

REBLOZYL Dosing and Reconstitution Guide

REBLOZYL (luspatercept-aamt) is indicated for the treatment of anemia without previous erythropoiesis stimulating agent use (ESA-naïve) in adult patients with very low- to intermediate-risk myelodysplastic syndromes (MDS) who may require regular red blood cell (RBC) transfusions.

REBLOZYL is not indicated for use as a substitute for RBC transfusions in patients who require immediate correction of anemia.

IMPORTANT SAFETY INFORMATION

WARNINGS AND PRECAUTIONS

Thrombosis/Thromboembolism

In adult patients with beta thalassemia, thromboembolic events (TEE) were reported in 8/223 (3.6%) of REBLOZYL-treated patients. TEEs included deep vein thrombosis, pulmonary embolus, portal vein thrombosis, and ischemic stroke. Patients with known risk factors for thromboembolism (splenectomy or concomitant use of hormone replacement therapy) may be at further increased risk of thromboembolic conditions. Consider thromboprophylaxis in patients at increased risk of TEE. Monitor patients for signs and symptoms of thromboembolic events and institute treatment promptly.



Click here for REBLOZYL MDS Dosing Calculator

REBLOZYL is available in

2 strengths as single-dose vials for reconstitution¹





25 mg 75 mg

Table of contents

Warnings and Precautions

3 Warnings and precautions

COMMANDS clinical trial

- 4 Primary endpoint
- 5 Dose levels in the clinical trial

Dosing

- 6 REBLOZYL dosing response
- 7 Dosing convenience
- 8,9 Dose modifications

Reconstitution

- 10 Reconstituting REBLOZYL
- 11 Reconstitution instructions

Administration

- 12 Instructions for subcutaneous (SC) administration
- 13 Example: How to calculate and deliver a dose

Storage

14 Storing REBLOZYL

Important Safety Information

15 Important Safety Information

Warnings and Precautions

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Hypertension

Hypertension was reported in 11.4% (63/554) of REBLOZYL-treated patients. Across clinical studies, the incidence of Grade 3 to 4 hypertension ranged from 2% to 9.6%. In ESA-naïve adult patients with MDS with normal baseline blood pressure, 23 (36%) patients developed SBP ≥140 mm Hg and 11 (6%) patients developed DBP ≥80 mm Hg. Monitor blood pressure prior to each administration. Manage new or exacerbations of preexisting hypertension using anti-hypertensive agents.

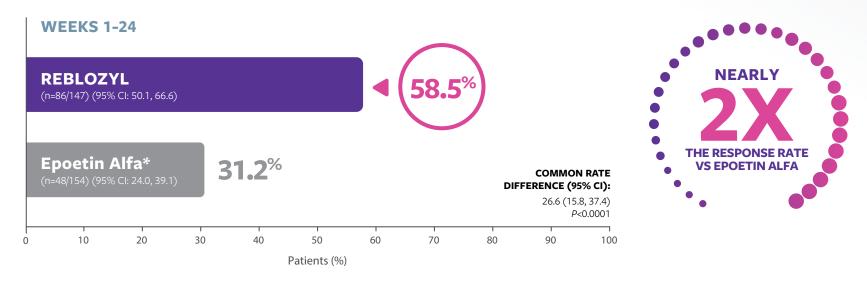
Embryo-Fetal Toxicity

REBLOZYL may cause fetal harm when administered to a pregnant woman. REBLOZYL caused increased post-implantation loss, decreased litter size, and an increased incidence of skeletal variations in pregnant rat and rabbit studies. Advise pregnant women of the potential risk to a fetus. Advise females of reproductive potential to use effective contraception during treatment and for at least 3 months after the final dose.



REBLOZYL nearly doubled the response rate in the COMMANDS trial¹

PRIMARY COMPOSITE ENDPOINT: RBC-TI for at least 12 weeks with concurrent mean Hgb increase ≥1.5 g/dL¹



This prespecified interim analysis included 301 patients who had either completed 24 weeks of treatment or discontinued prior to completing 24 weeks of treatment. This represents 85% of the total patient population contributing data for the primary endpoint.

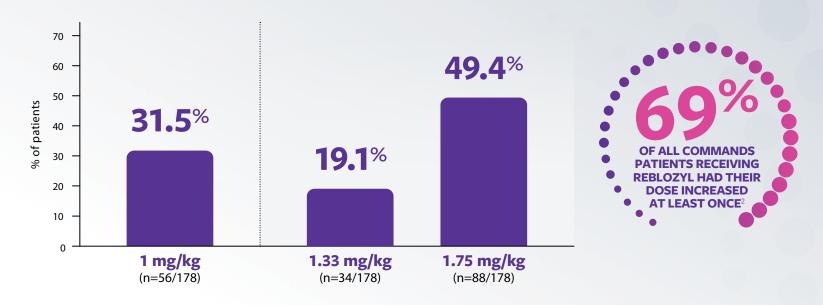
STUDY DESIGN: COMMANDS (N=356) was a Phase 3, randomized, open-label, active-controlled trial comparing REBLOZYL vs epoetin alfa in adult patients with anemia due to IPSS-R very low-, low-, or intermediate-risk MDS, with or without ring-sideroblasts, who were ESA-naive (with endogenous sEPO levels <500 U/L) and required RBCT. Patients with del(5q) and those previously treated with disease-modifying agents or HMAs were excluded.

Patients were randomized to either REBLOZYL (n=178) 1 mg/kg SC Q3W, with titration up to max 1.75 mg/kg if needed to achieve response or epoetin alfa (n=178) 450 IU/kg SC QW max total dose 40K IU, with titration up to 1050 IU/kg max total dose 80K IU. The primary endpoint was RBC-TI with a mean improvement in Hgb by at least 1.5 g/dL for any consecutive 12-week period during Weeks 1-24.^{1,2}

^{*&}gt;90% of study participants were outside of the United States and used non-licensed epoetin alfa product. Direct comparisons between REBLOZYL and US-licensed epoetin alfa product have not been established.



Highest dose level of REBLOZYL received by patients in the COMMANDS trial³



- The majority of patients (49.4%, n=88/178) received 2 dose increases
- The median (min, max) time to first dose escalation was 45 days (43, 125)⁴

REBLOZYL has a well-established safety profile¹

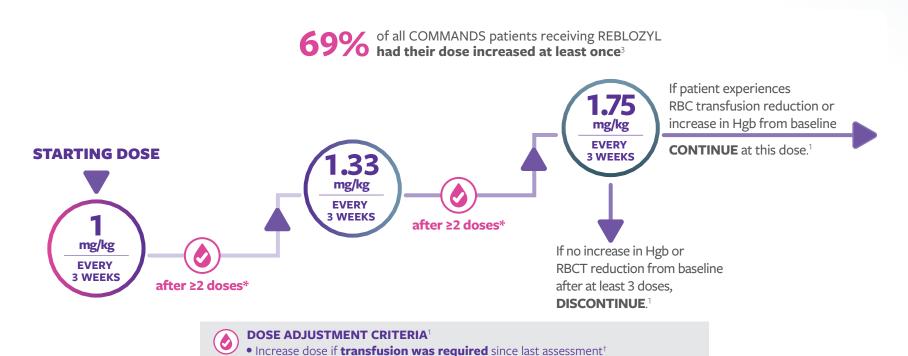
- The most common (>10%) all-grade adverse reactions included diarrhea, fatigue, hypertension, COVID-19, peripheral edema, nausea, and dyspnea¹
- The most common (>2%) Grade >3 adverse reactions included hypertension and dyspnea¹
- Selected laboratory abnormalities that changed from Grade 0-2 at baseline to Grades 2-3 at any time during the studies were glomerular filtration rate and total bilirubin increased¹
- Other clinically relevant adverse reactions reported in <5% of patients are injection site reactions, including erythema, pruritus, and rash¹



Dose-adjust to optimize patient response¹

Expect to escalate dose to meet patient treatment goals¹

- Prior to each REBLOZYL administration, assess if patient may require a dose adjustment. Review Hgb prior to administration. If RBC transfusion occurred, use pretransfusion Hgb
- Following at least 2 doses at the same level, dosing adjustments can be considered at any time during therapy
- Do not continue treatment or increase dose if patient is experiencing unacceptable toxicity or an adverse event



Continue at current dose if patient has met treatment goals and has ongoing RBC-TI

Hgb=hemoglobin; RBCT=red blood cell transfusion; RBC-TI=red blood cell transfusion independence.

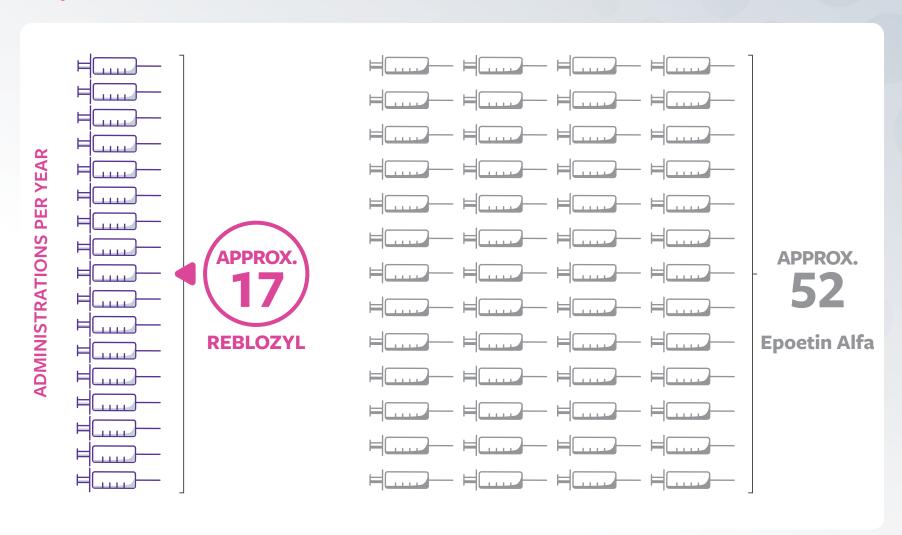


^{*}Do not increase dose more frequently than every 6 weeks (2 doses); do not increase dose beyond maximum dose.

¹In the absence of transfusion, if predose Hgb is ≥11.5 g/dL or if Hgb increases >2 g/dL within 3 weeks, interrupt or decrease dose. See instructions for modifications.

Dosing convenience^{1,3‡}

Every 3 weeks vs once a week§





[‡]Timing of administration may be impacted by dose modifications (eg, AEs, rapid Hgb rise).

[§]Based on the COMMANDS dosing schedule for REBLOZYL (1 administration every 3 weeks=about 17 administrations per year) and epoetin alfa (1 injection every week=52 injections per year).

Dose modifications when administering REBLOZYL¹

DOSE MODIFICATIONS FOR PREDOSE HGB LEVELS OR RAPID HGB RISE

SCENARIO	REBLOZYL Dosing recommendation	
Predose Hgb ≥11.5 g/dL is in the absence of transfusions	 Interrupt treatment Restart when the Hgb is no more than 11 g/dL 	
Increase in Hgb >2 g/dL within 3 weeks in the absence of transfusions and:		
Current dose is 1.75 mg/kg	Reduce dose to 1.33 mg/kg	
Current dose is 1.33 mg/kg	• Reduce dose to 1 mg/kg	
Current dose is 1 mg/kg	Reduce dose to 0.8 mg/kg	
Current dose is 0.8 mg/kg	Reduce dose to 0.6 mg/kg	
Current dose is 0.6 mg/kg	Discontinue treatment	

Dose increases in the event of loss of response¹

- If, upon dose reduction, the patient loses response (ie, requires a transfusion) or Hgb concentration drops by 1 g/dL or more in 3 weeks in the absence of transfusion, increase the dose by 1 dose level
- Wait a minimum of 6 weeks between dose increases
- Dose increases to 1.33 mg/kg and subsequently to 1.75 mg/kg may occur at any time during treatment after patients have received at least 2 consecutive doses at the prior lower dose level
- Do not increase the dose more frequently than every 2 consecutive doses (6 weeks) or beyond the maximum dose of 1.75 mg/kg

Discontinue treatment if no clinical benefit is observed¹

• Discontinue REBLOZYL if no increase in Hgb or reduction in RBC transfusion burden from baseline after at least 3 consecutive doses (9 weeks) at 1.75 mg/kg or if unacceptable toxicity occurs at any time

If a planned administration of REBLOZYL is delayed or missed¹

• Administer REBLOZYL as soon as possible and continue dosing as prescribed, with at least 3 weeks between doses



Dose modifications when administering REBLOZYL¹

DOSE MODIFICATIONS FOR ADVERSE REACTIONS¹

SCENARIO	REBLOZYL Dosing recommendation
Grade 3 or 4 hypersensitivity reactions*	Discontinue treatment
Other Grade 3 or 4 adverse reactions*	 Interrupt treatment When the adverse reaction resolves to no more than Grade 1, restart treatment at the next lower dose level† If the lower dose delay is >12 consecutive weeks, discontinue treatment

Patients requiring dose escalation³

- 69% of all COMMANDS patients receiving REBLOZYL had their dose increased at least once
- 49% of patients ultimately reached the maximum dose of 1.75 mg/kg



^{*}Grade 1 is mild, Grade 2 is moderate, Grade 3 is severe, and Grade 4 is life-threatening.
†Per dose reductions in table on previous page.

Reconstituting REBLOZYL

REBLOZYL should be reconstituted and administered by a healthcare professional¹

Reconstitution volumes			
Vial size	Amount of Sterile Water for Injection, USP required for reconstitution	Final concentration	Deliverable volume
25 mg vial	0.68 mL	25 mg/0.5 mL (50 mg/mL)	0.5 mL
75 mg vial	1.6 mL	75 mg/1.5 mL (50 mg/mL)	1.5 mL



• Reconstitute REBLOZYL with Sterile Water for Injection, USP only

Important considerations for REBLOZYL reconstitution¹

- Reconstitute the number of REBLOZYL vials to achieve the appropriate dose based on the patient's weight
- Use a syringe with suitable graduations for reconstitution to ensure accurate dosage



Reconstitution instructions

Adhere to the following steps to properly reconstitute REBLOZYL¹



Add Sterile Water for Injection, USP.

Reconstitute with Sterile Water for Injection, USP using volumes described in the reconstitution volumes table on page 10 with the stream directed onto the lyophilized powder. Allow to stand for 1 minute.



STEP

Invert, mix, and wait.

Invert the vial and gently swirl in an inverted position for 30 seconds. Bring the vial back to the upright position, and let it sit for 30 seconds.





Discard the needle and syringe used for reconstitution.

The needle and syringe used for reconstitution should not be used for subcutaneous injections.





Repeat.

Repeat step 5 seven more times to ensure complete reconstitution of material on the sides of the vial.





Mix and wait.

Gently swirl the vial in a circular motion for 30 seconds. Stop swirling and let the vial sit in an upright position for 30 seconds.



Inspect.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration whenever solution and container permit. REBLOZYL is a colorless to slightly yellow, clear to slightly opalescent solution, which is free of foreign particulate matter. Do not use if undissolved product or foreign

particulate matter is observed.





Inspect the vial for undissolved particles in the solution. If undissolved powder is observed, repeat step 3 until the powder is completely dissolved.





Instructions for subcutaneous administration

REBLOZYL is administered subcutaneously and is available in 2 vial sizes (25 mg and 75 mg)¹

• Prior to injection, allow solution to reach room temperature for a more comfortable injection

STEP	Verify correct dose for the patient Calculate the exact total dosing volume of 50 mg/mL solution required for the patient		
STEP	 Plan and prepare for injection Slowly withdraw the dosing volume of the reconstituted REBLOZYL solution from the single-dose vial(s) into a syringe Divide doses requiring larger reconstituted volumes (ie, >1.2 mL) into separate, similar-volume injections and inject into separate sites 		
STEP	Administer subcutaneously If multiple injections are required, use a new syringe and needle for each SC injection	Administer REBLOZ of the following site Upper Abdor Thigh	es by SC injection:

NOTE: Discard any unused portion. Do not pool unused portions from the vials. Do not administer more than 1 dose from a vial. Do not mix with other medications.

SC=subcutaneous.

Example: How to calculate and deliver a dose



REBLOZYL should be reconstituted and administered by a healthcare professional¹



Sample calculation for SC administration of REBLOZYL

- Average adult male aged 71 years and weighing 197 pounds (89 kg)
- 1 mg of REBLOZYL per 1 kg=89 mg starting dose

Total volume of reconstituted 50 mg/mL solution needed to administer 89 mg: 1.78 mL¹

Number of vials	REBLOZYL	Concentration after reconstitution	Solution needed for administration	Milligrams in solution
1	75 mg vial	75 mg/1.5 mL (50 mg/mL)	Use 1.5 mL	75 mg
1	25 mg vial	25 mg/0.5 mL (50 mg/mL)	Use 0.28 mL	14 mg
			Total volume needed 1.78 mL	89 mg

Doses with reconstituted volumes larger than 1.2 mL should be divided into separate, similar-volume syringes for injection and injected into separate sites (upper arm, thigh, and/or abdomen).

Injection 1: 0.89 mL – upper arm **Injection 2:** 0.89 mL – thigh or abdomen



Storing REBLOZYL



REBLOZYL requires cold storage¹

Storage of unreconstituted vial	Storage of reconstituted solution
• Do not freeze	• Do not freeze
Store unreconstituted vials at 2°C to 8°C (36°F to 46°F) in original carton to protect from light	 Store at 2°C to 8°C (36°F to 46°F) for up to 24 hours in the original vial — Discard if not used within 24 hours of reconstitution if refrigerated — Remove from refrigerated condition 15 to 30 minutes prior to injection to allow solution to reach room temperature for a more comfortable injection Store at room temperature at 20°C to 25°C (68°F to 77°F) in the original vial for up to 8 hours. Discard if not used within 8 hours of reconstitution at room temperature

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ADVERSE REACTIONS

Grade ≥3 (≥2%) adverse reactions included hypertension and dyspnea.

The most common (≥10%) all-grade adverse reactions included diarrhea, fatigue, hypertension, peripheral edema, nausea, and dyspnea.

LACTATION

It is not known whether REBLOZYL is excreted into human milk or absorbed systemically after ingestion by a nursing infant. REBLOZYL was detected in milk of lactating rats. When a drug is present in animal milk, it is likely that the drug will be present in human milk. Because many drugs are excreted in human milk, and because of the unknown effects of REBLOZYL in infants, a decision should be made whether to discontinue nursing or to discontinue treatment. Because of the potential for serious adverse reactions in the breastfed child, breastfeeding is not recommended during treatment and for 3 months after the last dose.

DRUG ABUSE POTENTIAL

Abuse: Abuse of REBLOZYL may be seen in athletes for the effects on erythropoiesis. Misuse of drugs that increase erythropoiesis, such as REBLOZYL, by healthy persons may lead to polycythemia, which may be associated with life-threatening cardiovascular complications.



Learn more about REBLOZYL

Visit <u>REBLOZYLPro.com</u> to access additional resources.

Please see Important Safety Information throughout and full <u>Prescribing Information</u> for REBLOZYL.

References: 1. REBLOZYL [US Prescribing Information]. Summit, NJ: Celgene Corporation; 2023. **2.** Platzbecker U, Della Porta MG, Santini V, et el. Efficacy and safety of luspatercept versus epoetin alfa in erythropoiesis-stimulating agent-naive, transfusion-dependent, lower-risk myelodysplastic syndromes (COMMANDS): interim analysis of a phase 3, open-label, randomised controlled trial. *Lancet*. 2023;402(10399):373-385. **3.** Data on file. BMS-REF-ACE-536-0009. Princeton, NJ: Bristol-Myers Squibb Company; 2023. **4.** Platzbecker U, Della Porta MG, Santini V, et el. Efficacy and safety of luspatercept versus epoetin alfa in erythropoiesis-stimulating agent-naive, transfusion-dependent, lower-risk myelodysplastic syndromes (COMMANDS): interim analysis of a phase 3, open-label, randomised controlled trial. *Lancet*. 2023;402(10399)(suppl):373-385.



