

## UTILIZATION MANAGEMENT MEDICAL POLICY

**POLICY:** Hemophilia – Altuviiiio Utilization Management Medical Policy

- Altuviiiio™ (antihemophilic factor [recombinant] Fc-VWF-XTEN fusion protein-ehtl intravenous infusion – Bioverativ/Sanofi)

**REVIEW DATE:** 02/19/2025

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### OVERVIEW

Altuviiiio, a recombinant DNA-derived Factor VIII concentrate, is indicated for use in **hemophilia A** in adults and children for:<sup>1</sup>

- **Routine prophylaxis** to reduce the frequency of bleeding episodes.
- **On-demand treatment and control** of bleeding episodes.
- **Perioperative management** of bleeding.

It is notable that Altuviiiio has demonstrated a 3- to 4-fold prolonged half-life relative to other standard and extended half-life products.<sup>1</sup>

### Disease Overview

Hemophilia A is an X-linked bleeding disorder primarily impacting males caused by a deficiency in Factor VIII.<sup>2-5</sup> 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

Guidelines for hemophilia from the National Bleeding Disorders Foundation (October 2024)<sup>6</sup> recognize Altuviiiio as a product with a prolonged half-life that differs from other recombinant Factor VIII concentrates.

### Dosing Considerations

Dosing of clotting factor concentrates is highly individualized. The National Hemophilia Foundation's Medical and Scientific Advisory Council (MASAC) provides recommendations regarding doses of clotting factor concentrate in the home (2016).<sup>7</sup> The number of required doses varies greatly and is dependent on the severity of the disorder and the prescribed regimen. Per MASAC guidance, patients on prophylaxis should also have a minimum of one major dose and two minor doses on hand for breakthrough bleeding in addition to the prophylactic doses used monthly. The guidance also notes that an adequate supply of clotting factor concentrate is needed to accommodate weekends and holidays. Therefore, maximum doses in this policy allow for prophylactic dosing plus three days of acute bleeding or perioperative management per 28 days. Doses exceeding this quantity will be reviewed on a case-by-case basis by a clinician.

### **POLICY STATEMENT**

Prior Authorization is recommended for medical benefit coverage Altuviiiio. Approval is recommended for those who meet the Criteria and Dosing for the listed indication. Extended approvals are allowed if the patient continues to meet the criteria and dosing. 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). All approvals are provided for the duration noted below. Because of the specialized skills required for evaluation and diagnosis of patients treated with Altuviiiio, as well as the monitoring required for adverse events and long-term efficacy, the agent is required to be prescribed by or in consultation with a physician who specializes in the condition being treated.

**Automation:** None.

### **RECOMMENDED AUTHORIZATION CRITERIA**

Coverage of Altuviiiio is recommended for patients who meet the following criteria:

#### **FDA-Approved Indication**

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- 1. Hemophilia A.** Approve for 1 year if the patient meets ONE of the following (A or B):
  - A) Initial Therapy.** Approve if the patient meets ALL of the following (i, ii, and iii):
    - i.** Altuviiiio is being used in at least ONE of the following scenarios (a, b, or c):
      - a)** Routine prophylaxis; OR
      - b)** On-demand treatment and control of bleeding episodes; OR
      - c)** Perioperative management of bleeding; AND
    - ii.** Patient meets ONE of the following (a or b):
      - a)** Patient meets BOTH of the following [(1) and (2)]:
        - (1)** Factor VIII inhibitor testing has been performed within the past 30 days; AND
        - (2)** Patient does not have a positive test for Factor VIII inhibitors  $\geq 1.0$  Bethesda units/mL;  
OR
      - b)** Patient has not received Factor VIII therapy in the past; AND
    - iii.** Medication is prescribed by or in consultation with a hemophilia specialist; OR
  - B) Patient is Currently Receiving Altuviiiio or Has Received Altuviiiio in the Past.** Approve if the patient meets ALL of the following (i, ii, and iii):
    - i.** Altuviiiio is being used in at least ONE of the following scenarios (a, b, or c):
      - a)** Routine prophylaxis; OR
      - b)** On-demand treatment and control of bleeding episodes; OR
      - c)** Perioperative management of bleeding; AND
    - ii.** Patient meets ONE of the following (a or b):
      - a)** Patient meets BOTH of the following [(1) and (2)]:
        - (1)** Factor VIII inhibitor testing has been performed within the past 365 days; AND
        - (2)** Patient does not have a positive test for Factor VIII inhibitors  $\geq 1.0$  Bethesda units/mL;  
OR
      - b)** According to the prescriber, the patient does not have clinical manifestations suggesting the presence of Factor VIII inhibitors; AND  
Note: Inhibitors may be present if bleeding is not well controlled, there is decreased responsiveness to Factor VIII therapy, and/or if expected Factor VIII activity plasma levels are not achieved.
    - iii.** Medication is prescribed by or in consultation with a hemophilia specialist.

**Dosing.** Approve the following dosing regimens (A, B, and/or C):

- A) Routine prophylaxis: approve up to 50 IU per kg intravenously no more frequently than once weekly; AND/OR
- B) On demand treatment and control of bleeding episodes: approve up to 50 IU per kg intravenously with additional doses once every 2 to 3 days for up to 10 days per episode; AND/OR
- C) Perioperative management of bleeding: approve up to 50 IU per kg intravenously and provide for additional doses once every 2 to 3 days for up to 10 days per procedure.

### CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Altuviiiio 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. Altuviiiio™ intravenous infusion [prescribing information]. Waltham, MA: Bioverativ/Sanofi; September 2024.
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. Peyvandi F, Garagiola I, Young G. The past and future of haemophilia: diagnosis, treatments and its complications. *Lancet*. 2016;388(10040):187-197.
6. National Bleeding Disorders Foundation. MASAC (Medical and Scientific Advisory Council) recommendations concerning products licensed for the treatment of hemophilia and selected disorders of the coagulation system (endorsed October 2, 2025). MASAC Document #290. Available at: <https://www.hemophilia.org/sites/default/files/document/files/MASAC-Products-Licensed.pdf>. Accessed on February 17, 2025.
7. National Hemophilia Foundation. MASAC (Medical and Scientific Advisory Council) recommendations regarding doses of clotting factor concentrate in the home (Revised June 7, 2016). MASAC Document #242. Adopted on September 3, 2020. Available at: <https://www.hemophilia.org/sites/default/files/document/files/242.pdf>. Accessed on February 19, 2025.

### HISTORY

| Type of Revision  | Summary of Changes   | Review Date |
|-------------------|--|-------------|
| New Policy        | --   | 03/29/2023  |
| Annual Revision   | No criteria changes.   | 02/28/2024  |
| Selected Revision | <b>Hemophilia A:</b> In Initial Therapy, the threshold for a positive inhibitor test was changed to $\geq 1.0$ Bethesda units/mL; previously, it was $\geq 0.6$ Bethesda units/mL. It was added that a patient who has not received Factor VIII therapy in the past is not required to meet the inhibitor testing requirements. For a Patient Currently Receiving Altuviiiio or has Received Altuviiiio in the Past, the Factor VIII inhibitor testing timeframe was changed to within the past 365 days; previously, the timeframe was within the last 30 days. Also, the threshold for a positive inhibitor test was changed to $\geq 1.0$ Bethesda units/mL; previously, it was $\geq 0.6$ Bethesda units/mL. The wording “prescribing physician” was replaced with “prescriber”. | 12/04/2024  |
| Annual Revision   | No criteria changes.   | 02/19/2025  |

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