

UTILIZATION MANAGEMENT MEDICAL POLICY

POLICY: Hemophilia – Hemlibra Utilization Management Medical Policy

- Hemlibra® (emicizumab-kxwh subcutaneous injection – Genentech/Roche/Chugai)

REVIEW DATE: 05/24/2023

OVERVIEW

Hemlibra, a bispecific Factor IXa- and Factor X-directed antibody, is indicated for routine prophylaxis to prevent or reduce the frequency of bleeding episodes in adult and pediatric patients ages newborn and older with **hemophilia A** (congenital factor VIII deficiency) with or without factor VIII inhibitors.¹

Hemlibra is recommended to be given as a loading dose by subcutaneous injection once weekly for the first 4 weeks, followed by a maintenance dose given either once weekly, once every 2 weeks, or once every 4 weeks.¹ Discontinue prophylactic use of bypassing medications the day before starting Hemlibra. The prophylactic use of Factor VIII products may be continued during the first week of Hemlibra prophylaxis. If appropriate, a patient or caregiver may self-inject Hemlibra. Self-administration is not recommended for children < 7 years of age.

Disease Overview

Hemophilia A is an X-linked bleeding disorder primarily impacting males caused by a deficiency in Factor VIII.²⁻⁵ In the US, the incidence of hemophilia A in males is 1:5,000 with an estimated 20,000 people in the US living with hemophilia A. The condition is characterized by bleeding in joints, either spontaneously or in a provoked joint by trauma. Bleeding can occur in many different body areas as well (e.g., muscles, central nervous system). The bleeding manifestations can lead to substantial morbidity such as hemophilic arthropathy. Disease severity is usually defined by the plasma levels or activity of Factor VIII classified as follows: severe (levels < 1% of normal), moderate (levels 1% to 5% of normal), and mild (levels > 5% to < 40% of normal); phenotypic expression may vary. Approximately 50% of patients with hemophilia A are categorized as having severe disease.

Guidelines

Various guidelines discuss Hemlibra.⁶⁻⁸

- **National Hemophilia Foundation (NHF):** Two documents from the NHF Medical and Scientific Advisory Council (MASAC) provide recommendations regarding Hemlibra.^{6,7} In general, Hemlibra has been shown to prevent or reduce the occurrence of bleeding in patients with hemophilia A in adults, adolescents, children and infants, both with and without inhibitors.⁶ Factor VIII prophylaxis continuation during the week after initiation of Hemlibra is a reasonable approach.⁷ However, because Hemlibra steady-state levels are not achieved until after four weekly doses, it may be reasonable to continue Factor VIII prophylaxis in selected patients based on bleeding history, as well as physical history, until they are ready to initiate maintenance dosing. Factor VIII products may be used for breakthrough bleeding events. Data are limited regarding the use of Hemlibra prophylaxis during immune tolerance induction.
- **World Federation of Hemophilia (WFH):** Guidelines from the WFH regarding hemophilia (2020) feature Hemlibra in a variety of clinical scenarios.⁸ It is noted that subcutaneous administration permits patients to initiate prophylaxis at a very young age. Other key benefits include its long half-life, high efficacy in bleed prevention, and reduction in bleeding episodes in patients with or without inhibitors.

Safety

Hemlibra has a Boxed Warning regarding thrombotic microangiopathy and thromboembolism.¹ Cases of thrombotic microangiopathy and thrombotic events were reported when on average a cumulative amount of > 100 U/kg/24 hours of activated prothrombin complex concentrate (aPCC) was given for 24 hours or more to patients receiving Hemlibra prophylaxis. Monitor for the development of thrombotic microangiopathy and thrombotic events when aPCC is given. Discontinue prophylactic use of bypassing agents the day before starting Hemlibra.

POLICY STATEMENT

Prior Authorization is recommended for medical benefit coverage of Hemlibra. Approval is recommended for those who meet the **Criteria** and **Dosing** for the listed indications. Extended approvals are allowed for the duration noted below if the patient continues to meet the criteria and dosing for the indication provided. Requests for doses outside of the established dosing documented in this policy will be considered on a case-by-case basis by a clinician (i.e., Medical Director or Pharmacist). Because of the specialized skills required for evaluation and diagnosis of patients treated with Hemlibra as well as the monitoring required for adverse events and long-term efficacy, approval requires Hemlibra to be prescribed by or in consultation with a physician who specializes in the condition being treated.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Hemlibra is recommended in those who meet one of the following criteria:

FDA-Approved Indications

1. **Hemophilia A with Factor VIII Inhibitors.** Approve for 1 year if the patient meets the following (A or B):
 - A) **Initial Therapy.** Approve if the patient meets the following criteria (i, ii, iii, iv, v, and vi):
 - i. Patient is using Hemlibra for routine prophylaxis to prevent or reduce the frequency of bleeding episodes; AND
 - ii. Patient meets one of the following (a or b):
 - a) Patient has had a positive Factor VIII inhibitor titer greater than 5 Bethesda Units; OR
 - b) Patient has had a positive Factor VIII inhibitor titer less than or equal to 5 Bethesda Units and meets one of the following [(1) or (2)]:
 - (1) Patient has had an anamnestic response (current or past) to Factor VIII product dosing; OR
 - (2) Patient experienced an inadequate clinical response (current or past) to increased Factor VIII product dosing; AND
 - iii. Prescriber attests that the patient will not be undergoing immune tolerance induction therapy while receiving Hemlibra; AND
 - iv. Prescriber attests the following regarding use of bypassing agents (a and b):
 - a) If the patient is currently receiving a bypassing agent for prophylaxis, the bypassing agent therapy will be discontinued the day prior to initiation of Hemlibra; AND
 - b) Prophylactic use of bypassing agents will not occur while using Hemlibra; AND

Note: Use of bypassing agents for the treatment of breakthrough bleeding is permitted. Examples of bypassing agents include NovoSeven RT (coagulation Factor VIIa [recombinant] intravenous infusion), Sevenfact (Factor VIIa [recombinant]-jncw intravenous infusion), and FEIBA (anti-inhibitor coagulant complex intravenous infusion).
 - v. Prescriber attests the following regarding Factor VIII products (a and b):

- a) If the patient is currently receiving a Factor VIII product for prophylactic use, the Factor VIII product will be discontinued within the initial 4-week loading dose period with Hemlibra; AND
- b) Prophylactic use of Factor VIII products will not occur while using Hemlibra; AND
Note: Use of Factor VIII products for the treatment of breakthrough bleeding is permitted.
- vi. Medication is prescribed by or in consultation with a hemophilia specialist; OR
- B) Patient is Currently Receiving Hemlibra.** Approve if the patient meets the following criteria (i, ii, iii, iv, v, and vi):
 - i. Patient is using Hemlibra for routine prophylaxis to prevent or reduce the frequency of bleeding episodes; AND
 - ii. Prescriber attests that the patient will not be undergoing immune tolerance induction therapy while receiving Hemlibra; AND
 - iii. Prescriber attests that prophylactic use of bypassing agent will not occur while using Hemlibra; AND
Note: Use of bypassing agents for the treatment of breakthrough bleeding is permitted. Examples of bypassing agents include NovoSeven RT (coagulation Factor VIIa [recombinant] intravenous infusion), Sevenfact (Factor VIIa [recombinant]-jnew intravenous infusion), and FEIBA (anti-inhibitor coagulant complex intravenous infusion).
 - iv. Prescriber attests that prophylactic use of Factor VIII product will not occur while using Hemlibra; AND
Note: Use of Factor VIII products for the treatment of breakthrough bleeding is permitted.
 - v. Medication is prescribed by or in consultation with a hemophilia specialist; AND
 - vi. Patient experienced a beneficial response to therapy according to the prescriber.
Note: Examples of a beneficial response to therapy include a reduction in bleeding events, in the severity of bleeding episodes, in the number of bleeding events that required treatment, and/or in the number of spontaneous bleeds.

Dosing. Approve the following dosing regimens (A and B):

- A) Loading dose is 3 mg/kg by subcutaneous injection once weekly for the first 4 weeks; AND
- B) The patient is receiving one of the following maintenance doses (i, ii, or iii):
 - i. 1.5 mg/kg by subcutaneous injection once every week, OR
 - ii. 3 mg/kg SC by subcutaneous injection once every 2 weeks; OR
 - iii. 6 mg/kg SC by subcutaneous injection once every 4 weeks.

2. Hemophilia A without Factor VIII Inhibitors. Approve for 1 year if the patient meets the following criteria (A or B):

- A) Initial Therapy. Approve if the patient meets the following criteria (i, ii, iii, iv, and v):
 - i. Patient is using Hemlibra for routine prophylaxis to prevent or reduce the frequency of bleeding episodes; AND
 - ii. Patient meets one of the following criteria (a or b):
 - a) Patient has severe to moderate severe disease as defined by pretreatment Factor VIII levels $\leq 2\%$ of normal; OR
 - b) Patient has moderate to mild disease as defined by pretreatment Factor VIII levels greater than 2% to less than 40% of normal and meets one of the following criteria [(1), (2), or (3)]:
 - (1) Patient has experienced a severe, traumatic, or spontaneous bleeding episode as determined by the prescriber; OR
Note: An example is a bleed involving the central nervous system.
 - (2) Patient has hemophilia-related joint damage, has experienced a joint bleed, or has a specific joint that is subject to recurrent bleeding (presence of a target joint); OR

- (3) Patient is in a perioperative situation and/or has an additional clinical scenario regarding bleeding/bleeding risk in which the prescriber determines the use of Hemlibra is warranted.

Note: Examples include iliopsoas bleeding or severe epistaxis.

- iii. Prescriber attests that prophylactic use of bypassing agent will not occur while using Hemlibra; AND

Note: Examples of bypassing agents include NovoSeven RT (coagulation Factor VIIa [recombinant] intravenous infusion), Sevenfact (Factor VIIa [recombinant]-jncw intravenous infusion), and FEIBA (anti-inhibitor coagulant complex intravenous infusion).

- iv. Prescriber attests the following regarding Factor VIII products (a and b):

- a) If receiving a Factor VIII product for prophylactic use, therapy will be discontinued within the initial 4-week loading dose period with Hemlibra; AND

- b) Prophylactic use of Factor VIII products will not occur while using Hemlibra; AND

Note: Use of Factor VIII products for the treatment of breakthrough bleeding is permitted.

- v. Medication is prescribed by or in consultation with a hemophilia specialist; OR

- B) Patient is Currently Receiving Hemlibra. Approve if the patient meets the following criteria (i, ii, iii, iv, and v):

- i. Patient is using Hemlibra for routine prophylaxis to prevent or reduce the frequency of bleeding episodes; AND

- ii. Prescriber attests that prophylactic use of bypassing agent will not occur while using Hemlibra; AND

Note: Examples of bypassing agents include NovoSeven RT (coagulation Factor VIIa [recombinant] intravenous infusion), Sevenfact (Factor VIIa [recombinant]-jncw intravenous infusion), and FEIBA (anti-inhibitor coagulant complex intravenous infusion).

- iii. Prescriber attests that prophylactic use of Factor VIII product will not occur while using Hemlibra; AND

Note: Use of Factor VIII products for the treatment of breakthrough bleeding is permitted.

- iv. Medication is prescribed by or in consultation with a hemophilia specialist; AND

- v. Patient experienced a beneficial response to therapy according to the prescriber.

Note: Examples of a beneficial response include a reduction in bleeding events, in the severity of bleeding episodes, in the number of bleeding events that required treatment, and/or in the number of spontaneous bleeding events.

Dosing. Approve the following dosing regimens (A and B):

- A) Loading dose is 3 mg/kg by subcutaneous injection once weekly for the first 4 weeks; AND

- B) Patient is receiving one of the following maintenance doses (i, ii, or iii):

- i. 1.5 mg/kg by subcutaneous injection once every week, OR

- ii. 3 mg/kg by subcutaneous injection once every 2 weeks; OR

- iii. 6 mg/kg by subcutaneous injection once every 4 weeks.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Hemlibra is not recommended in the following situations:

1. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

1. Hemlibra® subcutaneous injection [prescribing information]. South San Francisco, CA and Tokyo, Japan: Genentech/Roche and Chugai; March 2023.
2. Mancuso ME, Mahlangu JN, Pipe SW. The changing treatment landscape in haemophilia: from standard half-life clotting factor concentrates to gene editing. *Lancet*. 2021;397:630-640.

3. Croteau SE. Hemophilia A/B. *Hematol Oncol Clin North Am.* 2022;36(4):797-812.
4. Franchini M, Mannucci PM. The more recent history of hemophilia treatment. *Semin Thromb Hemost.* 2022;48(8):904-910.
5. Mannucci PM. Hemophilia treatment innovation: 50 years of progress and more to come. *J Thromb Haemost.* 2023;21(3):403-412.
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7. National Hemophilia Foundation. MASAC (Medical and Scientific Advisory Council) recommendations on the use and management of emicizumab-kxwh (Hemlibra®) for hemophilia A with and without inhibitors. MASAC Document #268. Adopted by the National Hemophilia Foundation Board of Directors on April 27, 2022. Available at: https://www.hemophilia.org/sites/default/files/document/files/268_Emicizumab.pdf. Accessed on May 18, 2023.
8. Srivastava A, Santagostino E, Dougall A, et al, on behalf of the WFH guidelines for the management of hemophilia panelists and co-authors. WFH guidelines for the management of hemophilia, 3rd edition. *Hemophilia.* 2020;26(Suppl 6):1-158.

HISTORY

Type of Revision	Summary of Changes	Review Date
Annual Revision	No criteria changes.	05/18/2022
Annual Revision	No criteria changes.	05/24/2023