| PHARMACY POLICY STATEMENT<br>**Marketplace** | |
|---|---|
| DRUG NAME | Procysbi and Cystagon (cysteamine bitartrate); Cystaran and Cystadrops (cysteamine hydrochloride solution) |
| BILLING CODE | Must use valid NDC code |
| BENEFIT TYPE | Pharmacy |
| SITE OF SERVICE ALLOWED | Home |
| COVERAGE REQUIREMENTS | Prior Authorization Required (Non-Preferred Products)<br>QUANTITY LIMIT— See "dosage allowed" |
| LIST OF DIAGNOSES CONSIDERED **NOT** MEDICALLY NECESSARY | Click Here |

Procysbi and Cystagon (cysteamine bitartrate), Cystaran and Cystadrops (cysteamine hydrochloride solution) are **non-preferred** products and will only be considered for coverage under the **pharmacy** benefit when the following criteria are met:

Members must be clinically diagnosed with one of the following disease states and meet their individual criteria as stated.

## NEPHROPATHIC CYSTINOSIS (Procysbi or Cystagon)

For **initial** authorization:

1. Member must be 1 year of age or older if the request is for Procysbi (no limit for Cystagon); AND
2. Medication must be prescribed by or in consultation with a nephrologist; AND
3. Member has a diagnosis of nephropathic cystinosis confirmed by an elevated WBC cystine concentration greater than 2 nmol ½ cystine/mg protein (lab report must include reference values) AND at least **one** of the following:
   a) CTNS gene mutation;
   b) Presence of corneal crystals, as shown by slit lamp exam performed by an ophthalmologist; AND
4. If the request is for Procysbi, all the following must also be documented in the chart notes:
   a) Inability to reach target cystine level despite a minimum of 6 months of compliant therapy with Cystagon at max dose (or highest tolerated dose);
   b) If requesting switch from Cystagon due to intolerance, member must first attempt to temporarily stop therapy, then re-initiate at a lower dose and gradually increase to the proper dose;[2]
   c) If requesting switch from Cystagon due to GI side effects, member must also try taking with a proton pump inhibitor (e.g. omeprazole), in addition to attempting dose adjustment;
   d) NOTE: Any other rationale for switching from Cystagon (aside from inefficacy or intolerance) will be considered on a case by case basis. In general, CareSource does not recognize frequency of dosing or lack of adherence as being indicative of medical necessity.
5. **Dosage allowed:** Refer to product label for initiation, titration, and adjustment. The max dose is 1.95g/$m^2$/day.

***If member meets all the requirements listed above, the medication will be approved for 6 months.***

For **reauthorization**:
1. Lab report showing stabilized or decreased cystine levels from baseline; AND
2. Chart notes showing stabilized or improved signs and symptoms of disease or slowed progression.

***If member meets all the reauthorization requirements above, the medication will be approved for an additional 12 months.***

## CYSTINOSIS (Cystaran or Cystadrops)

For **initial** authorization:
1. Medication must be prescribed by or in consultation with a nephrologist or ophthalmologist; AND
2. Member has a diagnosis of cystinosis confirmed by an elevated WBC cystine concentration 1 nmol ½ cystine/mg protein or greater; AND
3. Presence of corneal crystal deposits as evidenced by slit lamp exam.
4. **Dosage allowed:** 1 drop in each eye, every waking hour; (up to 4 times a day for Cystadrops).

***If member meets all the requirements listed above, the medication will be approved for 3 months.***

For **reauthorization**:
1. Chart notes have been provided that show improvement of signs and symptoms of disease (e.g. reduction of corneal cystine crystal accumulation, decreased severity of photophobia).

***If member meets all the reauthorization requirements above, the medication will be approved for an additional 12 months.***

## CareSource considers Procysbi and Cystagon (cysteamine bitartrate), Cystaran and Cystadrops (cysteamine hydrochloride solution) not medically necessary for the treatment of diseases that are not listed in this document.

| DATE | ACTION/DESCRIPTION |
|---|---|
| **10/07/2020** | New policy for Procysbi and Cystagon (cysteamine bitartrate), Cystaran and Cystadrops (cysteamine hydrochloride solution) created. |
| **09/16/2021** | Annual review, no changes |

References:


1. Procysbi (cysteamine bitartrate) [package insert]. Lake Forest, IL: Horizon Therapeutics USA, Inc.; 2020.
2. Cystagon (cysteamine bitartrate) [package insert]. Morgantown, WV: Mylan Pharmaceuticals Inc; 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. doi:10.1007/s00467-010-1627-6
4. Elmonem MA, Veys KR, Soliman NA, Dyck MV, Heuvel LPVD, Levtchenko E. Cystinosis: a review. *Orphanet Journal of Rare Diseases*. April 2016. doi:10.1186/s13023-016-0426-y
5. Bäumner S, Weber LT. Nephropathic Cystinosis: Symptoms, Treatment, and Perspectives of a Systemic Disease. *Front Pediatr*. 2018;6:58. Published 2018 Mar 14. doi:10.3389/fped.2018.00058
6. Ahlenstiel-Grunow T, Kanzelmeyer NK, Froede K, et al. Switching from immediate- to extended-release cysteamine in nephropathic cystinosis patients: a retrospective real-life single-center study. *Pediatric Nephrology*. 2016;32(1):91-97. doi:10.1007/s00467-016-3438-x
7. Bäumner S, Weber LT. Conversion from immediate- to extended-release cysteamine may decrease disease control and increase additional side effects. *Pediatric Nephrology*. 2017;32(7):1281-1282. doi:10.1007/s00467-017-3618-3
8. Emma F, Nesterova G, Langman C, et al. Nephropathic cystinosis: an international consensus document. *Nephrol Dial Transplant*. 2014;29 Suppl 4(Suppl 4):iv87-iv94. doi:10.1093/ndt/gfu090

9. Nesterova G, Gahl WA. Cystinosis. 2001 Mar 22 [Updated 2017 Dec 7]. In: Adam MP, Ardinger HH, Pagon RA, et al., editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2020. Available from: https://www.ncbi.nlm.nih.gov/books/NBK1400/
10. Cystaran (cysteamine hydrochloride solution) [package insert]. Gaithersburg, MD: Leadiant Biosciences, Inc.; 2020.
11. Cystadrops (cysteamine hydrochloride solution) [package insert]. Lebanon, NJ: Recordati Rare Diseases Inc.; 2020.
12. Kaur S, Sarma P, Kaur H, et al. Efficacy and safety of topical cysteamine in corneal cystinosis: a systematic review and meta- analysis. *American Journal of Ophthalmology*. September 2020. doi:10.1016/j.ajo.2020.07.052
13. Biswas S, Gaviria M, Malheiro L, Marques JP, Giordano V, Liang H. Latest Clinical Approaches in the Ocular Management of Cystinosis: A Review of Current Practice and Opinion from the Ophthalmology Cystinosis Forum. *Ophthalmol Ther*. 2018;7(2):307-322. doi:10.1007/s40123-018-0146-6.

Effective date: 01/01/2022
Revised date: 09/16/2021