

## Clinical Policy: Ropeginterferon Alfa-2b-njft (BESREMi)

Reference Number: LA.PHAR.570

Effective Date: 09.29.23

Last Review Date: 02.06.25

Line of Business: Medicaid

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

**\*\*Please note: This policy is for medical benefit\*\***

### Description

Ropeginterferon alfa-2b-njft (BESREMi<sup>®</sup>) is an interferon alfa-2b.

### FDA Approved Indication(s)

Besremi<sup>®</sup> is indicated for the treatment of adults with polycythemia vera (PV).

### 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.*

It is the policy of Louisiana Healthcare Connections<sup>®</sup> that BESREMi<sup>®</sup> is **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

##### A. Polycythemia Vera (must meet all):

1. Diagnosis of PV;
2. Prescribed by or in consultation with an oncologist or hematologist;
3. Age  $\geq$  18 years;
4. One of the following (a or b):
  - a. Failure of hydroxyurea, unless clinically significant adverse effects are experienced or all are contraindicated;  
*\*Prior authorization may be required for hydroxyurea*
  - b. Member has symptomatic low risk-PV despite aspirin and phlebotomy therapy AND meets one of the following indications for cytoreductive therapy (i, ii, iii, iv, or v):
    - i. New thrombosis or disease-related major bleeding;
    - ii. Frequent phlebotomy or intolerant of phlebotomy;
    - iii. Splenomegaly;
    - iv. Progressive thrombocytosis and/or leukocytosis;
    - v. Disease-related symptoms (e.g., pruritis, night sweats, fatigue);
5. Documentation of JAK2 V617F mutation;
6. Member meets one of the following (a or b):
  - a. For males: Documentation of hemoglobin level  $>$  16.5 g/dL or hematocrit level of  $>$  49% or increased red cell mass;

## CLINICAL POLICY

### Ropeginterferon Alfa-2b-njft

- b. For females: Documentation hemoglobin level > 16 g/dL or a hematocrit level of > 48% or increased red cell mass;
- 7. Request meets one of the following (a or b):\*
  - a. Dose does not exceed 500 mcg every 2 weeks;
  - b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

*\*Prescribed regimen must be FDA-approved or recommended by NCCN*

#### **Approval duration: 6 months**

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

- 1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to LA.PMN.255
- 2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: LA.PMN.53.

## II. Continued Therapy

#### **A. Polycythemia Vera (must meet all):**

- 1. Currently receiving medication via Louisiana Healthcare Connections benefit, or documentation supports that member is currently receiving BESREMi for a covered indication and has received this medication for at least 30 days;
- 2. Member is responding positively to therapy;
- 3. If request is for a dose increase, request meets one of the following (a, b or c):\*
  - a. For members with achievement of hematological stability for at least one year while on a stable dose of BESREMi, dose does not exceed 500 mcg every 4 weeks unless medical justification supports otherwise;
  - b. For members who have not yet achieved hematological stability, dose does not exceed 500 mcg every 2 weeks;
  - c. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

*\*Prescribed regimen must be FDA-approved or recommended by NCCN*

#### **Approval duration: 12 months**

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

- 1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to LA.PMN.255
- 2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: LA.PMN.53.

## CLINICAL POLICY

### Ropeginterferon Alfa-2b-njft

#### 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 – LA.PMN.53.

#### IV. Appendices/General Information

*Appendix A: Abbreviation/Acronym Key*

FDA: Food and Drug Administration

NCCN: National Comprehensive Cancer Network

*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
hydroxyurea (Droxia®, Hydrea®)	15 to 20 mg/kg/day	20 mg/kg/day

*Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.*

*Appendix C: Contraindications/Boxed Warnings*

- Contraindication(s):
  - Existence of, or history of severe psychiatric disorders, particularly severe depression, suicidal ideation, or suicide attempt
  - Hypersensitivity to interferon, including interferon alfa-2b, or to any component of BESREMi
  - Moderate (Child-Pugh B) or severe (Child-Pugh C) hepatic impairment
  - History or presence of active serious or untreated autoimmune disease
  - Immunosuppressed transplant recipients
- Boxed warning(s):
  - Risk of Serious Disorders: Interferon alfa products may cause or aggravate fatal or life-threatening neuropsychiatric, autoimmune, ischemic, and infectious disorders. Monitor closely and withdraw therapy with persistently severe or worsening signs or symptoms of the above disorders.

*Appendix D: General Information*

- Per NCCN,
  - Low-risk PV: age < 60 years and no prior history of thrombosis
  - High-risk PV: age ≥ 60 years and/or prior history of thrombosis
- Per NCCN, for high-risk PV patients, preferred regimens for cytoreductive therapy include hydroxyurea or ropeginterferon alfa-2b-njft.
- Per NCCN, for low-risk PV patients, ropeginterferon alfa-2b-njft is the only preferred regimen for cytoreductive therapy. Other recommended regimens include hydroxyurea or peginterferon alfa-2a.

## CLINICAL POLICY

### Ropeginterferon Alfa-2b-njft

- Per Prescribing Information, hematological parameters are stabilized when hematocrit < 45%, platelets < 400 x 10<sup>9</sup>/L, and leukocytes less than 10 x 10<sup>9</sup>/L.
- Symptoms of disease progression include fatigue, early satiety, abdominal discomfort, inactivity, problems with concentration, night sweats, pruritus, bone pain (diffuse not joint pain or arthritis), fever (> 100 F), unintentional weight loss last 6 months.
- Poor tolerance to phlebotomy is defined as recurrent episodes of post-phlebotomy syncope despite appropriate preventive interventions.

## V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Polycythemia vera	<p>Starting dose: 100 mcg SC injection every 2 weeks (50 mcg if receiving hydroxyurea).</p> <p>Increase the dose by 50 mcg every 2 weeks until hematological parameters are stabilized (hematocrit &lt; 45%, platelets &lt; 400 x 10<sup>9</sup>/L, and leukocytes less than 10 x 10<sup>9</sup>/L).</p> <p>Maintain the two week dosing interval at which hematological stability is achieved for at least 1 year. After achievement of hematological stability for at least 1 year on a stable dose, the dosing interval may be expanded to every 4 weeks.</p>	500 mcg every 2 weeks

## VI. Product Availability

Injection: 500 mcg/mL solution in a single-dose prefilled syringe

## VII. References

1. BESREMi Prescribing Information. Burlington, MA. PharmaEssentia Corporation; November 2021. Available at <https://www.besremi.com/>. Accessed February 13, 2024.
2. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at [www.nccn.org](http://www.nccn.org). Accessed February 13, 2024.
3. National Comprehensive Cancer Network. Myeloproliferative Neoplasms Version 1.2024. Available at [https://www.nccn.org/professionals/physician\\_gls/pdf/mpn.pdf](https://www.nccn.org/professionals/physician_gls/pdf/mpn.pdf). Accessed February 13, 2024.
4. ClinicalTrials.gov. Safety study of pegylated interferon alpha 2b to treat polycythemia vera (PEGINVERA). Available at <https://clinicaltrials.gov/ct2/show/NCT01193699>. Accessed February 13, 2024.
5. Barbui T, Thiele J, Gisslinger H, et al. The 2016 WHO classification and diagnostic criteria for myeloproliferative neoplasms: document summary and in-depth discussion. *Blood Cancer J*. 2018 Feb; 8(2): 15.
6. McMullin MF, Harrison CN, Ali S, et al; BSH Committee. A guideline for the diagnosis and management of polycythemia vera. A British Society for Hematology Guideline. *British Journal Hematology*. 2019 Jan; 184(2):176-191.

## CLINICAL POLICY

### Ropeginterferon Alfa-2b-njft

7. Gisslinger H, Zagrijtschuk O, Buxhofer-Ausch V, et al. Ropeginterferon alfa-2b, a novel IFN $\alpha$ -2b, induces high response rates with low toxicity in patients with polycythemia vera. *Blood*. 2015 Oct 8; 126(15): 1762–1769.
8. Tefferi A and Barbui T. Polycythemia vera: 2024 update on diagnosis, risk-stratification, and management. *Am J Hematol*. 2023;98:1465-1487.
9. Marchetti M, Vannucchi AM, Griesshammer, et al. Appropriate management of polycythaemia vera with cytoreductive drug therapy: European LeukemiaNet 2021 recommendations. *Lancet Haematol*. 2022 April;9(4):e301-e311. doi: 10.1016/S2352-3026(22)00046-1.

### 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
C9399	Unclassified drugs or biologics
J9999	Not otherwise classified, antineoplastic drugs

Reviews, Revisions, and Approvals	Date	LDH Approval Date
Policy created.	05.01.23	08.28.23
Annual review: no significant changes; for Appendix D, added Besremi as preferred regimen for cytoreductive therapy for high risk PCV; added HCPCS codes [C9399, J9999]; references reviewed and updated.	04.05.24	07.10.24
Removed peginterferon alfa-2a as therapeutic alternative as no longer a preferred cytoreductive therapy for high-risk PV per NCCN; Added option for usage in low-risk PV with indications for cytoreductive therapy per NCCN; for Appendix D, added definition for low-risk and high-risk PV, removed peginterferon alfa-2a from preferred regimen for cytoreductive therapy for high-risk PV, added examples of symptoms of disease progression per NCCN.	02.06.25	

### Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no

## CLINICAL POLICY

### Ropeginterferon Alfa-2b-njft

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## CLINICAL POLICY

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