BlueCross BlueShield Federal Employee Program

DOPTELET (avatrombopag)

RATIONALE FOR INCLUSION IN PA PROGRAM

Background

Doptelet is a thrombopoietin (TPO) receptor agonist used to increase platelet counts. Doptelet (avatrombopag) is an orally bioavailable, small molecule TPO receptor agonist that stimulates proliferation and differentiation of megakaryocytes from bone marrow progenitor cells resulting in an increased production of platelets. Doptelet does not compete with TPO for binding to the TPO receptor and has an additive effect with TPO on platelet production (1).

Regulatory Status

FDA approved indications: Doptelet is a thrombopoietin receptor agonist indicated for the treatment of: (1)

1. Thrombocytopenia in adult patients with chronic liver disease who are scheduled to undergo a procedure.
2. Thrombocytopenia in adult patients with chronic immune thrombocytopenia who have had an insufficient response to a previous treatment.

Doptelet should not be administered to patients with chronic liver disease in an attempt to normalize platelet counts (1).

Doptelet is a thrombopoietin (TPO) receptor agonist and TPO receptor agonists have been associated with thrombotic and thromboembolic complications in patients with chronic liver disease. A Doppler ultrasound is a noninvasive test that can be used to estimate the blood flow through blood vessels by bouncing high-frequency sound waves (ultrasound) off circulating red blood cells. A Doppler ultrasound may help determine if Doptelet therapy is appropriate for a patient (1-2).

The safety and effectiveness of Doptelet in pediatric patients have not been established (1).

Summary

Doptelet is a thrombopoietin (TPO) receptor agonist used to increase platelet counts. Doptelet (avatrombopag) is an orally bioavailable, small molecule TPO receptor agonist that stimulates proliferation and differentiation of megakaryocytes from bone marrow progenitor cells resulting in an increased production of platelets. Doptelet does not compete with TPO for binding to the TPO

receptor and has an additive effect with TPO on platelet production. The safety and effectiveness of Doptelet in pediatric patients have not been established (1).

Prior approval is required to ensure the safe, clinically appropriate, and cost-effective use of Doptelet while maintaining optimal therapeutic outcomes.

References

1. Doptelet [package insert]. Morrisville, NC: AkaRx, Inc.; July 2021.
2. Sheps, S. G. Doppler Ultrasound: What is it used for?: Mayo Clinic. December 17, 2016.