

## UTILIZATION MANAGEMENT MEDICAL POLICY

**POLICY:** Hematology – Rytelo Utilization Management Medical Policy

- Rytelo® (imetelstat intravenous infusion – Geron)

**REVIEW DATE:** 10/08/2025

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### OVERVIEW

Rytelo, an oligonucleotide telomerase inhibitor, is indicated for the treatment of **transfusion-dependent anemia** in adults with **low- to intermediate-1 risk myelodysplastic syndrome (MDS)** requiring  $\geq 4$  red blood cell units over 8 weeks who have not responded to, have lost response to, or are ineligible for erythropoiesis-stimulating agents (ESAs).<sup>1</sup>

Discontinue if a patient does not experience a decrease in red blood cell transfusion burden after 24 weeks of treatment (administration of 6 doses) or if unacceptable toxicity occurs at any time.<sup>1</sup>

### Dosing Information

The recommended dosage of Rytelo is 7.1 mg/kg given by a healthcare provider via intravenous infusion over 2 hours once every 4 weeks.<sup>1</sup>

### Guidelines

The National Comprehensive Cancer Network guidelines for MDS (version 2.2025 – January 17, 2025) are extensive.<sup>2</sup> Some of the NCCN recommendations for Rytelo for the treatment of MDS in lower-risk disease associated with symptomatic anemia are provided. A patient is considered ring sideroblast positive (RS+) if ring sideroblasts are  $\geq 15\%$  (or ring sideroblasts  $\geq 5\%$  with an *SF3B1* mutation). A patient is considered ring sideroblast negative (RS-) if ring sideroblasts  $< 15\%$  (or ring sideroblasts  $< 5\%$  with an *SF3B1* mutation). The guidelines categorize patients without the del(5q) abnormality on the basis of ring sideroblasts and serum erythropoietin level without specifying red blood cell transfusion burden.

- For patients who are RS- and have a serum erythropoietin  $\leq 500$  mU/mL, Rytelo is recommended following no response to ESAs (specifically epoetin alfa products or Aranesp) or Reblozyl® (luspatercept-aamt subcutaneous injection) [category 1]. For patients who are RS- and have a serum erythropoietin level  $> 500$  mU/mL, Rytelo is listed as an “Other Recommended Regimen” to the preferred (azacitidine injection) [category 2A] for patients with a poor probability to respond to immunosuppressive therapy and/or following no response or an intolerance to immunosuppressive therapy.
- For patients who are RS+, Rytelo is recommended following no response to Reblozyl if serum erythropoietin levels  $\leq 500$  mU/mL (category 1) and if serum erythropoietin  $> 500$  mU/mL (category 2A). For patients who are RS+ and have serum erythropoietin  $> 500$  mU/mL, Rytelo is recommended as initial treatment as well as recommended following no response to Reblozyl (both category 2A).

### POLICY STATEMENT

Prior Authorization is recommended for medical benefit coverage of Rytelo. Approval is recommended for those who meet the **Criteria** and **Dosing** for the listed indication. Extended approvals are allowed if the patient continues to meet the Criteria and Dosing. Requests for doses outside of the established dosing documented in this policy will be considered on a case-by-case basis by a clinician (i.e., Medical Director

or Pharmacist). All approvals are provided for the duration noted below. In cases where the approval is authorized in months, 1 month is equal to 30 days. Because of the specialized skills required for evaluation and diagnosis of patients treated with Rytelo as well as the monitoring required for adverse events and long-term efficacy, approval requires Rytelo to be prescribed by or in consultation with a physician who specializes in the condition being treated.

**Automation:** None.

## RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Rytelo is recommended in those who meet the following criteria:

### FDA-Approved Indication

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**1. Myelodysplastic Syndrome.** Approve for the duration noted if the patient meets ONE of the following (A or B):

**A) Initial Therapy.** Approve for 6 months if the patient meets ALL of the following (i, ii, iii, iv, v, and vi):

**i.** Patient is  $\geq 18$  years of age; AND

**ii.** According to the prescriber, patient has very low to intermediate-risk myelodysplastic syndrome (MDS); AND

Note: MDS risk category is determined using the International Prognostic Scoring System (IPSS).

**iii.** Patient has transfusion-dependent anemia, defined as requiring transfusion of  $\geq 4$  red blood cell units over an 8-week period; AND

**iv.** According to the prescriber, patient has not responded, lost response to, or is ineligible for erythropoiesis-stimulating agents; AND

Note: Examples of erythropoiesis-stimulating agents include an epoetin alfa product (e.g., Epogen, Procrit, or Retacrit), a darbepoetin alfa product (e.g., Aranesp), or a methoxy polyethylene glycol-epoetin beta product (e.g., Mircera). Also, a patient with a serum erythropoietin level  $> 500$  mU/mL is considered ineligible for erythropoiesis-stimulating agents.

**v.** Rytelo will NOT be used in combination with an erythropoiesis stimulating agent; AND

**vi.** The medication is being prescribed by or in consultation with an oncologist or hematologist;  
OR

**B) Patient is Currently Receiving Rytelo.** Approve for 1 year if, according to the prescriber, the patient has experienced a clinically meaningful decrease in transfusion burden.

Note: For a patient who has not received 6 months (24 weeks) of therapy or who is restarting therapy, refer to Initial Therapy criteria above.

**Dosing.** Approve up to 7.1 mg/kg by intravenous infusion administered not more frequently than once every 4 weeks.

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### CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Rytelo is not recommended in the following situations:

**1.** Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

**REFERENCES**

1. Rytelo® intravenous infusion [prescribing information]. Foster City, CA: Geron; June 2024.
2. The NCCN Myelodysplastic Syndromes Clinical Practice Guidelines in Oncology (version 2.2025 – January 17, 2025). © 2025 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on October 1, 2025.

**HISTORY**

Type of Revision	Summary of Changes	Review Date
New Policy	--	06/12/2024
Update	<b>08/02/2024:</b> Overview section updated with National Comprehensive Cancer Network guidelines version 3.2024 – July 25, 2024 which includes recommendations for Rytelo.	--
Annual Revision	No criteria changes.	06/11/2025
Early Annual Revision	<b>Myelodysplastic Syndrome:</b> Regarding the diagnosis of myelodysplastic syndrome, the qualifier of “very” was added to “low” and “intermediate-1” was changed to “intermediate”. Also, removed the requirement that the patient does not have deletion 5q [del{5q}] cytogenic abnormality. In the requirement that the patient has responded, lost response, or is ineligible for erythropoiesis-stimulating agents, a Note was added that a patient with a serum erythropoietin level > 500 mU/mL is considered ineligible for erythropoiesis-stimulating agents.	10/08/2025