planned surgery.

- have a severe short-term (acute) illness such as an infection or injury.
- are pregnant or plan to become pregnant. HYMPAVZI may harm your unborn baby.

Females who are able to become pregnant:

  - Your healthcare provider will do a pregnancy test before you start your treatment with HYMPAVZI.
  - You should use effective birth control (contraception) during treatment with HYMPAVZI and for at least 2 months after the last dose of HYMPAVZI.
  - Tell your healthcare provider right away if you become pregnant or think that you may be pregnant during treatment with HYMPAVZI.
  - are breastfeeding or plan to breastfeed. It is not known if HYMPAVZI passes into your breast milk.

Tell your healthcare provider about all the medicines you take , including prescription medicines, over?the? counter medicines, vitamins, and herbal supplements.

What are the possible side effects of HYMPAVZI?

HYMPAVZI may cause serious side effects, including:

- **blood clots (thromboembolic events).** HYMPAVZI may increase the risk for your blood to clot. Blood clots may form in blood vessels in your arm, leg, lung, or head and can be life?threatening. Get medical help right away if you develop any of these signs or symptoms of blood clots:
  - swelling or pain in arms or legs
  - redness or discoloration in your arms or legs
  - shortness of breath
  - pain in chest or upper back
  - fast heart rate
  - cough up blood
  - feel faint
  - headache
  - numbness in your face
  - eye pain or swelling
  - trouble seeing
- **allergic reactions.** Allergic reactions, including rash and itching have happened in people treated with HYMPAVZI. Stop using HYMPAVZI and get medical help right away if you develop any of the following symptoms of a severe allergic reaction:
  - swelling of your face, lips, mouth, or tongue
  - trouble breathing
  - wheezing
  - dizziness or fainting
  - fast heartbeat or pounding in your chest
  - sweating

The most common side effects of HYMPAVZI are injection site reactions (itching, swelling, hardening, redness, bruising, pain at the injection site), headache, and itching.

These are not all the possible side effects of HYMPAVZI. Call your doctor for medical advice about side effects. You may report side effects to the FDA at 1-800-FDA-1088.

The full Prescribing Information can be found here. If it is not currently available via this link, it will be visible as soon as possible as we work to finalize the document. Please check back for the full information shortly.

About Pfizer: Breakthroughs That Change Patients' Lives

At Pfizer, we apply science and our global resources to bring therapies to people that extend and significantly improve their lives. We strive to set the standard for quality, safety and value in the discovery, development and manufacture of health care products, including innovative medicines and vaccines. Every day, Pfizer colleagues work across developed and emerging markets to advance wellness, prevention, treatments and cures that challenge the most feared diseases of our time. Consistent with our responsibility as one of the world's premier innovative biopharmaceutical companies, we collaborate with health care providers, governments and local communities to support and expand access to reliable, affordable health care around the world. For 175 years, we have worked to make a difference for all who rely on us. **We routinely post information that may be important to investors on our website at** www.Pfizer.com. In addition, to learn more, please visit us on www.Pfizer.com and follow us on X at @Pfizer and @Pfizer_News, LinkedIn, YouTube and like us on Facebook at www.facebook.com/Pfizer/.

Category: Prescription Medicines

Disclosure notice

The information contained in this release is as of October 11 , 2024 . Pfizer assumes no obligation to update forward-looking statements contained in this release as the result of new information or future events or developments.

This release contains forward-looking information about HYMPAVZI, an anti-tissue factor pathway inhibitor, and Pfizer's other hemophilia approved and investigational products, including their potential benefits, that involves substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Risks and uncertainties include, among other things, uncertainties regarding the commercial success of HYMPAVZI and Pfizer's other hemophilia products; the uncertainties inherent in research and development, including the ability to meet anticipated clinical endpoints, commencement and/or completion dates for our clinical trials, regulatory submission dates, regulatory approval dates and/or launch dates, as well as the possibility of unfavorable new clinical data and further analyses of existing clinical data; whether or when the inhibitor cohort of the BASIS trial will be successful; the risk that clinical trial data are subject to differing interpretations and assessments by regulatory authorities; whether regulatory authorities will be satisfied with the design of and results from our clinical studies; whether and when any applications may be filed with regulatory authorities in particular jurisdictions for HYMPAVZI or any other products or product candidates; whether and when any such applications that may be pending or filed for HYMPAVZI or any other products or product candidates may be approved by regulatory authorities, which will depend on myriad factors, including making a determination as to whether the product's benefits outweigh its known risks and determination of the product's efficacy and, if approved, whether HYMPAVZI or any such other products or product candidates will be commercially successful; decisions by regulatory authorities impacting labeling, manufacturing processes, safety and/or other matters that could affect the availability or commercial potential of HYMPAVZI or any such other products or product candidates; uncertainties regarding the impact of COVID-19 on our business, operations and financial results; and competitive developments.

A further description of risks and uncertainties can be found in Pfizer's Annual Report on Form 10-K for the fiscal year ended December 31, 2023 and in its subsequent reports on Form 10-Q, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Information and Factors That May Affect Future Results", as well as in its subsequent reports on Form 8-K, all of which are filed with the U.S. Securities and

Exchange Commission and available at www.sec.gov and www.pfizer.com .

[1] World Federation of Hemophilia. World Federation of Hemophilia Global Report on the Annual Global Survey 2022. https://www1.wfh.org/publications/files/pdf-2399.pdf.
[2] Srivastava A, Santagostino E, Dougall A, et al. WFH guidelines for the management of hemophilia, 3rd Edition; 2020. Haemophilia. 26(S6), 1–158. https://doi.org/10.1111/hae.14046.
[3] Franchini M, Mannucci PM. Past, present and future of hemophilia: a narrative review. Orphanet J Rare Dis. 7, 24 (2012). https://doi.org/10.1186/1750-1172-7-24.
[4] Ohmori T, Mizukami H, Ozawa K, et al. New approaches to gene and cell therapy for hemophilia. *J Thromb Haemost* . 2015;13(Suppl 1): S133-142.
[5] Centers for Disease Control and Prevention. Hemophilia. Last Reviewed: April 2023. https://www.cdc.gov/ncbddd/hemophilia/.
[6] Weyand AC, Pipe SW. New therapies for hemophilia. Blood. 2019;133(5):389–398. doi: https://doi.org/10.1182/blood-2018-08-872291.
[7] Thornburg CD, Duncan NA. Treatment adherence in hemophilia. Patient Prefer Adherence. 2017;11:1677-1686. https://doi.org/10.2147/PPA.S139851.
[8] Hacker MR, Geraghty S, Manco-Johnson M. Barriers to compliance with prophylaxis therapy in haemophilia. Haemophilia. 2001;7(4):392-6.

Media Contact:
+1 (212) 733-1226
PfizerMediaRelations@Pfizer.com

Investor Contact:
+1 (212) 733-4848
IR@Pfizer.com

Source: Pfizer Inc.