SmartPA Criteria Proposal

Drug/Drug Class:	Besremi Clinical Edit
First Implementation Date:	TBD
Proposed Date:	June 16, 2022
Prepared for:	MO HealthNet
Prepared by:	MO HealthNet/Conduent
Criteria Status:	☐Existing Criteria ☐Revision of Existing Criteria ☒New Criteria

Executive Summary

Purpose: Ensure appropriate utilization and control of Besremi® (ropeginterferon alfa-2b-njft).

Why Issue Selected: Besremi® (ropeginterferon alfa-2b-njft) was FDA approved on November 12, 2021 for the treatment of adult patients with polycythemia vera. Polycythemia vera is the most common of the chronic myeloproliferative neoplasms (MPNs) and differs from the other MPNs by the presence of an elevated red blood cell mass (erythrocytosis). Serious complications of polycythemia vera include increased risk of blood clots and disease transformation into myelofibrosis or acute myeloid leukemia. Polycythemia vera may occur in any patient population or any age, however the median age at diagnosis is 60 years. Prevalence is estimated at 44 to 57 per 100,000 people in the United States.

Besremi belongs to the class of type 1 interferons, which exhibit their cellular effect in polycythemia vera in the bone marrow. After binding to the interferon alfa receptor (IFNAR), Besremi initiates a downstream signaling cascade that reduces blood cell production. It is the first FDA-approved agent for polycythemia vera that can be utilized regardless of treatment history.

Due to the high cost and specific approved indications, MO HealthNet will impose clinical criteria to ensure appropriate utilization of Besremi.

Program-Specific Information:

Drug	Cost per unit (MAC)	Cost per month (MAC)	Cost per year (MAC)
BESREMI 500 MCG/ML SYRINGE	$6,960.05	$13,920.10	$180,961.30

Type of Criteria:
☐ **Increased risk of ADE**
☒ **Appropriate Indications**
☐ **Preferred Drug List**
☒ **Clinical Edit**

Data Sources:
☐ **Only Administrative Databases**
☒ **Databases + Prescriber-Supplied**

Setting & Population

- Drug class for review: Besremi® (ropeginterferon alfa-2b-njft)
- Age range: All appropriate MO HealthNet participants aged 18 years and older

Approval Criteria

Initial Therapy:

- Documented diagnosis of polycythemia vera **AND**
- Prescribed by or in consultation with a hematologist, oncologist, or other specialist in the treated disease state **AND**
- Participant aged ≥ 18 years **AND**
- Participant considered to be high-risk based on:
  - Age > 60 years **OR**
  - Age ≤ 60 years and thrombosis history **AND**
- Participant history demonstrates therapeutic trial of peginterferon alfa-2a (defined as 84/112 days) **AND**
- Participant has resistance or intolerance to hydroxyurea therapy defined by:
  - Need for phlebotomy to keep hematocrit < 45% after 3 months of at least 2 g/day of hydroxyurea **OR**
  - Platelet count > 400 x 10^9/L and white blood cell count > 10 x 10^9/L after 3 months of at least 2 g/day of hydroxyurea **OR**
  - Reduction of splenomegaly < 50% after 3 months of at least 2 g/day of hydroxyurea **OR**
  - Absolute neutrophil count < 1.0 x 10^9/L or platelet count < 100 x 10^9/L or hemoglobin < 10 g/dL **OR**
  - Documentation of previous therapeutic trial (at least 3 months of therapy) or concurrent treatment, intolerance, insufficient response, or contraindication with hydroxyurea.
- Initial approval for 6 months

Continuation of Therapy:

- Participant demonstrates compliance to prescribed therapeutic regimen (defined as 84/112 days)
- Continued approval for 1 year

Denial Criteria

- Therapy will be denied if all approval criteria are not met
- Participant has existence of, or history of severe psychiatric disorders, particularly severe depression, suicidal ideation, or suicide attempt
- Participant has history of moderate to severe hepatic impairment (Child-Pugh B and C)
- Participant has history of Chronic Kidney Disasese Stage 4 or 5 or End-Stage Renal Disease
- Participant is currently pregnant

Required Documentation

Laboratory Results:		Progress Notes:	
MedWatch Form:		Other:	X

Disposition of Edit

Denial: Exception code “0682” (Clinical Edit)
Rule Type: CE

Default Approval Period

6 months

References

- Besremi® (ropeginterferon alfa-2b-njft) [package insert]. Burlington, MA: PharmaEssentia USA Corporation; November 2021.
- Tefferi, A. Prognosis and treatment of polycythemia vera. UpToDate. Prognosis and treatment of polycythemia vera - UpToDate. Accessed November 22, 2021.
- Tefferi, A. Clinical manifestations and diagnosis of polycythemia vera. UpToDate. Clinical manifestations and diagnosis of polycythemia vera - UpToDate. Accessed November 22, 2021.
- Mesa R. A. (2018). Refining the management of polycythemia vera. *Clinical advances in hematology & oncology : H&O*, *16*(9), 587–589. Refining the Management of Polycythemia Vera – Hematology & Oncology (hematologyandoncology.net). Accessed November 22, 2021.
- Spivak, J. How I treat polycythemia vera. *Blood* 2019; 134 (4): 341–352. doi: How I treat polycythemia vera | Blood | American Society of Hematology (ashpublications.org). Accesssed November 24, 2021.
- Frisone, P. 5-year results from the PROUD-PV and CONTINUATION-PV studies. MPNHub. 5-year results from the PROUD-PV and CONTINUATION-PV studies (mpn-hub.com). Accessed November 24, 2021.
- National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Myeloproliferative Neoplasms. Version 2.2021 – August 18, 2021. mpn.pdf (nccn.org). Accessed November 24, 2021.
- Cerquozzi, S., Tefferi, A. Blast transformation and fibrotic progression in polycythemia vera and essential thrombocythemia: a literature review of incidence and risk factors. *Blood Cancer Journal* 5, e366 (2015). https://doi.org/10.1038/bcj.2015.95. Accessed November 30, 2021.
- Gisslinger H, Zagrijtschuk O, Buxhofer-Ausch V, et al. Ropeginterferon alfa-2b, a novel IFNα-2b, induces high response rates with low toxicity in patients with polycythemia vera. *Blood* 2015; 126 (15): 1762–1769. doi: Ropeginterferon alfa-2b, a novel IFNα-2b, induces high response rates with low toxicity in patients with polycythemia vera | Blood | American Society of Hematology (ashpublications.org). Accessed November 30, 2021.
- Verger, E., Soret-Dulphy, J., Maslah, N. et al. Ropeginterferon alpha-2b targets JAK2V617F-positive polycythemia vera cells in vitro and in vivo. *Blood Cancer Journal* 8, 94 (2018). https://doi.org/10.1038/s41408-018-0133-0. Accessed November 24, 2021.
- Renso, R., Aroldi, A., Pioltelli, P. et al. Long-term and low-dose of busulfan is a safe and effective second-line treatment in elderly patients with essential thrombocythemia resistant or intolerant to hydroxyurea. *Blood Cancer Journal* **8,** 56 (2018). https://doi.org/10.1038/s41408-018-0091-6. Accessed November 24, 2021.