Hemgenix® (etranacogene dezaparvovec-drlb)
(Intravenous)

Document Number: EOCCO-0688

Last Review Date: 01/03/2023
Date of Origin: 01/03/2023
Dates Reviewed: 01/2023

I. Length of Authorization

Coverage will be provided for one dose and may not be renewed.

II. Dosing Limits

A. Quantity Limit (max daily dose) [NDC Unit]:

- 1 kit (based on weight chart below)

B. Max Units (per dose and over time) [HCPCS Unit]:

- 1 kit (based on weight chart below)

III. Initial Approval Criteria [1-11]

Submission of medical records (chart notes) related to the medical necessity criteria is REQUIRED on all requests for authorizations. Records will be reviewed at the time of submission. Please provide documentation related to diagnosis, step therapy, and clinical markers (i.e. genetic and mutational testing) supporting initiation when applicable. Please provide documentation via direct upload through the PA web portal or by fax.

Coverage is provided in the following conditions:

Use for indications outside of FDA-approved labeled indications does NOT meet medical criteria for coverage and will be considered investigational, thus will NOT be covered.

Hemophilia B (Congenital Factor IX Deficiency) † Φ

- Patient is at least 18 years of age; **AND**
- Patient has a diagnosis of moderately severe or severe congenital factor IX deficiency (i.e., ≤2% of normal circulating factor IX), as confirmed by blood coagulation testing, for which the subject is on continuous routine factor IX prophylaxis, unless there is a contraindication or intolerance*(Note: Continuous routine prophylaxis is defined as the intent of treating with an a priori defined frequency of infusions (e.g., twice weekly, once every two weeks, etc.) as documented in the medical records)*; **AND**

- Patient has not received prior hemophilia AAV-vector–based gene therapy; **AND**
- Patient has one or more of the following:
    - Currently use Factor IX prophylaxis therapy; **OR**
    - Have current or historical life-threatening hemorrhage; **OR**
    - Have repeated, serious spontaneous bleeding episodes, *(e.g., intramuscular hematomas requiring hospitalization, hemarthrosis, central nervous system (CNS) bleeding (including intracranial hemorrhage), pulmonary hemorrhage, life-threatening gastrointestinal (GI) hemorrhage and umbilical cord bleeding)*; **AND**
- Patient has been tested and found negative for Factor IX inhibitor titers (if test result is positive, re-test within approximately 2 weeks. If re-test is also positive, Hemgenix should not be given); **AND**
- Patient Factor IX activity will be monitored periodically (e.g., weekly for 3 months) as well as presence of inhibitors if bleeding is not controlled (note: patients will continue to require exogenous Factor IX until response to Hemgenix occurs) ; **AND**
- Patient will discontinue Factor IX prophylaxis therapy upon achieving FIX levels of 5% from etranacogene dezaparvovec treatment; **AND**
- Patient must have a baseline anti-AAV5 antibody titer of ≤ 1:678 measured by ELISA *(Note: this assay was used in the HOPE-B clinical trial and is assessable via CSL Behring)*; **AND**
- Patient will have a complete liver assessment, prior to therapy, including all of the following:
    - Enzyme testing [alanine aminotransferase (ALT), aspartate aminotransferase (AST), alkaline phosphatase (ALP) and total bilirubin]; **AND**
    - Hepatic ultrasound and elastography; AND
    - In case of patients with either radiological liver abnormalities or sustained liver enzyme elevations, a consulting hepatologist has assessed the patient's eligible to receive Hemgenix and concludes that the patient is deemed to have a healthy liver compatible with the administration of Hemgenix; **AND**
- Patient will have liver function assessed after therapy, weekly for at least 3 months; **AND**
- Patients with preexisting risk factors for hepatocellular carcinoma (e.g., patients with cirrhosis, advanced hepatic fibrosis, hepatitis C or B, non-alcoholic fatty liver disease (NAFLD), chronic alcohol consumption, non-alcoholic steatohepatitis (NASH), and advanced age) will have abdominal ultrasound screenings and be monitored regularly (e.g., annually) for alpha-fetoprotein (AFP) elevations following administration; **AND**
- Provider attestation that, in the case that Factor IX replacement is necessary to maintain stable blood clotting after Hemgenix has been administered, the Factor IX prescribing provider will fill out and return a medical attestation to EOCCO, if requested

† FDA Approved Indication(s); **‡** Compendium Recommended Indication(s); **Φ** Orphan Drug

IV. Renewal Criteria

Coverage cannot be renewed.

V. Dosage/Administration

Indication	Dose
Hemophilia B (Congenital Factor IX Deficiency	The recommended dose of Hemgenix is 2 x 10^{13} genome copies (gc) per kilogram (kg) of body weight (or 2 mL/kg body weight) administered as an intravenous infusion. Calculate the dose as follows: – Hemgenix dose (in mL) = patient body weight (in kilogram) x 2 *The multiplication factor 2 represents the per kilogram dose (2 × 10^{13} gc/kg) divided by the amount of genome copies per mL of the Hemgenix solution (1 × 10^{13} cg/mL).* – Number of Hemgenix vials needed = Hemgenix dose (in mL) divided by 10 (round up to next whole number of vials). *The division factor 10 represents the extractable volume of Hemgenix from each vial (10 mL).*
• Prepare Hemgenix using sterile technique under aseptic conditions, proper engineering controls (e.g., biological safety cabinet or isolator) and according to institutional policies. • Do not expose Hemgenix to the light of an ultraviolet radiation disinfection lamp. • Confirm that the patient's identity matches with the patient-specific identifier number on the outer carton. • Verify the required dose of Hemgenix based on the patient's body weight. • Confirm that the carton contains sufficient number of vials to prepare the diluted Hemgenix patient-specific infusion bag. • Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. • For single-dose intravenous infusion only. • DO NOT administer Hemgenix as an intravenous push or bolus. • DO NOT infuse the diluted Hemgenix solution in the same intravenous line with any other products. • DO NOT use a central line or port.	

VI. Billing Code/Availability Information

HCPCS code:

- J1411 – Injection, etranacogene dezaparvovec-drlb, per therapeutic dose; 1 billable unit = 1 kit (based on weight chart below) *(Effective 04/01/2023)*
- J3590 – Unclassified biologics *(Discontinue use on 04/01/2023)*

NDC:

Hemgenix kit sizes:

Total number of vials	Patient Weight (kg)	Total Volume (mL)	NDC
10	46-50	100	00053-0100-10
11	51-55	110	00053-0110-11
12	56-60	120	00053-0120-12

13	61-65	130	00053-0130-13
14	66-70	140	00053-0140-14
15	71-75	150	00053-0150-15
16	76-80	160	00053-0160-16
17	81-85	170	00053-0170-17
18	86-90	180	00053-0180-18
19	91-95	190	00053-0190-19
20	96-100	200	00053-0200-20
21	101-105	210	00053-0210-21
22	106-110	220	00053-0220-22
23	111-115	230	00053-0230-23
24	116-120	240	00053-0240-24
25	121-125	250	00053-0250-25
26	126-130	260	00053-0260-26
27	131-135	270	00053-0270-27
28	136-140	280	00053-0280-28
29	141-145	290	00053-0290-29
30	146-150	300	00053-0300-30
31	151-155	310	00053-0310-31
32	156-160	320	00053-0320-32
33	161-165	330	00053-0330-33
34	166-170	340	00053-0340-34
35	171-175	350	00053-0350-35
36	176-180	360	00053-0360-36
37	181-185	370	00053-0370-37
38	186-190	380	00053-0380-38
39	191-195	390	00053-0390-39
40	196-200	400	00053-0400-40
41	201-205	410	00053-0410-41
42	206-210	420	00053-0420-42
43	211-215	430	00053-0430-43
44	216-220	440	00053-0440-44
45	221-225	450	00053-0450-45
46	226-230	460	00053-0460-46
47	231-235	470	00053-0470-47
48	236-240	480	00053-0480-48

VII. References

1. Hemgenix [package insert]. King of Prussia, PA; CSL Behring, LLC., November 2022. Accessed November 2022.

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3. Guidelines for the Management of Hemophilia. 3rd Edition. World Federation of Hemophilia 2020. Available at: https://www1.wfh.org/publications/files/pdf-1863.pdf. Accessed April 2022.
4. Annual Review of Factor Replacement Products. Oklahoma Health Care Authority Review Board. Updated April 2016. Accessed April 2022.
5. Graham A1, Jaworski K. Pharmacokinetic analysis of anti-hemophilic factor in the obese patient. Haemophilia. 2014 Mar;20(2):226-9.
6. Croteau SE1, Neufeld EJ. Transition considerations for extended half-life factor products. Haemophilia. 2015 May;21(3):285-8.
7. Mingot-Castellano, et al. Application of Pharmacokinetics Programs in Optimization of Haemostatic Treatment in Severe Hemophilia a Patients: Changes in Consumption, Clinical Outcomes and Quality of Life. Blood. 2014 December; 124 (21).
8. MASAC RECOMMENDATION CONCERNING PROPHYLAXIS. 2016 National Hemophilia Foundation. MASAC Document #241; February 2016. Available at: http://www.hemophilia.org. Accessed April 2022.
9. Rayment R, Chalmers E, Forsyth K, et al. Guidelines on the use of prophylactic factor replacement for children and adults with Haemophilia A and B. B J Haem:190;5, Sep 2020. https://doi.org/10.1111/bjh.16704. Accessed April 2022.
10. Peyvandi F, Palla R, Menegatti M, et al. Coagulation factor activity and clinical bleeding severity in rare bleeding disorders: results from the European Network of Rare Bleeding Disorders. *J Thromb Haemost*. 2012;10:615-621.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
D67	Hereditary factor IX deficiency

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD), Local Coverage Articles (LCAs) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: http://www.cms.gov/medicare-coverage-database/ search.aspx. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCA/LCD): N/A

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	**Applicable State/US Territory**	**Contractor**
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA, LLC
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC