Rusfertide

Also called: Mimrylo; PTG-300

What it is

A synthetic hepcidin mimetic that binds ferroportin and withholds iron from the bone marrow, approved in 2026 as Mimrylo for erythrocytosis in polycythaemia vera.

Approval status

FDA Approved. FDA-approved as Mimrylo (rusfertide) for the treatment of erythrocytosis in adults with polycythaemia vera. Drugs@FDA lists NDA 220605, Takeda Pharmaceuticals America, as a prescription powder in four vial strengths (9.5, 28, 41 and 54 mg base). The label starts at 19 mg subcutaneously once a week over a 9.5 to 108 mg range; doses above 54 mg need two injections and doses above 82 mg are given on separate days.

Dosing, as printed in the page's Recommended Dosing box

Manufacturer's recommended dosing (FDA label)

From the prescribing information. Other doses studied, if any, are in the full dosing data below.

Protocol and source	Dose	Frequency	Duration	Route
Label: erythrocytosis in adults with polycythaemia vera **[Approved label]** MIMRYLO (rusfertide) for injection Prescribing Information, sections 1, 2, 5, 6, 12 and 14 (DailyMed version 2, effective August 28, 2026)	Start 19 mg; adjust in steps from 9.5 to a maximum of 108 mg; doses above 54 mg need two injections, and above 82 mg are split across day 1 and day 4 or 5	Once weekly	Ongoing, with dose changes at least 2 weeks apart	Subcutaneous

Used in human trials

No manufacturer dose exists for this use: these are amounts given in published trials, not recommendations.

Protocol and source	Dose	Frequency	Duration	Route
Study: suboptimally controlled disease (haematocrit above 48%) **[Human study]** PMID 41175501	40 mg	Twice weekly	8 weeks	Subcutaneous

Educational information, not medical advice. Each dose above is tagged with its source: an approved label, a published human study, animal data, or amounts reported by users. None is a recommendation for you. An unapproved compound has no established safe or effective human dose, and products sold for "research use only" are not made or tested for people. Talk to a doctor before acting on anything on this site, including before you start, stop or change any medicine or dose.

Key human evidence

The first 3 of the 7 human studies carded on the page (7 study cards in all):

• **REVIVE, the phase 2** (Human, 2024). 70 patients with phlebotomy-dependent polycythaemia vera entered 28 weeks of dose-finding; 59 were then randomised to rusfertide or placebo for 12 weeks. The endpoint combined haematocrit control, no phlebotomy and completing the regimen. Participants had averaged 8.7 phlebotomies a year beforehand. **PMID 38381675**

• **How quickly it works** (Human, 2025). 20 patients with haematocrit above 48% took 40 mg twice weekly until it fell below 45%, then weekly. By week 8, 85% were below 45% and 95% had fallen at least 5 points; the median time to the first reading under 45% was 4.9 weeks. No patient needed a phlebotomy during treatment. **PMID 41175501**

• **The opposite disease** (Human, 2023). An open-label phase 2 trial at nine US and Canadian centres gave 10 mg weekly for 24 weeks to adults with HFE-related haemochromatosis on maintenance phlebotomy, keeping transferrin saturation under 40%. **PMID 37863080**

Interactions

From the FDA label's drug-interaction section (Mimrylo (rusfertide) for injection, US prescribing information. DailyMed version 2, effective August 28, 2026, read September 30, 2026):

• With no drug: the label carries no drug interactions section and no boxed warning (FDA label)

Side effects and cautions

Reported side effects	Contraindications and cautions
• Injection-site reactions, usual for a weekly subcutaneous peptide • Iron and transferrin saturation fall by design • Haemoglobin and haematocrit fall, which the dose is titrated against • No boxed warning and no drug interactions section on the label	• Anyone outside specialist care — the dose is titrated against haematocrit readings • Anyone expecting it to treat the underlying clone; it controls erythrocytosis, not the JAK2-driven disease • Self-treatment for iron overload, which is investigational and was studied at a different dose • Tested athletes — see the Sport (WADA) row below

Five questions to ask

1. Is Rusfertide right for me, and is the labelled dose on this sheet right for my weight, age, kidney and liver function?
2. Here are the medicines and supplements I take. Do any of them interact with Rusfertide? This sheet lists the interactions on record.
3. Which side effects should make me stop and call you, for example injection-site reactions?
4. Do any of the cautions on this sheet apply to me, such as: Anyone outside specialist care — the dose is titrated against haematocrit readings?
5. What should we check before I start and while I am on it (blood tests, blood pressure, weight), and how often?

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