

Hypavzi® (marstacimab-hncq) (Subcutaneous)

Effective Date: 05/01/2025

Reviewed Date: 02/10/2025

Pharmacy Scope: Medicaid

Medical Scope: Medicaid, Commercial, Medicare-Medicaid Plan (MMP)

I. Length of Authorization

Coverage will be provided for 6 months and may be renewed

II. Dosing Limits

A. Quantity Limit (max daily dose)

- Hypavzi 150mg/ml: 4 syringes/pens (4 ml) per 28 days
- Quantity limit exception for first fill of 5 ml per 28 days (0.179ml/day) to be provided to allow for initial loading dose of 300mg (2 ml), followed one week later by 150mg weekly
- Quantity limit exception for 300mg weekly (8 ml per 28 days or 0.286 ml per day) as maintenance dose may be provided with documentation of inadequate clinical response (i.e. control of bleeding events) at lower dose in patients weighing greater than or equal to 50 kg
- Max weekly dose is 300mg weekly

B. Max Units (per dose and over time) [HCPCS Unit]:

- 300 mg every week

III. Summary of Evidence

Hypavzi (marstacimab-hncq) is indicated for routine prophylaxis to prevent or reduce the frequency of bleeding episodes in adult and pediatric patients 12 years of age and older with hemophilia A without factor VIII inhibitors or hemophilia B without factor IX inhibitors (neutralizing antibodies). Hemophilia A and hemophilia B are genetic bleeding disorders caused by a dysfunction or deficiency of coagulation factor VIII (FVIII) or IX (FIX), respectively. Hypavzi's approval is based on the Phase 3 BASIS study which was an open-label, multi-center study in 116 adult and pediatric male patients with either severe hemophilia A or severe hemophilia B, both without inhibitors. For the first six months of this study, patients received treatment with replacement factor either on-demand (33 patients) or prophylactically (83 patients). These patients then received Hypavzi prophylaxis for 12 months. The primary measure of efficacy of Hypavzi was the annualized bleeding rates of treated bleeds. In the patients receiving on-demand factor replacement during the first six months of the study, the estimated annualized bleeding rate was 38 compared to the estimated annualized bleeding rate during treatment with Hypavzi of 3.2, showing that Hypavzi

was superior to on-demand factor replacement. In the initial six-month period during which patients received prophylactic factor replacement, the estimated annualized bleeding rate was 7.85 and was 5.08 during the subsequent 12 months on Hympavzi prophylaxis, showing that Hympavzi provided similar bleeding rates. The most common side effects of Hympavzi are injection site reactions, headache and pruritis.

IV. Initial Approval Criteria ^{1-3,8,10-11}

Coverage is provided in the following conditions:

- Patient is at least 12 years of age; **AND**
- Hympavzi must be prescribed by, or consultation with a hematologist; **AND**
- Patient will initiate maintenance therapy at the lower range of dosing (i.e., 150 mg every week); **AND**
- Will not be used for the treatment of breakthrough bleeds (*Note: Factor VIII or Factor IX products may be administered on an as needed basis for the treatment of breakthrough bleeds in patients being treated with Hympavzi(marstacimab)*); **AND**
- Female patients of reproductive potential are not pregnant prior to initiating therapy with Hympavzi (marstacimab); **AND**
- Patient does not have a history of coronary artery disease, venous or arterial thrombosis or ischemic disease.

Universal Criteria

- Will not be used in combination with clotting factor products (i.e., factor VIII or factor IX concentrates) or Hemlibra as prophylactic therapy – *Therapy can be initiated at any time after discontinuing clotting factor concentrates (Note: factor VIII or factor IX products can be administered for the treatment of breakthrough bleeds while receiving marstacimab)*; **AND**
- Patient has not previously received treatment with a gene therapy product (e.g., Roctavian) for the treatment of hemophilia A or a gene therapy product (e.g., Hemgenix or Beqvez) for the treatment of hemophilia B

Hemophilia A (congenital factor VIII deficiency) without inhibitors † Φ

- Diagnosis of congenital factor VIII deficiency without inhibitors has been confirmed by blood coagulation testing; **AND**
- Must be used for routine prophylaxis to prevent or reduce the frequency of bleeding episodes; **AND**
- Patient meets ONE of the following:
 - Has had an inadequate response, intolerance, or contraindication to compliant use of a factor VIII product (e.g., Advate, Koate/Koate DVI, Hemofil, etc.) and Hemlibra; **OR**
 - Has had at least 6 acute bleeding episodes in the previous 6 months.
- Used as treatment in one of the following:
 - Primary prophylaxis in patients with severe factor VIII deficiency (factor VIII level of <1%); **OR**
 - Secondary prophylaxis in patients with at least TWO documented episodes of spontaneous bleeding into joints;

Hemophilia B (congenital factor IX deficiency aka Christmas Disease) without inhibitors † Φ

- Diagnosis of congenital factor IX deficiency without inhibitors has been confirmed by blood coagulation testing; **AND**
- Must be used for routine prophylaxis to prevent or reduce the frequency of bleeding episodes; **AND**

- Patient meets ONE of the following:
 - Has had an inadequate response, intolerance, or contraindication to compliant use of a factor IX product (e.g., Benefix, Rixubis, Alphanine, etc.); **OR**
 - Has had at least 6 acute bleeding episodes in the previous 6 months.
- Used as treatment in one of the following:
 - Primary prophylaxis in patients with severe factor IX deficiency (factor IX level of <1%); **OR**
 - Secondary prophylaxis in patients with at least TWO documented episodes of spontaneous bleeding into joints;

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); Ⓢ Orphan Drug

V. Renewal Criteria ^{1-3,8}

Coverage can be renewed based upon the following criteria:

- Patient continues to meet the indication-specific relevant criteria such as concomitant therapy requirements (not including prerequisite therapy), performance status, etc. identified in section IV; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: thromboembolic events, hypersensitivity, etc.; **AND**
 - Patient has demonstrated a beneficial response to therapy (i.e., the frequency of bleeding episodes has decreased from pre-treatment baseline); **OR**
 - Patient requires a dose escalation* (up to the maximum dose and frequency specified below) provided that the patient meets all the following criteria:
 - Patient weighs greater than or equal to 50 kg
 - Control of bleeding events has been inadequate (i.e., patient has experienced two or more breakthrough bleeds while on maintenance therapy at the lower dose)
 - Patient has been fully adherent to maintenance therapy for at least six months at the lower dose

**Note: Safety and efficacy of Hympavzi at doses above 300 mg weekly has not been established.*

VI. Dosage/Administration ¹

Indication	Dose
Routine Prophylaxis in Congenital Hemophilia A or Hemophilia B without inhibitors	<p><u>Loading Dose:</u></p> <ul style="list-style-type: none"> • 300 mg (two 150 mg subcutaneous injections) <p><u>Maintenance Dose:</u></p> <ul style="list-style-type: none"> • One week after the loading dose, initiate maintenance dosing of 150 mg every week by subcutaneous injection on the same day each week, at any time of day. • Consider a dose adjustment to 300 mg subcutaneous injection weekly in patients weighing greater than or equal to 50 kg when control of bleeding events is judged to be inadequate by the healthcare provider. Safety and efficacy of Hympavzi at doses above 300 mg weekly have not been established. <p><i>If more than one injection is required to deliver a complete dose, administer each injection at a different injection site.</i></p>

Indication	Dose
<ul style="list-style-type: none"> • Hympavzi is intended for use under the guidance of a healthcare provider. After proper training in subcutaneous injection technique, a patient may self-inject or the patient’s caregiver may administer it, if a healthcare provider determines that it is appropriate. 	

VII. Billing Code/Availability Information

HCPCS Code:

- J3590 – Unclassified biologic

NDC:

- Hympavzi single-dose prefilled syringe: 00069-1510-xx
- Hympavzi single-dose prefilled pen: 00069-2151-xx

VIII. References

1. Hympavzi [package insert]. New York, NY; Pfizer, Inc. November 2024. Accessed January 2025.
2. MASAC Recommendations Concerning Products Licensed for the Treatment of Hemophilia and Selected Disorders of the Coagulation System. Revised April 11, 2024. National Hemophilia Foundation. MASAC Document #284; April 2024. Available at: <https://www.bleeding.org>. Accessed May 2024.
3. Guidelines for the Management of Hemophilia. 3rd Edition. World Federation of Hemophilia 2020. Available at: <https://www1.wfh.org/publications/files/pdf-1863.pdf>. Accessed May 2024.
4. Annual Review of Factor Replacement Products. Oklahoma Health Care Authority Review Board. Updated Dec 2020. Accessed May 2024.
5. Graham A1, Jaworski K. Pharmacokinetic analysis of anti-hemophilic factor in the obese patient. *Haemophilia*. 2014 Mar;20(2):226-9.
6. Croteau SE1, Neufeld EJ. Transition considerations for extended half-life factor products. *Haemophilia*. 2015 May;21(3):285-8.
7. Mingot-Castellano, et al. Application of Pharmacokinetics Programs in Optimization of Haemostatic Treatment in Severe Hemophilia a Patients: Changes in Consumption, Clinical Outcomes and Quality of Life. *Blood*. 2014 December; 124 (21).
8. MASAC Recommendation Concerning Prophylaxis for Hemophilia A and B with and without Inhibitors. Revised April 27, 2022. National Hemophilia Foundation. MASAC Document #267; April 2022. Available at: <https://www.bleeding.org>. Accessed May 2024.
9. UKHCDO protocol for first line immune tolerance induction for children with severe haemophilia A: A protocol from the UKHCDO Inhibitor and Paediatric Working Parties. 2017. Available at: <http://www.ukhcdo.org/guidelines>. Accessed May 2024.
10. Hoots, WK. (2024). Hemophilia A and B: Routine management including prophylaxis. In Leung LLK, Tirnauer JS (Eds.), *UptoDate*. Last updated: April 16, 2024. Accessed May 13, 2024. Available from https://www.uptodate.com/contents/hemophilia-a-and-b-routine-management-including-prophylaxis?search=hemophilia%20a&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2#H978189854.
11. Matino D, Acharya S, Palladino A, et al. Efficacy and Safety of the Anti-Tissue Factor Pathway Inhibitor Marstacimab in Participants with Severe Hemophilia without Inhibitors: Results from the Phase 3 Basis Trial.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
D66	Hereditary factor VIII deficiency
D67	Hereditary factor IX deficiency