PRIOR AUTHORIZATION POLICY

POLICY: Antibiotics (Inhaled) – Cayston Prior Authorization Policy

• Cayston® (aztreonam inhalation solution – Gilead)

REVIEW DATE: 03/27/2024

OVERVIEW

Cayston, a monobactam antibiotic, is indicated to improve respiratory symptoms in **cystic fibrosis** (CF) patients with *Pseudomonas aeruginosa*. Safety and efficacy have not been established in pediatric patients < 7 years of age, in patients with forced expiratory volume in 1 second (FEV₁) < 25% or > 75% predicted, or in patients colonized with *Burkholderia cepacia*.

To reduce the development of drug-resistant bacteria and maintain the effectiveness of Cayston and other antibiotics, Cayston should be used to treat patients with CF known to have *P. aeruginosa* in the lungs.¹

Clinical Efficacy

An open-label study assessed inhaled aztreonam for the eradication of newly acquired P. aeruginosa in children aged 3 months to < 18 years of age (n = 105). In total, 49 patients < 6 years of age were included in the study. Patients received inhaled aztreonam 75 mg three times daily for 28 days. At the end of treatment with inhaled aztreonam, 91.5% of the patients (n = 43/47) < 6 years of age were culture-negative for P. aeruginosa and 76.6% of patients (n = 36/47) < 6 years of age remained culture-negative 4 weeks after completing the course of therapy.

Guidelines

The Cystic Fibrosis Foundation (CFF) Pulmonary Therapeutics Committee provides recommendations for the use of chronic medications in the management of CF lung disease (2013).³ In patients \geq 6 years of age with CF and moderate-to-severe lung disease with *P. aeruginosa* persistently present in cultures of the airways, the chronic use of inhaled aztreonam is strongly recommended to improve lung function and quality of life (QoL). For mild disease, the Committee recommends chronic use of inhaled aztreonam for patients \geq 6 years of age with CF and *P. aeruginosa* persistently present in cultures of the airways, to improve lung function and QoL.

The CFF published a systematic review of the literature regarding eradication of initial *P. aeruginosa* infections to develop guidelines for effective prevention (2014).⁴ The recommendations pertaining to inhaled antibiotics are as follows: 1) Inhaled antibiotic therapy is recommended for the treatment of initial or new growth of *P. aeruginosa* (the favored antibiotic regimen is tobramycin [300 mg twice daily] for 28 days); and 2) Prophylactic antipseudomonal antibiotics to prevent the acquisition of *P. aeruginosa* are not recommended.

POLICY STATEMENT

Prior Authorization is recommended for prescription benefit coverage of Cayston. All approvals are provided for the duration noted below. In cases where the approval is authorized in months, 1 month is equal to 30 days. Because of the specialized skills required for evaluation and diagnosis of patients treated with Cayston as well as the monitoring required for adverse events and long-term efficacy, approval requires Cayston to be prescribed by or in consultation with a physician who specializes in the condition being treated.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Cayston is recommended in those who meet one of the following:

FDA-Approved Indication

- 1. Cystic Fibrosis. Approve for 1 year if the patient meets BOTH of the following (A and B):
 - **A)** Patient has *Pseudomonas aeruginosa* in culture of the airway; AND Note: Examples of culture of the airway include sputum culture, oropharyngeal culture, bronchoalveolar lavage culture.
 - **B)** The medication is prescribed by or in consultation with a pulmonologist or a physician who specializes in the treatment of cystic fibrosis.

Other Uses with Supportive Evidence

2. Continuation of Cayston. Approve for 1 month if the patient was started on Cayston and is continuing a course of therapy.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Cayston is not recommended in the following situations:

- 1. Nasal Rinse. Cayston is not approvable for compounding of aztreonam nasal rinse.
- **2.** Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

- 1. Cayston® inhalation solution [prescribing information]. Foster City, CA: Gilead; November 2019.
- 2. Tiddens HAWM, De Boeck K, Clancy JP, et al. Open label study of inhaled aztreonam for *Pseudomonas* eradication in children with cystic fibrosis: The ALPINE study. *J Cyst Fibros*. 2015;14:111-119.
- 3. Mogayzel PJ, Naureckas ET, Robinson KA, et al. Cystic Fibrosis Pulmonary Guidelines. Chronic Medications for Maintenance of Lung Health. *Am J Respir Crit Care Med*. 2013;187:680-689.
- 4. Mogayzel PJ, Naureckas ET, Robinson KA, et al; and the Cystic Fibrosis Foundation Pulmonary Clinical Practice Guidelines Committee. Pharmacologic approaches to prevention and eradication of initial *Pseudomonas aeruginosa* infection. *Ann Am Thorac Soc.* 2014;11(10):1640-1650.