

Medical Affairs Policy & Procedure

Title/Service: Neumega (Oprelvekin, Thrombopoietic Growth Factor)

Revised	09/16/2011
Reviewed	03/24/00, 06/17/03, 06/02/06, 04/24/09, 07/27/10
Developed	03/24/00
Policy Committee Approval	09/16/2011

Description:

Neumega (a synthetic version of a cytokine called interleukin-11) is indicated for the prevention of severe thrombocytopenia (decreased platelets) and to minimize the need for platelet transfusions. Neumega directly stimulates the proliferation of hematopoietic stem cells (cells responsible for the formation of various blood cells) and megakaryocyte (cells that form platelets) progenitor cells and induces megakaryocyte maturation resulting in increased platelet production.

Indications of Coverage:

Neumega is considered medically necessary in individuals over eighteen years of age for the treatment of severe thrombocytopenia (platelet count less than 20,000) and to reduce the need for platelet transfusions following myelosuppressive chemotherapy in adult patients with nonmyeloid malignancies. Treatment with Neumega should be discontinued at least two days before starting the next planned cycle of chemotherapy and should begin six to 24 hours following the completion of chemotherapy.

Dosage and Administration:

The recommended dose of Neumega is 50 micrograms/kilogram given subcutaneously once a day to the abdomen, thigh, hip, or upper arm. Neumega injections should be self administered unless contraindicated (for example, the individual is unable to inject themselves due to a functional limitation). One injection in the clinic for teaching is allowed for individuals who have not previously received instruction in self-administered injections. For individuals with functional limitations, home health assistance may be considered.

Limitations of Coverage:

- A. Review contract and endorsements for exclusions and prior authorization or benefit requirements.

- B. If used for a condition/diagnosis other than is listed in the Indications of Coverage, deny as experimental or investigative.
- C. If used for a condition/diagnosis that is listed in the Indications of Coverage, but the criteria are not met, deny as not medically necessary.
- D. The use of Neumega is considered not medically necessary in the following situations:
1. During or following myeloablative chemotherapy (administration of chemotherapy agents at doses several times greater than the standard therapeutic dose, usually prior to bone marrow transplant)
 2. When given within the two days prior to chemotherapy or at the same time as the chemotherapy treatment.
 3. In individuals with a platelet count greater than 50,000
- E. The use of Neumega is considered investigational in the following situations:
1. When used for more than 21 days per chemotherapy cycle
 2. For pediatric (under eighteen years of age) patients since safety and effectiveness have not been established

Documentation Required:

- Office notes, physicians orders
- Laboratory reports (documenting platelet levels)

Rationale:

Neumega is a drug which stimulates the production of platelets in the blood by stimulating cells in the bone marrow. Since platelets assist in the clotting of blood, using this drug may help to prevent excessive bleeding caused by the side effects of chemotherapy. Use of Neumega is not considered safe after myeloablative chemotherapy (high dose chemotherapy given prior to transplant) due to severe side effects in this setting. The Prescribing Information available from the manufacturer states that, “a safe and effective dose of Neumega has not been established in children”, so the use of Neumega is limited to individuals over eighteen years of age.

References:

1. Wyeth Pharmaceuticals Inc. Neumega (oprelvekin). Philadelphia, PA: Wyeth Pharmaceuticals Inc. Revised: 03/09. Available at: www.wyeth.com/content/showlabeling.asp?id=500. Accessed: 11 Jul 10.

Approved by the Medical Director