

Roctavian® (valoctocogene roxaparvovec-rvox) (Intravenous)

Effective Date: 01/01/2024

Review Date: 12/14/2023, 01/10/2024

Scope: Medicaid, Commercial, Medicare-Medicaid Plan (MMP)

I. Length of Authorization

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

II. Dosing Limits

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

- Roctavian 2 x 10¹³ vg/mL single-dose vial: 44 vials one time only

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

- 44 vials one time only

III. Summary of Evidence

Roctavian (valoctocogene roxaparvovec-rvox) is indicated for the treatment of adults with severe hemophilia A (congenital factor VIII deficiency with factor VIII activity < 1 IU/dL) without antibodies to adeno-associated virus serotype 5 (AAV5) detected by an FDA-approved test. The approval was based on the 3-year results of a cohort from the Phase 3 GENEr8-1 study (N = 134). In the trial, 112 patients with baseline annualized bleeding rate (ABR) data, prospectively collected during a period of at least 6 months on FVIII prophylaxis prior to receiving Roctavian, experienced a mean ABR reduction of 52% after treatment (2.6 bleeds/year) through the end of follow-up (median of 3 years) compared to their baseline ABR (5.4 bleeds/year). The most common adverse reactions were mild changes in liver function, headache, nausea, vomiting, fatigue, abdominal pain, and infusion-related reactions.

IV. Initial Approval Criteria

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:

MMP members who have previously received this medication within the past 365 days are not subject to Step Therapy Requirements.

Hemophilia A (Congenital Factor VIII Deficiency) † Φ¹⁻¹²

- Patient is male and at least 18 years of age; **AND**
- Roctavain must be prescribed by, or consultation with a hematologist; **AND**
- Patient has severe hemophilia A (congenital factor VIII deficiency) diagnosed by a factor VIII activity level < 1 IU/dL (in the absence of exogenous factor VIII); **AND**
- Evidence of any bleeding disorder NOT related to hemophilia A has been ruled out; **AND**
- Patient is on a stable dose of regularly administered exogenous factor VIII for the prevention and control of bleeding episodes; **AND**
- Patient does not have an active infection, either acute (such as acute respiratory infections or acute hepatitis) or uncontrolled chronic (such as chronic active hepatitis B); **AND**
- Must not be administered concurrently with live vaccines while on immunosuppressive therapies; **AND**
- Patient does not have significant hepatic fibrosis (stage 3 or 4) or cirrhosis; **AND**
- Patient does not have a known hypersensitivity to mannitol; **AND**
- Patient has not received prior hemophilia AAV-vector-based gene therapy; **AND**
- Patient is adeno-associated virus serotype 5 (AAV5) antibody negative as determined by an FDA-approved or CLIA-compliant test❖; **AND**
- Patient has been tested and found negative for active factor VIII inhibitors (*i.e., results from a Bethesda assay or Bethesda assay with Nijmegen modification of less than 0.6 Bethesda Units (BU) on 2 consecutive occasions at least one week apart within the past 12 months*) and is not receiving a bypassing agent (e.g., Feiba); **AND**
- Post administration monitoring of patient serum ALT levels will be performed according to the monitoring schedule outlined in the product labeling with corticosteroids (or other immunosuppressive therapy) administered in response to elevations; **AND**
- Patients with preexisting risk factors for hepatocellular carcinoma [e.g., patients with hepatitis C or B, non-alcoholic fatty liver disease (NAFLD), chronic alcohol consumption, non-alcoholic steatohepatitis (NASH),

and advanced age] will have regular (e.g., annually) liver ultrasounds performed and will be tested for alpha-fetoprotein (AFP) elevations following administration; **AND**

- Patient Factor VIII activity will be monitored periodically; **AND**
 - Patients with factor VIII activity levels >5 IU/dL should discontinue routine prophylactic exogenous factor VIII; **OR**
 - If Factor VIII activity levels decrease and/or if bleeding is not controlled, assess presence of factor VIII inhibitors and assess the need for hemostatic prophylaxis

Notes:

- Hemostatic products may continue to be required in the case of surgery, invasive procedures, trauma, or episodic bleeds
- Response to valoctocogene may take several weeks or more to achieve
- Use of exogenous factor VIII products before and after valoctocogene administration may impede assessment of factor VIII activity

❖ If confirmed using an immunotherapy assay-<http://www.fda.gov/companiondiagnostics>

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

V. Renewal Criteria ¹

Coverage cannot be renewed. Approval is for one infusion per lifetime.

VI. Dosage/Administration ¹

Indication	Dose
Hemophilia A (Congenital Factor VIII Deficiency)	<p>The recommended dose of Roctavian is 6×10^{13} vector genomes per kilogram (vg/kg) body weight, administered as a single intravenous infusion.</p> <p><u>Calculating Dose in Milliliters (mL) and Number of Vials Required</u></p> <ul style="list-style-type: none"> • <u>Patient dose volume in mL:</u> <ul style="list-style-type: none"> – Body weight in kg multiplied by 3 = dose in mL. – <i>The multiplication factor 3 represents the per kilogram dose (6×10^{13} vg/kg) divided by the amount of vector genomes per mL of suspension (2×10^{13} vg/mL).</i>

	<ul style="list-style-type: none"> • <u>Number of vials to be thawed:</u> <ul style="list-style-type: none"> – Patient dose volume (mL) divided by 8 = number of vials to be thawed (round up to next whole number of vials). – <i>The division factor 8 represents the minimum volume extractable from a vial (8 mL).</i>
<ul style="list-style-type: none"> • Roctavian is administered using an infusion pump at a rate of 1 mL/min, which can be increased every 30 minutes by 1 mL/min up to a maximum rate of 4 mL/min. • Do not expose Roctavian to the light of an ultraviolet radiation disinfection lamp. • Prepare using aseptic technique. Wear gloves and safety glasses during preparation and administration. • Treat spills with a virucidal agent with proven activity against non-enveloped viruses and blot using absorbent materials. • Dispose unused medicinal product and materials that may have come in contact with Roctavian in accordance with the local biosafety guidelines. • Thaw at room temperature. Do not thaw or warm vials any other way. Thawing time is approximately 2 hours. Thawed suspension can be held at room temperature, up to 25°C (77°F), for a maximum of 10 hours including hold time in intact vial, preparation time into the syringes, and duration of infusion. • DO NOT administer as an intravenous push or bolus. • DO NOT infuse in the same intravenous line with any other products. • DO NOT use a central line or port. 	

VII. Billing Code/Availability Information

HCPCS code:

- J1412 – Injection, valoctocogene roxaparvovec-rvox, per mL, containing nominal 2×10^{13} vector genomes (*Effective 01/01/2024*)

NDC:

- Roctavian 2×10^{13} vector genomes (vg) per mL – 8 mL single dose vial: 68135-0927-xx

VIII. References

1. Roctavian [package insert]. Novato, CA; BioMarin Pharm., LLC., June 2023. Accessed November 2023.
2. MASAC RECOMMENDATIONS CONCERNING PRODUCTS LICENSED FOR THE TREATMENT OF HEMOPHILIA AND OTHER BLEEDING DISORDERS. National Hemophilia Foundation. MASAC Document #263; August 2020. Available at: <http://www.hemophilia.org>. Accessed July 2023.
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 July 2023.
4. Annual Review of Factor Replacement Products. Oklahoma Health Care Authority Review Board. Updated April 2016. Accessed July 2023.

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 July 2023.
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 July 2023.
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.
11. Ozelo MC, et al. Valoctocogene roxaparvovec gene therapy for hemophilia A. *N Engl J Med*. 2022;386(11):1013-1025. doi:10.1056/NEJMoa2113708.
12. Rind DM, et al. Valoctocogene roxaparvovec and emicizumab for hemophilia A without inhibitors: effectiveness and value; final report. Institute for Clinical and Economic Review. Published November 20, 2020. Accessed November 17, 2022. https://icer.org/wp-content/uploads/2020/10/ICER_Hemophilia-A_Final-Report_112020.pdf

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
D66	Hereditary factor VIII 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

Policy Rationale:

Rocatavian was reviewed by the Neighborhood Health Plan of Rhode Island Pharmacy & Therapeutics (P&T) Committee. Neighborhood adopted the following clinical coverage criteria to ensure that its members use Roctavian according to Food and Drug Administration (FDA) approved labeling and/or relevant clinical literature. Neighborhood worked with network prescribers and pharmacists to draft these criteria. These criteria will help ensure its members are using this drug for a medically accepted indication, while minimizing the risk for adverse effects and ensuring more cost-effective options are used first, if applicable and appropriate. For INTEGRITY (Medicare-Medicaid Plan) members, these coverage criteria will only apply in the absence of National Coverage Determination (NCD) or Local Coverage Determination (LCD) criteria. Neighborhood will give individual consideration to each request it reviews based on the information submitted by the prescriber and other information available to the plan.