Effective Date **8/1/2023**
Next Review Date **8/1/2024**
Coverage Policy Number **IP0466**

Cysteamine Bitartrate for Individual and Family Plans

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Related Coverage Resources

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. 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 cysteamine (oral) products for Individual and Family Plans:

- **Cystagon®** (cysteamine bitartrate capsules)
- **Procysbi®** (cysteamine bitartrate delayed-release capsules, delayed release granules)

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

Medical Necessity Criteria

Cysteamine (oral) products are considered medically necessary when the following are met:

I. **Cystagon (cysteamine bitartrate capsules).**

1. **Cystinosis, Nephropathic.** Individual meets **ALL** of the following criteria (A, B, and C):
    A. Documented diagnosis of nephropathic cystinosis confirmed by **ONE** of the following (i or ii):
        i. Biallelic pathogenic or likely pathogenic variants in the *CTNS* gene
        ii. Polymorphonuclear leukocyte cystine concentration above the upper limit of the normal reference range for the reporting laboratory

    B. Individual will NOT be using Cystagon (cysteamine bitartrate) and Procysbi (cysteamine bitartrate delayed release) concurrently

    C. The medication is prescribed by or in consultation with a nephrologist or a metabolic disease specialist.

II. **Procysbi (cysteamine bitartrate delayed-release capsules, delayed release granules).**

1. **Cystinosis, Nephropathic.** Individual meets **ALL** of the following criteria (A, B, C and D):
    A. Individual is 1 year of age or older

    B. Documented diagnosis of nephropathic cystinosis confirmed by **ONE** of the following (i or ii):
        i. Biallelic pathogenic or likely pathogenic variants in the *CTNS* gene
        ii. White blood cell cystine concentration above the upper limit of the normal reference range for the reporting laboratory

    C. Individual will NOT be using Cystagon (cysteamine bitartrate) and Procysbi (cysteamine bitartrate delayed release) concurrently

    D. The medication is prescribed by or in consultation with a nephrologist or a metabolic disease specialist.

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.

Reauthorization Criteria

Cysteamine (oral) products are considered medically necessary for continued use when initial criteria are met AND there is documentation of beneficial response (for example, decrease in cysteine levels).

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, including the following (this list may not be all inclusive):

1. **Concomitant Therapy with Cystagon and Procysbi.** There are no data available to support concomitant use.

Background

OVERVIEW
Cystagon and Procysbi are cystine-depleting agents indicated for the management of **nephropathic cystinosis**.[1-2] Note that Procysbi is indicated specifically in patients who are ≥ 1 year of age, whereas there is not an age limit for pediatric use of Cystagon.

Therapy with a cysteamine product should be initiated promptly once the diagnosis is confirmed (i.e., increased white blood cell cystine concentration).

Disease Overview
Cystinosis is a very rare autosomal recessive inborn error of metabolism in which cystine accumulates within lysosomes and forms crystals in many tissues, including the kidneys, liver, bone marrow, pancreas, muscle, rectal mucosa, brain, and eye.[3,4] Patients with cystinosis also experience growth failure and rickets, and cystine deposits in the cornea cause photophobia. Over time, most organs are damaged. Diagnosis is confirmed by measuring cystine levels in polymorphonuclear leukocytes.[5] Molecular genetic testing identifies a characteristic mutation of the *CTNS* gene.

References

1. Procysbi [prescribing information]. Lake Forest, IL: Horizon; February 2022.
2. Cystagon [prescribing information]. Morgantown, WV: Mylan; January 2019.
3. Wilmer MJ, Schoeber JP, van den Heuvel LP, Levtchenko EN. Cystinosis: practical tools for diagnosis and treatment. *Pediatr Nephrol*. 2011; 26(2): 205–215.
4. Elmonem MA, Veys KR, Soliman NA, et al. Cystinosis: a review. *Orphanet J Rare Dis*. 2016 Apr 22;11:47.
5. National Organization for Rare Disorders (NORD). Cystinosis. Accessed on March 4, 2023. Available at: https://rarediseases.org/rare-diseases/cystinosis/