

# Drug and Biologic Coverage Policy



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## Mannitol

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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 mannitol (**Bronchitol**<sup>®</sup>) oral inhalation powder.

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

### Medical Necessity Criteria

**Mannitol (Bronchitol) is considered medically necessary when the following are met:**

**Cystic Fibrosis (CF).** Individual meets **ALL** of the following criteria:

- A. 18 years of age or older
- B. Documentation of failure, contraindication, or intolerance for hypertonic saline
- C. Passed the Bronchitol Tolerance Test
- D. Pre-medicate with a short-acting bronchodilator
- E. Medication is prescribed by, or in consultation with, a pulmonologist or a physician who specializes in the treatment of cystic fibrosis

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

Continuation of mannitol (Bronchitol) is considered medically necessary for Cystic Fibrosis 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, including the following (this list may not be all inclusive):

### **Concomitant Use with Hypertonic Saline.**

Bronchitol has not been studied in combination with hypertonic saline.<sup>3-5</sup>

## Background

### **OVERVIEW**

Bronchitol, a sugar alcohol, is indicated as add-on maintenance therapy to improve pulmonary function in patients  $\geq 18$  years of age with **cystic fibrosis** (CF).<sup>1</sup>

### **Safety**

Bronchitol can cause bronchospasm, which can be severe in susceptible patients.<sup>1</sup> Therefore, Bronchitol is contraindicated in individuals who fail to pass the Bronchitol Tolerance Test. Prior to prescribing Bronchitol, the Bronchitol Tolerance Test must be administered and performed under the supervision of a healthcare practitioner who is able to manage acute bronchospasm, to identify patients who are suitable candidates for Bronchitol maintenance therapy. For patients who have passed the Bronchitol Tolerance Test, the recommended dosage of Bronchitol is 400 mg twice a day by oral inhalation (the contents of 10 capsules administered individually) via the inhaler. A short-acting bronchodilator should be administered by oral inhalation, 5 to 15 minutes before every dose of Bronchitol. Bronchitol should be taken once in the morning and once in the evening, with the later dose taken at least 2 to 3 hours before bedtime.

### **Guidelines**

Bronchitol is not addressed in US guidelines for CF. Guidelines from the CF Foundation (2013) in the US strongly recommend chronic use of Pulmozyme® (dornase alfa inhalation solution) in patients  $\geq 6$  years of age with moderate to severe disease to improve lung function, quality of life, and reduce exacerbations. Pulmozyme is also recommended for chronic use in patients  $\geq 6$  years of age with asymptomatic or mild disease to improve lung function and reduce exacerbations. Chronic use of hypertonic saline is also recommended in individuals with CF who are  $\geq 6$  years of age to improve lung function and quality of life and reduce exacerbations.

## References

1. Bronchitol® oral inhalation powder [prescribing information]. Frenchs Forest NSW, Australia/Cary, NC: Pharmaxis/Chiesi; October 2020.

2. Mogayzel PJ, Naureckas ET, Robinson KA, et al. Pulmonary clinical practice guidelines committee. Cystic fibrosis pulmonary guidelines. Chronic medications for maintenance of lung health. *Am J Respir Crit Care Med*. 2013;187(7):680-689.
3. Flume P, Amelina E, Daines CL, et al. Efficacy and safety of inhaled dry-powder mannitol in adults with cystic fibrosis: An international, randomized controlled study. *J Cyst Fibr*. 2020;30(6):1003-1009.
4. Bilton D, Robinson P, Cooper P, et al; for the CF301 Study Investigators. Inhaled dry powder mannitol in cystic fibrosis: an efficacy and safety study. *Eur Respir J*. 2011;38:1071-1080.
5. Aitken ML, Bellon G, De Boeck K, et al; for the CF302 Investigators. Long-term inhaled dry powder mannitol in cystic fibrosis. An international randomized study. *Am J Respir Crit Care*. 2012;185(6): 645-652.

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