



Louisiana

avatrombopag (Doptelet[®])

Policy # 00648

Original Effective Date: 11/21/2018

Current Effective Date: 11/21/2018

Applies to all products administered or underwritten by Blue Cross and Blue Shield of Louisiana and its subsidiary, HMO Louisiana, Inc. (collectively referred to as the "Company"), unless otherwise provided in the applicable contract. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

Note: lusutrombopag (Mulpleta[®]) is addressed separately in medical policy 00650.

When Services May Be Eligible for Coverage

Coverage for eligible medical treatments or procedures, drugs, devices or biological products may be provided only if:

- *Benefits are available in the member's contract/certificate, and*
- *Medical necessity criteria and guidelines are met.*

Based on review of available data, the Company may consider avatrombopag (Doptelet[®])[†] for the treatment of thrombocytopenia to be **eligible for coverage**.**

Patient Selection Criteria

Coverage eligibility for avatrombopag (Doptelet) will be considered when the following criteria are met:

- Patient is 18 years of age or older; AND
- Patient has a diagnosis of chronic liver disease; AND
- Patient has a platelet count less than 50,000 cells per microliter (μL); AND
- Patient is scheduled to undergo a surgical procedure.

When Services Are Considered Investigational

Coverage is not available for investigational medical treatments or procedures, drugs, devices or biological products.

Based on review of available data, the Company considers avatrombopag (Doptelet) when patient selection criteria are not met to be **investigational**.*

Background/Overview

Doptelet is an oral thrombopoietin receptor agonist (TPO-RA) that is indicated for treatment of thrombocytopenia in adult patients with chronic liver disease who are scheduled to undergo a procedure. It should be dosed daily for 5 days beginning 10 to 13 days before the scheduled procedure. The specific daily dose varies based on the patient's baseline platelet count with a higher dose (60 milligrams [mg]) for patients with a platelet count less than 40,000 cells/ μL and a lower dose (40 mg) for patients with a platelet count between 40,000-50,000 cells/ μL . Doptelet tablets should be given with food.

Thrombocytopenia is a common, multifactorial phenomenon that affects up to 80% of patients with chronic liver disease. An exact platelet count threshold at which thrombocytopenia is defined is not universal and is dependent upon the individual patient and clinical circumstance. In general, thrombocytopenia is defined as a decrease in the platelet count below the lower limit of normal ($<150,000/\mu\text{L}$) with subdefinitions based on

©2018 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from Blue Cross and Blue Shield of Louisiana.



Louisiana

avatrombopag (Doptelet[®])

Policy # 00648

Original Effective Date: 11/21/2018

Current Effective Date: 11/21/2018

platelet threshold (e.g., 50,000-100,000/ μ L is moderate and $<50,000/\mu$ L is severe). Thrombocytopenia can adversely affect the management of patients with chronic liver disease and delay necessary diagnostic or surgical procedures due to an increased risk of bleeding. Patients with chronic liver disease and severe thrombocytopenia may receive platelet transfusions prior to surgical procedures to reduce the risk of bleeding. However, the need for platelet transfusions often increases the complexity of the management of the patient due to the possibility for transfusion reactions or the development of antiplatelet antibodies. Promacta and Nplate are two other TPO-RAs with a small amount of off-label data regarding use in this manner, but some safety concerns (e.g. portal vein thrombosis) were noted with these agents.

FDA or Other Governmental Regulatory Approval

U.S. Food and Drug Administration (FDA)

Doptelet was approved in May 2018 for the treatment of thrombocytopenia in adult patients with chronic liver disease who are scheduled to undergo a procedure.

Rationale/Source

This medical policy was developed through consideration of peer-reviewed medical literature generally recognized by the relevant medical community, U.S. FDA approval status, nationally accepted standards of medical practice and accepted standards of medical practice in this community, Blue Cross and Blue Shield Association technology assessment program (TEC) and other non-affiliated technology evaluation centers, reference to federal regulations, other plan medical policies, and accredited national guidelines.

The efficacy of Doptelet was established in 2 identically designed multicenter, randomized, double-blind, placebo-controlled trials (ADAPT-1 and ADAPT-2). In each study, patients were assigned to a low baseline platelet count cohort ($<40 \times 10^9/L$) or a high baseline platelet count cohort (≥ 40 to $<50 \times 10^9/L$) based on their platelet count at baseline. Patients were then randomized in a 2:1 ratio to either Doptelet or placebo. Patients undergoing neurosurgical interventions, thoracotomy, laparotomy or organ resection were not eligible for enrollment.

In ADAPT-1, a total of 231 patients were randomized, 149 patients were treated with Doptelet and 82 with placebo. In ADAPT-2, a total of 204 patients were randomized, 128 patients were treated with Doptelet and 76 with placebo. Patients underwent a broad spectrum of types of scheduled procedures that ranged from low to high bleeding risk, but the majority of patients (60.8%) underwent low bleeding risk procedures. 17.2% of patients underwent procedures associated with moderate bleeding risk, and 22.1% of patients underwent procedures associated with high bleeding risk. The major efficacy outcome in both trials was the proportion of patients who did not require a platelet transfusion or any rescue procedure for bleeding after randomization and up to 7 days following an elective procedure. In both baseline platelet count cohorts, patients in the Doptelet treatment groups had a greater proportion of responders than the corresponding placebo treatment groups that was both clinically meaningful and statistically significant. In the low baseline platelet count cohort, 66% of patients in ADAPT-1 and 69% of patients in ADAPT-2 were responders compared with 23% and 35% of the respective placebo groups. In the high baseline platelet count cohort,

©2018 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from Blue Cross and Blue Shield of Louisiana.



Louisiana

avatrombopag (Doptelet®)

Policy # 00648

Original Effective Date: 11/21/2018

Current Effective Date: 11/21/2018

88% of patients in both the ADAPT-1 and ADAPT-2 trials were responders compared with 38% and 33% in the respective placebo groups.

References

1. Doptelet [package insert]. AkaRx, Inc. Durham, NC. Updated May 2018
2. Doptelet Drug Evaluation. Express Scripts. Updated May 2018

Policy History

Original Effective Date: 11/21/2018

Current Effective Date: 11/21/2018

11/08/2018 Medical Policy Committee review

11/21/2018 Medical Policy Implementation Committee approval. New policy.

Next Scheduled Review Date: 11/2019

*Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:

- A. Whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. Food and Drug Administration (FDA) and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or
- B. Whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:
 1. Consultation with the Blue Cross and Blue Shield Association technology assessment program (TEC) or other nonaffiliated technology evaluation center(s);
 2. Credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or
 3. Reference to federal regulations.

**Medically Necessary (or "Medical Necessity") - Health care services, treatment, procedures, equipment, drugs, devices, items or supplies that a Provider, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury, disease or its symptoms, and that are:

- A. In accordance with nationally accepted standards of medical practice;
- B. Clinically appropriate, in terms of type, frequency, extent, level of care, site and duration, and considered effective for the patient's illness, injury or disease; and
- C. Not primarily for the personal comfort or convenience of the patient, physician or other health care provider, and not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.

For these purposes, "nationally accepted standards of medical practice" means standards that are based on credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community, Physician Specialty Society recommendations and the views of Physicians practicing in relevant clinical areas and any other relevant factors.

‡ Indicated trademarks are the registered trademarks of their respective owners.

NOTICE: Medical Policies are scientific based opinions, provided solely for coverage and informational purposes. Medical Policies should not be construed to suggest that the Company recommends, advocates, requires, encourages, or discourages any particular treatment, procedure, or service, or any particular course of treatment, procedure, or service.

©2018 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from Blue Cross and Blue Shield of Louisiana.