MVP Health Care Medical Policy

Medicare Part B: Hemophilia Gene Therapy

Type of Policy:	**Drug Therapy**
Prior Approval Date:	**NA**
Approval Date:	**02/01/2024**
Effective Date:	**02/01/2024**
Related Policies:	**Hemophilia Factor**

Refer to the MVP Medicare website for the Medicare Part D formulary and Part D policies.

Drugs Requiring Prior Authorization under the medical benefit

J1411 Hemgenix (injection, etranacogene dezaparvovec-drlb)

J3590 Roctavian (injection, valoctocogene roxaparvovec)

Overview/Summary of Evidence

Hemgenix is an adeno-associated virus vector-based gene therapy indicated for the treatment of adults with **hemophilia B** (congenital Factor IX deficiency) who currently use Factor XI prophylaxis therapy or have current/historical life-threatening hemorrhage or have repeated serious spontaneous bleeding episodes.
Hemgenix is designed to deliver a copy of a gene encoding the Padua variant of human coagulation Factor IX (hFIX-Padua). Hemgenix infusion results in cell transduction and increase in circulating Factor IX activity in patients with Hemophilia B.

Roctavian is an adeno-associated virus vector-based gene therapy indicated for the treatment of adults with **severe hemophilia A** (congenital factor VIII deficiency with factor VIII activity <1IU/dL) without pre-existing antibodies to adeno-associated virus serotype 5 detected by an FDA-approved test. Roctavian is designed to introduce a functional copy of a transgene encoding the B-domain deleted SQ form of human coagulation factor VIII (hFVIII-SQ). Transcription of this transgene occurs within the liver,

using the liver-specific promotor, which results in the expression of hFVIII-SQ. The expressed hFVIII-SQ replaces the missing coagulation factor VIII needed for effective hemostasis.
The recommended dose of Roctavian is 6 X 1013 vector genomes per kilogram (vg/kg) body weight, administered as a single intravenuous infusion. Roctavian is administered using an infusion pump rate of 1 mL/min, which can be increased every 30 minutes by 1 mL/min up to a maximum rate of 4mL/min.

Indications/Criteria

A. Hemophilia A

Roctavian may be considered for coverage when ALL of the following criteria is met:

- Member is biologically male
- Chart notes documenting that member has a confirmed diagnosis of hemophilia A (hereditary factor VIII deficiency).
- Current chart notes documenting the **ALL** of the following tests:
    - Pre-existing antibodies to AAV5 using FDA approved companion diagnostic. Roctavian must NOT be administered to members with a positive test for antibodies to AAV5.
    - Factor VIII inhibitor titer testing
        - Roctavian must NOT be administered to members with a positive test for Factor VIII inhibitor
    - Liver function tests [alanine aminotransferase (ALT), aspartate aminotransferase (AST), gamma-glutamyl transferase (GGT), alkaline phosphatase (ALP), total bilirubin and international normalized ration (INR)]
    - Ultrasound or laboratory assessments for liver fibrosis
        - See Exclusions section
- Provider attestation that the evaluation for thrombosis and cardiovascular risk factors has been completed with the member and will be monitored after Roctavian infusion.

Roctavian will be approved as a **one-time dose**. Requests for replacement due to lost or damaged product will not be covered. Coverage is contingent on eligibility at the time of infusion.

B. Hemophilia B

Hemgenix may be considered for coverage when ALL of the following criteria is met:

- Member is biologically male
- Chart notes documenting that member has a confirmed diagnosis of hemophilia B (hereditary factor IX deficiency).
- Current chart notes documenting the **ALL** of the following tests:
    - Factor IX inhibitor titer testing
        - If initial test is positive, there must be documentation of a re-test within 2 weeks. If both the initial test and re-test results are positive, Hemgenix cannot be administered.
    - Documentation of liver health assessments including:
        - Enzyme testing [alanine aminotransferase (ALT), asparate aminotransferase (AST), alkaline phosphatase (ALP) and total bilirubin).
        - Hepatic ultrasounds and elastography
- Current chart notes documents one of the following:
    - Current use of Factor IX prophylaxis OR
    - Member has a current or historical life-threatening hemorrhage OR
    - Member as had repeated, serious spontaneous bleeding episodes
- Provider attestation
    - For members with pre-existing risk factors for hepatocellular carcinogenicity, regular (annual) monitoring liver ultrasounds and alpha-fetoprotein testing following administration
    - Transaminase levels will be monitored once per week for 3 months after administration.
    - Factor IX activity levels will be monitored regularly after Hemgenix administration

Hemgenix will be approved as a **one-time dose**. Requests for replacement due to lost or damaged product will not be covered. Coverage is contingent on eligibility at the time of infusion.

Exclusions

- Age, dose, frequency of dosing and/or duration of therapy outside of FDA approved package labeling
- Roctavian

    - Member has known significant hepatic fibrosis (stage 3 or stage 4 on the Batts-Ludwig scale or equivalent)
    - Member has cirrhosis
    - Member has mannitol hypersensitivity
    - Active or uncontrolled infection
- Hemgenix
    - Member has active hepatitis C infection
    - Member has uncontrolled HIV infection
    - Member has cirrhosis

References

1. U.S Food and Drug Administration. List of Cleared or Approved Companion Diagnostic Devices (In Vitro and Imaging Tools). Content current as of 08/03/2023. Accessed 08/03/2023. List of Cleared or Approved Companion Diagnostic Devices (In Vitro and Imaging Tools) | FDA

2. Roctavian (valotocogene roxaparvovec-rvox) suspension for intravenous infusion. BioMarin Pharmaceutical Inc. Novato CA. August 2023. 78bf2bcb-7068-4774-b962-a35c53704fc1_source__v.pdf (d34r3hkxgxjdtw.cloudfront.net)

3. Hemgenix (etranacogene dezaparvovec-drlb) suspension for intravenous infusion. CSL Behring LLC. King of Prussia, PA. November 2022. 2022-313 HEMGENIX.indd (cslbehring.com)