

Drug Policy

Policy:	201521	Initial Effective Date: 09/30/2015
Code(s):	HCPCS J2796	Annual Review Date: 07/19/2018
SUBJECT:	Nplate® (romiplostim for subcutaneous injection)	Last Revised Date: 01/22/2019

Prior approval is required for some or all procedure codes listed in this Corporate Drug Policy.

OVERVIEW

Nplate, a thrombopoietin receptor agonist, is indicated for the treatment of thrombocytopenia in patients with chronic immune thrombocytopenia (ITP) who have had an insufficient response to corticosteroids, immunoglobulins, or splenectomy. Nplate should not be used in an attempt to normalize platelet counts. The initial Nplate dose is 1 mcg/kg once weekly as a subcutaneous (SC) injection administered by a healthcare provider. The dose should be adjusted weekly by increments of 1 mcg/kg to achieve and maintain a platelet count $\geq 50 \times 10^9/L$ as needed to reduce the bleeding risk. Do not exceed a maximum weekly dose of 10 mcg/kg. Do not administer Nplate if the platelet count is $> 400 \times 10^9/L$. Discontinue Nplate if the platelet count does not increase after 4 weeks at the maximum dose.

Pivotal trials with Nplate involved patients who had tried at least one primary ITP therapy (e.g., corticosteroids, immunoglobulins); approximately 50% of patients had undergone splenectomy. Evidence-based practice guidelines for ITP from the American Society of Hematology, published in 2011, recommend corticosteroids or IVIG as first-line treatment for adults. Splenectomy is recommended for patients who have failed corticosteroid therapy. Thrombopoietin receptor agonists are recommended for adults at risk of bleeding who relapse following splenectomy or who have a contraindication to splenectomy and who have failed at least one other therapy. A Phase III, randomized, double-blind, placebo-controlled study investigated use of Nplate in children with immune thrombocytopenia who were aged 1 year to 17 years (n = 62) with mean platelet counts $\leq 30 \times 10^9/L$. Patients received weekly Nplate for 24 weeks with the dose adjusted from 1 mcg/kg to 10 mcg/kg SC once weekly to target platelet counts of 50 to $200 \times 10^9/L$. Durable platelet responses were observed in 52% of patients in the Nplate group (n = 22/42) compared with 10% of patients (n = 2/20) given placebo.

POLICY STATEMENT

Prior authorization is recommended for pharmacy and medical benefit coverage of Nplate. Because of the specialized skills required for evaluation and diagnosis of patients treated with Nplate as well as the monitoring required for adverse events and efficacy, approval requires Nplate to be prescribed by or in consultation with a physician who specializes in the condition being treated. **All medical benefit approvals for the Treatment of Thrombocytopenia in Patients with Chronic Immune Thrombocytopenia (ITP)** will be for up to 10 mcg/kg and are provided for 12 months in duration unless otherwise noted below.

This document is subject to the disclaimer found at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx and is subject to change. Always verify with the most current version at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx or https://provider.medmutual.com/TOOLS_and_RESOURCES/Care_Management/ExpressScripts.aspx.

Drug Policy

RECOMMENDED AUTHORIZATION CRITERIA

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

Food and Drug Administration (FDA)-Approved Indication

1. **Treatment of Thrombocytopenia in Patients with Chronic Immune Thrombocytopenia (ITP).** Approve Nplate for 12 months if the patient meets the following criteria (a, b, c, d and e):
 - a) The agent is prescribed by, or in consultation with, a hematologist; AND
 - b) The patient is ≥ 1 years of age; AND
 - c) Not using Nplate in combination with Promacta; AND
 - d) The patient meets ONE of the following conditions (i or ii) AND;
 - i. Current platelet count is less than $30 \times 10^9/L$; OR
 - ii. Current platelet count is less than $30 \times 10^9/L$ to $50 \times 10^9/L$ with symptomatic bleeding (eg, significant mucous membrane bleeding, gastrointestinal bleeding or trauma) or risk factors for bleeding
 - e) The patient meets one of the following criteria (i or ii):
 - i. The patient had an inadequate response or intolerance to prior therapy (e.g., corticosteroids, intravenous immunoglobulin, anti-D immunoglobulin, Promacta® [eltrombopag tablets and oral suspension], Tavalisse™ [fostamatinib disodium hexahydrate tablets], or Rituxan® [ritixumab injection for intravenous use]); OR
 - ii. The patient has undergone splenectomy.

Nplate is indicated for the treatment of thrombocytopenia in patients with chronic ITP who have had an insufficient response to corticosteroids, immunoglobulins, or splenectomy.¹ . The pivotal trials with Nplate involved patients who had tried at least one primary ITP therapy (e.g., corticosteroids, immunoglobulins); approximately 50% of patients had undergone splenectomy.¹ Evidence-based practice guidelines for immune thrombocytopenia from ASH (published in 2011), recommend corticosteroids or IVIG as first-line treatment for adults; splenectomy is recommended for patients who have failed corticosteroid therapy. Thrombopoietin receptor agonists are recommended for adults at risk of bleeding who relapse following splenectomy or who have a contraindication to splenectomy and who have failed at least one other therapy.

Dosing in Treatment of Thrombocytopenia in Patients with Chronic ITP (*Medical benefit only*). FDA recommended dosing:

The initial dose for Nplate is 1 mcg/kg based on actual body weight; do not exceed a maximum weekly dose of 10 mcg/kg.

2. **Patient Has Been Started on Nplate.** Approve for an indication or condition addressed as an approval in the Recommended Authorization Criteria section (FDA-Approved Indications) if the patient meets the following criteria (A, B and C):
 - A) Patient continues to respond to therapy with this drug (e.g. platelet count has increased); AND
 - B) Patient's platelet count is at least $50 \times 10^9/L$ and does not exceed $400 \times 10^9/L$; AND
 - C) Not using Nplate in combination with Promacta.

This document is subject to the disclaimer found at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx and is subject to change. Always verify with the most current version at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx or https://provider.medmutual.com/TOOLS_and_RESOURCES/Care_Management/ExpressScripts.aspx.

Drug Policy

Labs/Diagnostics.

For patients 1 years of age to 18 years of age, actual body weight should be assessed every 12 weeks

Other Uses with Supportive Evidence

- 1. Thrombocytopenia in Myelodysplastic Syndrome (MDS).** Approve Nplate for 12 months if the patient meets the following criteria (A, B and C):
 - A) The agent is prescribed by, or in consultation with, a hematologist or an oncologist; AND
 - B) The patient has low- to intermediate-risk MDS; AND
 - C) According to the prescribing physician the patient has clinically significant thrombocytopenia (e.g., low platelet counts [$< 30,000 \text{ mm}^3$ {pretreatment}]); is platelet transfusion-dependent; active bleeding; and/or a history of bleeding at low platelet counts).

Data are available that describe the use of Nplate in patients with MDS.^{6-8,18} Current recommendations from the National Comprehensive Cancer Network (NCCN) regarding MDS [version 2.2018] state to consider treatment with a thrombopoietin-receptor agonist in patients with lower-risk MDS who have severe or life-threatening thrombocytopenia.⁵ The data with Nplate are discussed noting an increased rate of platelet response and decreased overall bleeding events among patients with low to intermediate risk MDS.

Dosing in treatment of MDS: Romiplostim 500 mcg or 750 mcg subQ was administered once weekly

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Nplate has not been shown to be effective, or there are limited or preliminary data or potential safety concerns that are not supportive of general approval for the following conditions. Rationale for non-coverage for these specific conditions is provided below. (Note: This is not an exhaustive list of Conditions Not Recommended for Approval.)

1. Nplate should not be used in an attempt to normalize platelet counts per FDA labeling.
2. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

Documentation Requirements:

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the services performed were not medically necessary, investigational or experimental, not within the scope of benefits afforded to the member and/or a pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results and/or credentials of the provider ordering or performing a service. The Company also reserves the right to modify, revise, change, apply and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding.

This document is subject to the disclaimer found at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx and is subject to change. Always verify with the most current version at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx or https://provider.medmutual.com/TOOLS_and_RESOURCES/Care_Management/ExpressScripts.aspx.

Drug Policy

References

1. Nplate® injection for subcutaneous use [prescribing information]. Thousand Oaks, CA: Amgen, Inc.; Oct 2017.
2. Kuter DJ, Bussel JB, Lyons RM, et al. Efficacy of romiplostim in patients with chronic immune thrombocytopenia purpura: a double-blind randomized controlled trial. *Lancet*. 2008;371:395-403.
3. Bussel JB, Kuter DJ, Pullarkat V, et al. Safety and efficacy of long-term treatment with romiplostim in thrombocytopenic patients with chronic ITP. *Blood*. 2009;113(10):2161-2171.
4. Kuter DJ, Rummel M, Boccia R, et al. Romiplostim or standard of care in patients with immune thrombocytopenia. *N Engl J Med*. 2010;363:1889-1899.
5. The NCCN Myelodysplastic Syndromes Clinical Practice Guidelines in Oncology (Version 2.2018). © 2018 National Comprehensive Cancer Network, Inc. Available at: <http://www.nccn.org>. Accessed July 6, 2018
6. Giagounidis A, Mufti GJ, Fenaux P, et al. Results of a randomized, double-blind study of romiplostim versus placebo in patients with low/intermediate-1-risk myelodysplastic syndrome and thrombocytopenia. *Cancer*. 2014;120(12):1838-1846.
7. Kantarjian HM, Giles FJ, Greenberg PL, et al. Phase 2 study of romiplostim in patients with low- or intermediate-risk myelodysplastic syndrome receiving azacitidine therapy. *Blood*. 2010;116(17):3163-3170.
8. Sekeres MA, Kantarjian H, Fenaux P, et al. Subcutaneous or intravenous administration of romiplostim in thrombocytopenic patients with lower risk myelodysplastic syndromes. *Cancer*. 2011;117(5):992-1000.
9. Neunert C, Lim W, Crowther M, et al. The American Society of Hematology 2011 evidence-based practice guideline for immune thrombocytopenia. *Blood*. 2011;117:4190-4207.
10. Provan D, Stasi R, Newland AC, et al. International consensus report on the investigation and management of primary immune thrombocytopenia. *Blood*. 2010;115:168-186.
11. Mokhtar GM, Tantawy AA, El Sherif NH. Romiplostim therapy in children with unresponsive chronic immune thrombocytopenia. *Platelets*. 2012;23(4):264-273.
12. Bussel JB, Buchanan GR, Nugent DJ, et al. A randomized, double-blind study of romiplostim to determine its safety and efficacy in children with immune thrombocytopenia. *Blood*. 2011;118(1):28-36.
13. Elalfy MS, Abdelmaksoud AA, Eltonbary KY. Romiplostim in children with chronic refractory ITP: randomized placebo controlled study. *Ann Hematol*. 2011;91(11):1341-1344.
14. Kuter DJ, Bussel JB, Newland A, et al. Long-term treatment with romiplostim in patients with chronic immune thrombocytopenia: safety and efficacy. *Br J Haematol*. 2013;161(3):411-423.
15. Bussel JB, Hsieh L, Buchanan GR, et al. Long-term use of thrombopoietin-mimetic romiplostim in children with severe chronic immune thrombocytopenia (ITP). *Pediatr Blood Cancer*. 2015;62(2):208-213.
16. Neunert C, Despotovic J, Haley K, et al, on behalf of the Pediatric ITP Consortium of North America (ICON). Thrombopoietin receptor agonist use in children: data from the pediatric ITP consortium of North American ICON2 study. *Pediatr Blood Cancer*. 2016;63:1407-1413.
17. Tarantino MD, Bussel JB, Blanchette VS, et al. Romiplostim in children with immune thrombocytopenia: a phase 3, randomized, double-blind, placebo-controlled study. *Lancet*. 2016;388:45-54.
18. Brierley CK, Steensma DP. Thrombopoiesis-stimulating agents and myelodysplastic syndromes. *Br J Haematol*. 2015;169:309-323.
19. **Romiplostim [Nplate]. IBM Micromedex. IBM corporation. Accessed Jul 10, 2018**

Other References Utilized

- Imbach P, Crowther M. Thrombopoietin-receptor agonists for primary immune thrombocytopenia. *N Engl J Med*. 2011;365:734-741.
- Keating GM. Romiplostim. A review of its use in immune thrombocytopenia. *Drugs*. 2012;72(3):415-435.
- Khellaf M, Michel M, Quittet P, et al. Romiplostim safety and efficacy for immune thrombocytopenia in clinical practice: 2-year results of 72 adults in a romiplostim compassionate-use program. *Blood*. 2011;118:4338-4345.
- Kuter DJ, Bussel JB, Newland A, et al. Long-term treatment of romiplostim in patients with chronic immune thrombocytopenia: safety and efficacy. *Br J Haematol*. 2013;161(3):411-423.
- Parameswaran R, Lunning M, Mantha S, et al. Romiplostim for management of chemotherapy-induced thrombocytopenia. *Support Care Cancer*. 2014;22:1217-1222.
- Ramaswamy K, Hsieh L, Leven E, et al. Thrombopoietic agents for the treatment of persistent and chronic immune thrombocytopenia in children. *J Pediatr*. 2014;165(3):600-605.e4.
- Rodeghiero F, Stasi R, Giagounidis A, et al. Long-term safety and tolerability of romiplostim in patients with primary immune thrombocytopenia: a pooled analysis of 13 clinical trials. *Eur J Haematol*. 2013;91(5):423-436.

This document is subject to the disclaimer found at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx and is subject to change. Always verify with the most current version at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx or https://provider.medmutual.com/TOOLS_and_RESOURCES/Care_Management/ExpressScripts.aspx.

Drug Policy

- Zeng Y, Duan X, Xu J, Ni X. TPO receptor agonist for chronic idiopathic thrombocytopenic purpura. *Cochrane Database Syst Rev.* 2011 Jul 6;(7):CD008235.

FOR MEDICAL BENEFIT COVERAGE REQUESTS:

Prior approval is required for HCPCS Codes J2796

HCPCS Code(s):	
J2796	Injection, romiplostim, 10 micrograms

This document is subject to the disclaimer found at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx and is subject to change. Always verify with the most current version at https://provider.medmutual.com/tools_and_resources/Care_Management/MedPolicies/Disclaimer.aspx or https://provider.medmutual.com/TOOLS_and_RESOURCES/Care_Management/ExpressScripts.aspx.