POLICY NUMBER UM_1243	SUBJECT Nplate™ (romiplostim)		DEPT/PROGRAM UM Dept.	PAGE 1 OF 3
DATE REVIEWED 06/03/13, 07/22/14, 12/18/15, 12/20/16, 10/31/17, 10/05/18, 07/08/19	APPROVAL DATE July 10, 2019	EFFECTIVE DATE July 10, 2019	REVISION DATES (latest version listed last) 07/24/14, 12/18/15, 07/10/19	
PRIMARY BUSINESS OWNER: UM APPROVED BY: Dr. Andrew Hertler		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
URAC STANDARDS HUM 1		ADDITIONAL AREAS OF IMPACT Oncology		
CMS REQUIREMENTS	STATE/FEDERAL REQUIREMENTS		APPLICABLE LINES OF BUSINESS Oncology	

I. PURPOSE

To define and describe the accepted indications for Nplate (romiplostim) usage in the treatment of cancer

II. DEFINITIONS

Nplate (romiplostim): is an injectable thrombopoetin (TPO) receptor agonist produced by recombinant DNA technology in Escherichia coli. It increases platelet production through binding and activation of the TPO receptor, a mechanism similar to endogenous TPO. Romiplostim should only be used in patients whose degree of thrombocytopenia and clinical condition increase the risk of bleeding. It should not be used in an attempt to normalize platelet counts. Additionally, romiplostim should not be used in patients with thrombocytopenia secondary to myelodysplastic syndrome (MDS), due to the potential for MDS progression during treatment with romiplostim.

Nplate (romiplostim) is FDA approved for the treatment of thrombocytopenia in patients with chronic immune thrombocytopenia (ITP) who had an insufficient response to corticosteroids, immunoglobulins or splenectomy.

Nplate (romiplostim) is available as 250 mcg and 500 mcg vials for injection.

III. POLICY

New Century is responsible for processing all medication requests from network ordering providers. Medications not authorized by New Century may be deemed as not approvable and therefore not reimbursable.

Treatment request outside the approved FDA manufacturer labeling or CMS approved compendia must follow CMS Medicare Benefit Policy Manual Chapter 15. s. If references are not produced, delays may occur to the processing of such request.

Inclusion Criteria: Nplate (romiplostim) may be considered medically necessary when any of the following selection criteria is met:

1. **Chronic Idiopathic Thrombocytopenic Purpura (ITP)**
    a. The member has a diagnosis of relapsed/refractory chronic ITP of more than 6 months duration **AND**
    b. The member is at increased risk of bleeding and has ONE of the following platelet count:
        i. Less than 30,000/mm^3 (levels are obtained within the last 4 weeks) for members not receiving any ITP therapy **OR**
        ii. Less than 50,000/mm^3 (levels are obtained within the last 4 weeks) for members receiving treatment for ITP (i.e. corticosteroids)

AND

c. The member has insufficient response to prior splenectomy **OR**

d. The member has insufficient response, intolerance, or contraindications to corticosteroids, immunoglobulins (IVIG), **AND** Promacta (eltrombopag) **AND**

e. Insufficient response is defined as a platelet count < 50,000/mm^3

Exclusion Criteria: Nplate (romiplostim) is not considered medically necessary when any of the following selection criteria is met:

1. Nplate (romiplostim) is not used to normalize platelet counts.
2. The member has insufficient response after 4 weeks of therapy **OR** with appropriate dosage adjustment. Response is defined as a platelet count between 50,000/mm3 and 400,000/mm^3.
3. A platelet count > 400,000/mm^3; therapy should be discontinued.
4. Concurrent use with other TPO receptor agonist such as Promacta (eltrombopag).
5. Member has thrombocytopenia due to myelodysplastic syndrome (MDS), chemotherapy, or any cause of thrombocytopenia other than chronic ITP.
6. Dosing exceeds single dose limit of Nplate (romiplostim) 10mcg/kg.
7. Indications not supported by CMS recognized compendia or acceptable peer reviewed literature may be deemed as not approvable and therefore not reimbursable.

IV. PROCEDURE

Requests for Nplate (romiplostim) shall be reviewed for appropriateness per FDA approved product labeling, the National Comprehensive Cancer Network (NCCN) and American Society of Clinical Oncology (ASCO) clinical guidelines, or CMS approved compendia.

1. **Dosage and Administration**

   a. Initial dose: 1 mcg/kg (actual body weight) SUBQ once weekly, adjusted weekly in increments of 1 mcg/kg to achieve platelet count of 50,000/mm^3 or greater; MAX weekly dose 10 mcg/kg.

   b. If following 4 weeks of therapy at the maximum weekly dose of 10 mcg/kg SUBQ, the platelet count is not adequate to control bleeding, discontinue therapy and continue monitoring platelets for 2 weeks following discontinuation

2. **Dosage Adjustments**

   a. Dosage adjustments are not required for renal or hepatic impairment.

   b. Platelet count > 200,000/mm^3 for 2 consecutive weeks, reduce dose by 1 mcg/kg.

   c. Platelet count > 400,000/mm^3, do not dose and monitor weekly platelet counts; after platelets fall to < 200,000/mm^3 resume at a dose reduced by 1 mcg/kg.

3. **Monitoring**

   a. Obtain CBCs, including platelet counts and peripheral blood smears, weekly during the dose adjustment phase of romiplostim therapy until stable platelet count (50,000/mm^3 or greater) has been established and maintained for a minimum of 4 weeks with no dose adjustments, and then monitor monthly thereafter.

b. Evaluate patients with a lack of response or failure to maintain a response for possible etiologies, including neutralizing antibodies to romiplostim or bone marrow fibrosis.

c. Watch for signs and symptoms of excessive bleeding

d. Bone marrow changes: Examine peripheral blood differential to determine the baseline extent of red and white blood cell morphologic abnormalities (teardrop and nucleated red blood cells, immature white blood cells, or cytopenia) prior to romiplostim initiation. If patient develops new or worsening morphological abnormalities of red or white blood cells or cytopenia, discontinue romiplostim treatment and perform a bone marrow biopsy, including staining for fibrosis.

e. Watch for excessive increase in platelet counts; may result in thrombotic/thromboembolic complications.

f. Worsening thrombocytopenia: Weekly CBCs, including platelet counts and observe patient for worsened thrombocytopenia following romiplostim discontinuation for a minimum of 2 weeks

g. Thrombotic and thromboembolic complications: Watch for signs and symptoms of thrombosis

V. APPROVAL AUTHORITY

1. Review – UM Department
2. Final Approval – UM Committee

VI. ATTACHMENTS

None

VII. REFERENCES

1. Nplate prescribing information. Amgen Inc. Thousand Oaks, CA. 2018.
2. Clinical Pharmacology Elsevier Gold Standard. 2019.
3. Micromedex® Healthcare Series: Thomson Micromedex, Greenwood Village, Co. 2019.
4. National Comprehensive Cancer Network. Cancer Guidelines and Drugs and Biologics Compendium. 2019.
5. AHFS Drug Information. American Society of Health-Systems Pharmacists or Wolters Kluwer Lexi-Drugs. Bethesda, MD. 2019.

VIII. ADDENDUM

1. **Preferred product(s) for Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid agency: Nplate/Oral Promacta**

   For AHCCCS members: when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy for a list of NON-preferred products.