

Reblozyl (luspatercept)

Override(s)	Approval Duration
Prior Authorization	For β -thalassemia, myelodysplastic syndromes with ring sideroblasts (MDS-RS), myelodysplastic/myeloproliferative neoplasm with ring sideroblasts and thrombocytosis (MDS/MPN-RS-T), myelodysplastic syndromes (MDS) in ESA-naïve individuals: Initial Requests: 6 months Continuation Requests: 1 year
Medications	Dosing Limit
Reblozyl 25 mg, 75 mg vial	1.75 mg/kg per 3 weeks

APPROVAL CRITERIA

Initial requests for Reblozyl (luspatercept) for β -thalassemia may be approved if the following criteria are met:

- I. Individual is 18 years of age or older; **AND**
- II. Individual has a diagnosis of beta thalassemia or hemoglobin E beta (E/ β)-thalassemia; **AND**
- III. Documentation is provided that individual required regular red blood cell transfusions at initiation, defined as *both* of the following (NCT02604433):
 - A. Individual received six to twenty (6-20) RBC units in the last 24 weeks; **AND**
 - B. Individual had no transfusion-free period greater than 35 days in the last 24 weeks;**AND**
- IV. Individual has a baseline hemoglobin (Hgb) level 11 g/dL or less.

Continuation requests for Reblozyl (luspatercept) for β -thalassemia may be approved if the following criteria are met:

- I. Documentation is provided that individual demonstrates continued need for treatment and has confirmation of response to treatment as evidenced by a decrease in transfusion burden from baseline; **AND**
- II. Hemoglobin level 11.0 g/dL or less.

Reblozyl (luspatercept) for β -thalassemia may not be approved for the following:

- I. Individual has a diagnosis of sickle beta thalassemia (S/ β -thalassemia); **OR**
- II. Individual has a diagnosis of alpha (α)-thalassemia; **OR**
- III. Individual has a platelet count greater than $1000 \times 10^9/L$; **OR**
- IV. History of deep vein thrombosis (DVT) or stroke within the last 24 weeks; **OR**

- V. Use beyond 9 weeks of treatment (i.e., administration of consecutive 3 doses) in the absence of response (response defined as decrease in transfusion burden from baseline) at maximum dose level (i.e., 1.25 mg/kg every 3 weeks).

Initial requests for Reblozyl (luspatercept) MDS-RS or MDS/MPN-RS-T or ESA-naïve MDS may be approved if the following criteria are met:

- I. Individual is 18 years of age or older; **AND**
- II. Individual has one of the following (A, B, or C):
 - A. Documentation is provided that individual has a diagnosis very low to intermediate risk MDS-RS greater than or equal to 15% (or ring sideroblasts 5% to 14% with an SF3B1 mutation) (Label, NCCN 2A); **AND**
 1. Individual meets *one* of the following criteria:
 - a. Serum erythropoietin (EPO) level of greater than 500 mU/mL; **OR**
 - b. Serum EPO level of less than or equal to 500 mU/mL following no response to combination treatment with erythropoiesis-stimulating agent (ESA) *and* granulocyte-colony stimulating factor (G-CSF); **OR**
 - B. Individual has a diagnosis of MDS/MPN-RS-T with *all* of the following:
 1. Ring sideroblasts greater than or equal to 15% (WHO 2017), and documentation is provided; **AND**
 2. Thrombocytosis (defined as platelets greater than or equal to $450 \times 10^9/L$) (WHO 2017); **OR**
 - C. Individual has a diagnosis of MDS; **AND**
 1. Individual is ESA-naïve; **AND**
 2. Documentation is provided that individual has serum EPO level less than 500 U/L; **AND**
- III. Documentation is provided that individual has required regular red blood cell transfusions of two (2) or more RBC units over eight (8) weeks in the last 16 weeks; **AND**
- IV. Individual has a baseline hemoglobin (Hgb) level 11 g/dL or less.

Continuation requests for Reblozyl (luspatercept) for MDS-RS or MDS/MPN-RS-T may be approved if the following criteria are met:

- I. Documentation is provided that individual demonstrates continued need for treatment and has confirmation of response to treatment as evidenced by a decrease in transfusion burden from baseline; **AND**
- II. Hemoglobin level is 11.0 g/dL or less.

Reblozyl (luspatercept) for MDS-RS or MDS/MPN-RS-T or MDS may not be approved for the following:

- I. Individual has had an inadequate response to ESAs and one of the following:
 - A. Individual has unresolved iron deficiency (defined as serum ferritin 15 µg/L or less, or transferrin saturation 20% or less) (NCT02631070); **OR**

- B. Use beyond 9 weeks of treatment (i.e., administration of consecutive 3 doses) in the absence of response (response defined as decrease in transfusion burden from baseline) at maximum dose level (i.e., 1.75 mg/kg every 3 weeks); **OR**
- II. Individual is ESA-naïve and one of the following (Platzbecker, et al.):
 - A. Individual has unresolved iron deficiency (defined as serum ferritin less than 100 µg/L); **OR**
 - B. Individuals has uncontrolled hypertension.

Requests for Reblozyl (luspatercept) may not be approved when the above criteria are not met and for all other indications.

Key References:

1. Arber DA, Orazi A, Hasserjian R, et al. The 2016 revision to the World Health Organization classification of myeloid neoplasms and acute leukemia. *Blood* 2016; 127-2391-2405.
2. Beta Thalassemia. National Organization for Rare Disorders. Available at <https://rarediseases.org/rare-diseases/thalassemia-major/>.
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5. DrugPoints® System [electronic version]. Truven Health Analytics, Greenwood Village, CO. Updated periodically.
6. Fenaux P, Platzbecker U, Mufti GJ, et al. Luspatercept in Patients with Lower-Risk Myelodysplastic Syndromes. *N Engl J Med*. 2020 Jan 9;382(2):140-151. doi: 10.1056/NEJMoa1908892.
7. Lexi-Comp ONLINE™ with AHFS™, Hudson, Ohio: Lexi-Comp, Inc.; 2021; Updated periodically.
8. Myelodysplastic Syndromes. American Cancer Society. Available at <https://www.cancer.org/cancer/myelodysplastic-syndrome.html>.
9. Myeloproliferative Neoplasms—Health Professional Version. National Cancer Institute. Available at <https://www.cancer.gov/types/myeloproliferative>.
10. NCCN Clinical Practice Guidelines in Oncology™. © 2021 National Comprehensive Cancer Network, Inc. For additional information visit the NCCN website: <http://www.nccn.org/index.asp>. Accessed on July 14, 2021.
 - a. Myelodysplastic Syndromes. Version 3.2021. Revised January 15, 2021.
11. NCT02604433. ClinicalTrials.gov. U.S. National Library of Medicine. Available at <https://clinicaltrials.gov/ct2/show/NCT02604433?term=nct02604433&draw=2&rank=1>.
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14. Thalassemia. Cooley's Anemia Foundation. Available at <https://www.thalassemia.org/learn-about-thalassemia/about-thalassemia/>.

Federal and state laws or requirements, contract language, and Plan utilization management programs or policies may take precedence over the application of this clinical criteria.

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