



## Drug Coverage Policy

Effective Date..... 04/01/2024  
Coverage Policy Number..... IP0170  
Policy Title..... Cyanocobalamin Nasal  
Spray

# Cyanocobalamin Nasal Spray

### **INSTRUCTIONS FOR USE**

*The following Coverage Policy applies to health benefit plans administered by Cigna Companies. Certain Cigna Companies and/or lines of business only provide utilization review services to clients and do not make coverage determinations. References to standard benefit plan language and coverage determinations do not apply to those clients. Coverage Policies are intended to provide guidance in interpreting certain standard benefit plans administered by Cigna Companies. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document always supersedes the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Each coverage request should be reviewed on its own merits. Medical directors are expected to exercise clinical judgment and have discretion in making individual coverage determinations. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.*

## Overview

This policy supports medical necessity review for the following cyanocobalamin nasal spray products:

- cyanocobalamin nasal spray
- **Nascobal**<sup>®</sup> (cyanocobalamin nasal spray)

## Medical Necessity Criteria

**Cyanocobalamin Nasal Spray is considered medically necessary when ONE of the following is met:**

1. **Vitamin B12 maintenance therapy in adult patients with pernicious anemia.**  
Individual meets **BOTH** of the following criteria:
  - A. Age 18 years or older
  - B. Preferred product criteria is met for the products listed in the below table(s)
  
2. **Treatment of adult patients with dietary, drug-induced, or malabsorption-related vitamin B12 deficiency.** Individual meets **BOTH** of the following criteria:
  - A. Age 18 years or older
  - B. Preferred product criteria is met for the products listed in the below table(s)
  
3. **Prevention of vitamin B12 deficiency in adult patients with vitamin B12 requirements in excess of normal (for example, genetic disorders of vitamin B12 metabolism).** Individual meets **BOTH** of the following criteria:
  - A. Age 18 years or older
  - B. Preferred product criteria is met for the products listed in the below table(s)

**Employer Group:**

Product	Criteria
<b>Nascobal</b> (cyanocobalamin nasal spray)	Documentation of failure, contraindication, or intolerance to cyanocobalamin injection

**Individual and Family Plans:**

Product	Criteria
<b>cyanocobalamin</b> nasal spray	Documentation of failure, contraindication, or intolerance to cyanocobalamin injection
<b>Nascobal</b> (cyanocobalamin nasal spray)	Documentation of failure, contraindication, or intolerance to cyanocobalamin injection

When coverage is available and medically necessary, the dosage, frequency, duration of therapy, and site of care should be reasonable, clinically appropriate, and supported by evidence-based literature and adjusted based upon severity, alternative available treatments, and previous response to therapy.

Receipt of sample product does not satisfy any criteria requirements for coverage.

## Reauthorization Criteria

Continuation of cyanocobalamin Nasal Spray is considered medically necessary for ALL covered diagnosis when the above medical necessity criteria are met AND there is documentation of beneficial response

## Authorization Duration

Initial approval duration: up to 12 months  
 Reauthorization approval duration: up to 12 months

## Conditions Not Covered

Any other use is considered experimental, investigational, or unproven.

## Background

### OVERVIEW

Nascobal, a vitamin B12 nasal spray, is indicated for the following:

- **Pernicious anemia**, vitamin B12 maintenance therapy in adults who are in remission following intramuscular vitamin B12 therapy and who have no nervous system involvement.
- **Vitamin B12 deficiency, treatment**, in adults with dietary, drug-induced, or malabsorption-related vitamin B12 deficiency not due to pernicious anemia.
- **Vitamin B12 deficiency, prevention**, in adults with vitamin B12 requirements in excess of normal.

Nascobal is supplied in a nasal spray containing 500 mcg cyanocobalamin per actuation.<sup>1</sup> Additionally, cyanocobalamin is available as an intramuscular injection (1,000 mcg per mL), which is indicated for **vitamin B12 deficiencies** due to malabsorption, which may be associated with the following conditions: pernicious anemia; gastrointestinal pathology, dysfunction, or surgery (including gluten enteropathy or sprue, small bowel bacteria overgrowth, or total or partial gastrectomy); fish tapeworm infestation; malignancy of the pancreas or bowel, or folic acid deficiency.<sup>2</sup> Over-the-counter vitamin B12 oral supplements are also available, although these are poorly absorbed when intrinsic factor is absent (i.e., pernicious anemia).<sup>3</sup>

### Disease Overview

Vitamin B12, a water-soluble vitamin, is necessary for proper red blood cell formation, neurological function, and DNA synthesis.<sup>3</sup> Vitamin B12, bound to protein in food, is released by hydrochloric acid and gastric protease in the stomach. Vitamin B12 then complexes with intrinsic factor and is absorbed in the distal ileum. Thus, patients with deficiencies in stomach acid, intrinsic factor, or gastrointestinal absorption are at risk for development of vitamin B12 deficiency. Oral vitamin B12 supplements are provided in the free (not protein bound) form, therefore individuals with hydrochloric acid deficiency are typically able to meet their vitamin B12 needs with oral vitamin supplementation or fortified foods. Likewise, oral vitamin B12 supplementation has demonstrated efficacy in correcting deficiency related to gastrointestinal malabsorption, including gastric bypass and Crohn's disease.<sup>4-6</sup> Conversely, in pernicious anemia (characterized by the absence of intrinsic factor), only 1% of oral vitamin B12 is absorbed.<sup>3</sup> Thus, patients with pernicious anemia are typically treated with injectable vitamin B12.

## References

1. Nascobal® nasal spray [prescribing information]. Chestnut Ridge, NY: Par; November 2018.
2. Cyanocobalamin injection [prescribing information]. Shirley, NY: American Regent; October 2018.
3. Vitamin B12 Fact Sheet for Health Professionals. National Institutes of Health Office of Dietary Supplements. Updated March 9, 2022. Available at: <https://ods.od.nih.gov/factsheets/VitaminB12-HealthProfessional/>. Accessed on April 4, 2023.
4. Andrès E, Zulfiqar AA, Serraj K, et al. Systematic review and pragmatic clinical approach to oral and nasal vitamin B12 (cobalamin) treatment in patients with vitamin B12 deficiency related to gastrointestinal disorders. *J Clin Med*. 2018; 7(10):304.
5. Gomollón F, Gargallo CJ, Muñoz JF, et al. Oral Cyanocobalamin is Effective in the Treatment of Vitamin B12 Deficiency in Crohn's Disease. *Nutrients*. 2017; 9(3):308.
6. Schijns W, Homan J, van der Meer L, et al. Efficacy of oral compared with intramuscular vitamin B-12 supplementation after Roux-en-Y gastric bypass: a randomized controlled trial. *Am J Clin Nutr*. 2018; 108(1):6-12.

## Revision Details

Type of Revision	Summary of Changes	Date
Selected Revision	<ul style="list-style-type: none"><li>Added generic cyanocobalamin nasal spray to the policy</li><li>Updated existing Employer Group Nascobal verbiage from "inadequate response" to "failure"</li><li>Added Individual and Family Plans Preferred Product table to include both generic and branded (Nascobal) products</li></ul>	04/01/2024

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