

Federal Employee Program.

NASCOBAL (cyanocobalamin)

RATIONALE FOR INCLUSION IN PA PROGRAM

Background

Nascobal (cyanocobalamin) nasal spray is a vitamin B₁₂ supplement used for the maintenance therapy of vitamin B₁₂ deficiency (low levels of vitamin B₁₂) in adults with pernicious anemia who achieved healthy vitamin B₁₂ levels after receiving vitamin B₁₂ shots and do not have nervous system problems; for the treatment of vitamin B₁₂ deficiency caused by certain conditions not related to pernicious anemia; and for prevention of vitamin B₁₂ deficiency in adults with vitamin B_{12} requirements in excess of normal (1).

Regulatory Status

FDA approved indications: Nascobal is a vitamin B₁₂ indicated for: (1)

- 1. Vitamin B₁₂ maintenance therapy in adult patients with pernicious anemia who are in remission following intramuscular vitamin B₁₂ therapy and who have no nervous system involvement
- Treatment of adult patients with dietary, drug-induced, or malabsorption related vitamin B₁₂ deficiency not due to pernicious anemia
- 3. Prevention of vitamin B₁₂ deficiency in adult patients with vitamin B₁₂ requirements in excess of normal

<u>Limitations of Use</u>: (1)

- 1. Should not be used for the vitamin B₁₂ absorption test (Schilling test)
- 2. In patients with correctible or temporary causes of vitamin B₁₂ deficiency the benefit of continued long-term use following correction of vitamin B₁₂ deficiency and underlying disease has not been established
- 3. In patients with active symptoms of nasal congestion, allergic rhinitis or upper respiratory infection effectiveness has not been established

Patients with early Leber's disease (hereditary optic nerve atrophy) who were treated with vitamin B₁₂ suffered severe and swift optic atrophy. Nascobal, is not recommended for use in patients with Leber's optic atrophy (1).

Hypokalemia and sudden death may occur in severe megaloblastic anemia that is treated intensely with vitamin B₁₂. Hypokalemia and thrombocytosis can occur upon conversion of severe



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megaloblastic anemia to normal erythropoiesis with vitamin B₁₂ therapy. Therefore, serum potassium levels and platelet count should be monitored carefully during therapy (1).

Hematocrit, reticulocyte count, vitamin B_{12} , folate and iron levels should be obtained prior to treatment. Serum B_{12} levels should be monitored periodically during therapy to establish adequacy of therapy (1).

The recommended initial dose is one spray (500 mcg) in one nostril once weekly. If serum levels of B_{12} decline after one month of treatment, consider increasing the dose. Assess serum B_{12} level one month after each dose adjustment. If serum B_{12} levels are persistently low, consider alternative therapy (e.g., intramuscular or subcutaneous vitamin B_{12} therapy) (1).

Nascobal should be discontinued in patients whose underlying cause of vitamin B₁₂ deficiency has been corrected and are deemed no longer at risk for vitamin B₁₂ deficiency. The safety and effectiveness of continued long-term use in these individuals has not been established. In patients with pernicious anemia, continue appropriate vitamin B₁₂ treatment indefinitely (1).

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

Summary

Nascobal (cyanocobalamin) nasal spray is a vitamin B_{12} supplement used for the maintenance therapy of vitamin B_{12} deficiency (low levels of vitamin B_{12}) in adults with pernicious anemia who achieved healthy vitamin B_{12} levels after receiving vitamin B_{12} shots and do not have nervous system problems; for the treatment of vitamin B_{12} deficiency caused by certain conditions not related to pernicious anemia; and for prevention of vitamin B_{12} deficiency in adults with vitamin B_{12} requirements in excess of normal. Nascobal should not be used for a vitamin B_{12} absorption test known as the Schilling test. The safety and effectiveness of Nascobal in pediatric patients have not been established (1).

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



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Nascobal FEP Clinical Rationale

NASCORAL

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References							
	ackage insert]. C	hestnut Ridge	, NY. Par Pha	armaceuticals	, Inc. Novemb	er 2018.	