Clinical Policy: Etranacogene Dezaparvovec-drlb (Hemgenix)

Reference Number: PA.CP.PHAR.580
Effective Date: 01/2023
Last Review Date: 01/2026

Description
Etranacogene dezaparvovec-drlb (Hemgenix®) is an adeno-associated virus (AAV) vector-based gene therapy.

FDA Approved Indication(s)
Hemgenix is indicated for the treatment of adults with hemophilia B (congenital factor IX deficiency) who:

- Currently use factor IX prophylaxis therapy, or
- Have current or historical life-threatening hemorrhage, or
- Have repeated, serious spontaneous bleeding episodes.

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

All requests reviewed under this policy **require Precision Drug Action Committee (PDAC) Utilization Management Review**. Refer to CC.PHAR.21 for process details.

It is the policy of PA Health & Wellness® that Hemgenix is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Congenital Hemophilia B* (must meet all)**:**
**Only for initial treatment dose; subsequent doses will not be covered.*

1. Diagnosis of congenital hemophilia B (factor IX deficiency);
2. Prescribed by or in consultation with a hematologist;
3. Age ≥ 18 years;
4. Member has severe or moderately severe hemophilia (defined as a factor IX level of ≤ 2%);
5. Member meets one of the following (a, b or c):
   a. Member has been adherent with use of a factor IX product* (e.g., Alprolix®, Benefix®, Idelvion®, Ixinity®, Rebinyn®, Rixubis®) for routine prophylaxis for at least 12 months as assessed and documented by prescriber;
   b. Has had at least one serious spontaneous bleeding event;
   c. Has current or history of life threatening hemorrhage;
   **Prior authorization may be required*
6. For members who have had previous factor IX use: Member has been treated with factor IX product for a minimum of 150 exposure days (*see Appendix D*);
7. Member meets all of the following (a, b, and c):
   a. No previous documented history of a detectable factor IX inhibitor;

b. Documentation of inhibitor level assay < 0.6 Bethesda units (BU) within the last 12 months;
c. If member had an initial positive test result for factor IX inhibitor, member has documentation of a subsequent negative test within 2 weeks;

8. Member has had all of the following baseline liver assessments within the last 3 months (a, b, and c):
   a. Documentation of liver enzymes within normal limits (i.e., alanine aminotransferase [ALT], aspartate aminotransferase [AST], alkaline phosphatase [ALP] and total bilirubin);
   b. Documentation of normal hepatic ultrasound and elastography;
   c. If member has evidence of radiological liver abnormalities and/or sustained liver enzyme elevations, attestation from hepatologist that member is eligible for Hemgenix;
9. Member has not received prior gene therapy;
10. Member has been tested for neutralizing anti-adeno-associated virus serotype 5 (AAV5) antibodies and is deemed a suitable candidate for treatment;
11. Dose does not exceed a single IV infusion of 2×10^{13} genome copies (gc) per kg.

Approval duration: 3 months (*1 dose only*)

B. Other diagnoses/indications

1. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53

II. Continued Therapy

A. Congenital Hemophilia B

1. Continued therapy will not be authorized as Hemgenix is indicated to be dosed one time only.

Approval duration: Not applicable

B. Other diagnoses/indications (must meet 1 or 2)**:**

1. Currently receiving medication via PA Health & Wellness benefit and documentation supports positive response to therapy or the Continuity of Care policy (PA.PHARM.01) applies.
   Approval duration: Duration of request or 6 months (whichever is less); or
2. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – PA.CP.PMN.53.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

AAV: adeno-associated virus
ALP: alkaline phosphatase
ALT: alanine aminotransferase
AST: aspartate aminotransferase

BU: Bethesda units
ED: exposure day
FDA: Food and Drug Administration
gc: genome copies

Appendix B: Therapeutic Alternatives
This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
Factor IX recombinant products for routine prophylaxis		
Alprolix®	50 IU/dL/kg IV once weekly or 100 IU/dL/kg IV once every 10 days	100 IU/dL/kg/dose
BeneFIX®	100 IU/kg IV once weekly	100 IU/kg/dose
Idelvion®	25-40 IU/kg IV every 7 days followed by 50-75 IU/kg IV every 14 days once well-controlled	40 IU/kg/week
Ixinity®	40 to 70 IU/kg IV twice weekly	140 IU/kg/week
Rebinyn®	40 IU/kg IV once weekly	40 IU/kg/week
Rixubis®	40-60 IU/kg IV twice weekly	60 IU/kg/dose

Appendix C: Contraindications/Boxed Warnings
None reported

Appendix D: General Information
- Serious bleeding episodes include bleeds in the following sites: intracranial; neck/throat; gastrointestinal; joints (hemarthrosis); muscles (especially deep compartments such as the iliopsoas, calf, forearm), or mucous membranes of the mouth, nose and genitourinary tract.
- Spontaneous bleed is defined as a bleeding episode that occurs without apparent cause and is not the result of trauma.
- Exposure day (ED): An ED is a day on which a person with hemophilia has been infused with factor concentrate to treat or prevent a bleed. The number of EDs consists only of those days on which factor was infused.
  - 150 EDs of cumulative treatment increases the likelihood of immunologic stability – a decreased risk of producing inhibitors. Patients rarely develop inhibitors after 150 EDs.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Hemophilia B	Recommended dose: 2 x 10^{13} gc/kg of body weight by IV infusion	2 x 10^{13} gc/kg

VI. Product Availability

Single-dose cell suspension: 10 to 48 single-use vials with a nominal concentration of 1 x 10^{13} gc/mL with each vial containing an extractable volume of ≥ 10 mL

VII. References

1. Hemgenix Prescribing Information. Kankakee, IL: CSL Behring; November 2022. Available at: https://labeling.cslbehring.com/PI/US/Hemgenix/EN/Hemgenix-Prescribing-Information.pdf. Accessed November 24, 2025.
2. Pipe SW, Leebeek FWG, Recht M, et al. Gene therapy with etranacogene dezaparvovec for hemophilia B. N Engl J Med. 2023;388(8):706-718.Srivastava A, Santagostino E, Dougall A, et al. WFH Guidelines for the Management of Hemophilia, 3rd edition. Haemophilia. 2020 Aug;26 Suppl 6:1-158.
3. Carcao M and Goudemand J. Inhibitors in hemophilia: A primer, 5th edition. World Federation of Hemophilia. Available at: https://www1.wfh.org/publication/files/pdf-1122.pdf.
4. Medical and Scientific Advisory Council (MASAC) of the National Bleeding Disorders Foundation (formerly National Hemophilia Foundation): Database of treatment guidelines. Available at: https://www.hemophilia.org/healthcare-professionals/guidelines-on-care/masac-documents. Accessed November 25, 2025.
5. Rezende SM, Neumann I, Angchaisuksiri P, et al. International Society on Thrombosis and Haemostasis clinical practice guideline for treatment of congenital hemophilia A and B based on the Grading of Recommendations Assessment, Development, and Evaluation methodology. J Thromb Haemost. 2024;22(9):2629-2652.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J1411	Injection, etranacogene dezaparvovec-drlb, per therapeutic dose

Reviews, Revisions, and Approvals	Date
Policy created	01/2023
1Q 2024 annual review: added HCPCS code [J1411]; references reviewed and updated.	01/2024
1Q 2025 annual review: revised criterion for AAV5 neutralizing antibody titer of ≤ 1:678 to instead require a neutralizing anti-AAV5 antibody test and that member is deemed a suitable candidate for treatment due to the evolving nature of the anti-AAV5 neutralizing antibody test; added requirement for documentation of member's body weight for dose determination; references reviewed and updated.	01/2025
1Q 2026 annual review: added qualifier that the 150 EDs criterion applies to members who have had previous factor IX use; removed requirement for documentation of body weight; references reviewed and updated.	01/2026