

09-J4000-44

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Reviewed: 02/08/23

Revised: 04/01/23

Subject: Etranacogene Dezaparvovec (Hemgenix)

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Dosage/ Administration	Position Statement	Billing/Coding	Reimbursement	Program Exceptions	Definitions
Related Guidelines	Other	References	Updates		

DESCRIPTION:

Etranacogene dezaparvovec (Hemgenix), an adeno-associated virus (AAV) vector-based gene therapy, was approved by the U.S. Food and Drug Administration (FDA) in November 2022 for the treatment of adults with Hemophilia B (congenital Factor IX deficiency) who currently use Factor IX prophylaxis therapy, have current or historical life-threatening hemorrhage, or have repeated, serious spontaneous bleeding episodes. This is the first FDA-approved gene therapy for this indication.

The safety and efficacy of etranacogene dezaparvovec were evaluated in an open-label, single arm study of adult males with hemophilia B and FIX levels of less than or equal to 2% of normal (HOPE-B). Subjects were required to have received prophylaxis therapy for a minimum of two months, have at least 150 previous exposure days of treatment with FIX protein. Patients with a history of FIX inhibitors, positive HIV test, active infection with hepatitis B or C, or prior gene therapy were excluded. All subjects received a single intravenous dose of 2×10^{13} gc/kg body weight of etranacogene dezaparvovec and entered a follow-up period of 5 years (n=54). The primary endpoint was ABR (all bleeds) during months 7 to 18 after etranacogene dezaparvovec treatment compared with annualized bleed rate (ABR) during the lead-in period. A secondary endpoint was FIX activity and consumption.

The primary endpoint of ABR 7 to 18 months after a single etranacogene dezaparvovec treatment was noninferior to the ABR during the 6 months before treatment (1.9 vs 4.1 bleeds/year; ratio, 0.46; 95% CI, 0.26 to 0.81). In the lead-in period of at least 6 months prior to the etranacogene dezaparvovec treatment, subjects had received standard of care routine Factor IX prophylaxis. Subjects were allowed to continue prophylaxis during months 0 to 6, but 2 patients were unable to discontinue routine prophylaxis after etranacogene dezaparvovec treatment, and 1 additional patient received prophylaxis from days 396 to 534. In months 7 to 18 after treatment, there were 96 bleeds in 20 patients, 26% were spontaneous bleeds, and 35% were joint bleeds. In the 6-month lead-in period, there were 136 bleeds in 40 patients, 37% were spontaneous bleeds and 57% were joint bleed. The most frequent adverse events were ALT elevations, flu-like symptoms, and infusion-related reactions.

POSITION STATEMENT:

Etranacogene Dezaparvovec (Hemgenix) **meets the definition of medical necessity** when **ALL** of the following criteria are met:

1. Member has seen a board-certified hematologist or hematologist-oncologist and that physician has performed a complete hematologic and musculoskeletal assessment in the past 12 months – documentation from medical record must be provided
2. Etranacogene dezaparvovec is prescribed by a board-certified hematologist or hematologist-oncologist
3. Factor replacement protocol (including dosing for both acute and prophylactic management) is provided
4. Factor replacement protocol (including dosing for both acute and prophylactic management) has been developed or evaluated by a board-certified hematologist or hematologist-oncologist within the past 12 months – documentation from the medical record must be provided
5. Member maintains a treatment log documenting any bleeds and required treatment for 12 consecutive months
6. Member is diagnosed with hemophilia B
7. Member does not have inhibitors to factor IX
8. Member's endogenous factor IX is less than or equal to 2 IU/dL (2%) – laboratory documentation must be provided
9. Member has had clinically evident bleeding (defined as: 1 or more episodes of spontaneous bleeding into a joint or into the central nervous system; or 4 or more episodes of soft tissue bleeding in an 8-week period) after a two-month trial of at least one factor IX prophylaxis protocol
10. Member was previously approved by Florida Blue for a factor IX prophylaxis protocol
11. Member does not have a history of prior gene therapy use (including prior treatment with etranacogene dezaparvovec)
12. Member is at least 18 years of age

Approval duration: 6 months (1 lifetime treatment)

DOSAGE/ADMINISTRATION:

THIS INFORMATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE USED AS A SOURCE FOR MAKING PRESCRIBING OR OTHER MEDICAL DETERMINATIONS. PROVIDERS SHOULD REFER TO THE MANUFACTURER'S FULL PRESCRIBING INFORMATION FOR DOSAGE GUIDELINES AND OTHER INFORMATION RELATED TO THIS MEDICATION BEFORE MAKING ANY CLINICAL DECISIONS REGARDING ITS USAGE.

FDA-approved

- The recommended dose is 2×10^{13} genome copies (gc) per kilogram (kg) of body weight (or 2 mL/kg body weight) administered as an intravenous infusion after dilution with 0.9% sodium chloride solution (normal saline)
- Can be administered only once

Dose Adjustments

- None

Drug Availability

- Suspension for intravenous infusion
- Provided in kits containing 10 to 48 single-use vials, each kit constituting a dosage unit based on the patient's body weight
- Has a nominal concentration of 1×10^{13} gc/mL, and each vial contains an extractable volume of not less than 10 mL

PRECAUTIONS:

Boxed Warning

- None

Contraindications

- None

Precautions/Warnings

- Infusion reactions: Monitor during administration and for at least 3 hours after end of infusion. If symptoms occur, slow or interrupt administration. Re-start administration at a slower infusion once resolved.
- Hepatotoxicity: Closely monitor transaminase levels once per week for 3 months after administration to mitigate the risk of potential hepatotoxicity. Continue to monitor transaminases in all patients who developed liver enzyme elevations until liver enzymes return to baseline. Consider corticosteroid treatment should elevations occur.
- Hepatocellular carcinogenicity: For patients with preexisting risk factors (e.g., cirrhosis, advanced hepatic fibrosis, hepatitis B or C, non-alcoholic fatty liver disease (NAFLD), chronic alcohol consumption, non-alcoholic steatohepatitis (NASH), and advanced age), perform regular (e.g., annual) liver ultrasound and alpha-fetoprotein testing following administration.
- Monitoring Laboratory tests: Monitor for Factor IX activity and Factor IX inhibitors.

BILLING/CODING INFORMATION:

HCPCS Coding

J1411	Injection, etranacogene dezaparvovec-drlb, per therapeutic dose
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ICD-10 Diagnosis Codes That Support Medical Necessity

D67	Hereditary factor IX deficiency
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REIMBURSEMENT INFORMATION:

Refer to section entitled [POSITION STATEMENT](#).

PROGRAM EXCEPTIONS:

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Part D: Florida Blue has delegated to Prime Therapeutics authority to make coverage determinations for the Medicare Part D services referenced in this guideline.

Medicare Advantage: No National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) were found at the time of the last guideline review date.

DEFINITIONS:

None

RELATED GUIDELINES:

[Clotting Factors and Coagulant Drug Products, 09-J0000-34](#)

OTHER:

None

REFERENCES:

1. CSL, Behring. Hemgenix (etranacogene dezaparvovec) kit. 2023 [cited 2/2/23]. In: DailyMed [Internet]. Bethesda (MD): National Library of Medicine. Available from: <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=35b2db65-4c6c-4173-ab56-b2bca69193bd>
2. Clinical Pharmacology [Internet]. Tampa (FL): Gold Standard, Inc.; 2023 [cited 2/2/23]. Available from: <http://www.clinicalpharmacology.com/>.
3. ClinicalTrials.gov [Internet]. Bethesda (MD): National Library of Medicine; 2000 Feb 29 - [cited 2/2/23]. Available from: <http://clinicaltrials.gov/>.
4. DRUGDEX® System [Internet]. Greenwood Village (CO): Thomson Micromedex; Updated periodically [cited 2/2/23]. Available online.
5. Orphan Drug Designations and Approval [Internet]. Silver Spring (MD): US Food and Drug Administration; 2023 [cited 2/2/23]. Available from: <http://www.accessdata.fda.gov/scripts/opdlisting/oopd/index.cfm>

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Pharmacy Policy Committee on 02/08/23.

GUIDELINE UPDATE INFORMATION:

03/15/23	New Medical Coverage Guideline.
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04/01/23	Revision: Added HCPCS code J1411 and deleted code J3590.
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