Clinical Policy: Aztreonam (Cayston)

Reference Number: CP.PHAR.209
Effective Date: 05.01.16
Last Review Date: 02.18
Line of Business: Medicaid

Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description

Aztreonam (Cayston®) is a monobactam antibacterial.

FDA Approved Indication(s)

Cayston is indicated to improve respiratory symptoms in cystic fibrosis (CF) patients with *Pseudomonas aeruginosa*.

Limitation(s) of use:

- Safety and effectiveness have not been established in pediatric patients below the age of 7 years, patients with forced expiratory volume in one second (FEV_1) < 25% or > 75% predicted, or patients colonized with *Burkholderia cepacia*.
- To reduce the development of drug-resistant bacteria and maintain the effectiveness of Cayston and other antibacterial drugs, Cayston should be used only to treat patients with CF known to have *Pseudomonas aeruginosa* in the lungs.

Policy/Criteria

Provider must submit documentation (which may include office chart notes and lab results) supporting that member has met all approval criteria

It is the policy of health plans affiliated with Centene Corporation® that Cayston is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Cystic Fibrosis (must meet all)**:**

1. Diagnosis of CF;
2. Age ≥ 6 years;
3. Pseudomonas aeruginosa is present in at least one airway culture;
4. Member meets one of the following (a or b):
   a. Failure of a trial of TOBI® inhalation solution or TOBI® Podhaler™ unless contraindicated or clinically significant adverse effects are experienced;
   b. Antibiotic susceptibility testing indicates that aztreonam would be more effective than tobramycin;
5. Therapeutic plan does not include concurrent or alternating use of Cayston with inhaled tobramycin (Bethkis®, Kitabis® Pak, TOBI, TOBI Podhaler);
6. Dose does not exceed 225 mg/day administered on a 28 days on/28 days off cycle.

Approval duration: 6 months

B. Other diagnoses/indications

1. Refer to CP.PMN.53 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

II. Continued Therapy

A. Cystic Fibrosis (must meet all)**:**

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. Therapeutic plan does not include concurrent or alternating use of Cayston with inhaled tobramycin (Bethkis, Kitabis Pak, TOBI, TOBI Podhaler);
4. If request is for a dose increase, new dose does not exceed 225 mg/day administered on a 28 days on/28 days off cycle.

Approval duration: 12 months

B. Other diagnoses/indications (must meet 1 or 2)**:**

1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.
   Approval duration: Duration of request or 6 months (whichever is less); or
2. Refer to CP.PMN.53 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policy – CP.PMN.53 or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

CF: cystic fibrosis
FDA: Food and Drug Administration
FEV_1: forced expiratory volume in one second

Appendix B: Therapeutic Alternatives

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
inhaled tobramycin (Bethkis, Kitabis Pak, TOBI, TOBI Podhaler)	Inhalation solution (Bethkis, Kitabis Pak, TOBI): 300 mg inhaled twice daily for 28 days (followed by 28 days off tobramycin therapy) Inhalation powder (TOBI Podhaler): 112 mg (4 capsules) inhaled twice daily for 28 days (followed by 28 days off tobramycin therapy)	Solution: 600 mg/day Powder: 224 mg/day

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.

Appendix C: General Information

- Aztreonam is recommended for chronic use in both mild and moderate-to-severe disease per the American Thoracic Society 2013 CF guidelines. Severity of lung disease is defined by FEV_1 predicted as follows: normal, > 90% predicted; mildly impaired, 70-89% predicted; moderately impaired, 40-69% predicted; and severely impaired, < 40% predicted.
- The use of continuous alternating therapy (i.e., alternating different inhaled antibiotics in order to provide continuous therapy) lacks sufficient evidence. The efficacy of this practice was evaluated in a randomized, double-blind, phase 3 trial. 90 patients received 28-days inhaled tobramycin alternating with either 28-days inhaled aztreonam or placebo. Although the study found reduced exacerbation and respiratory hospitalization rates with the alternating tobramycin/aztreonam regimen compared to tobramycin/placebo, it was underpowered, and these results were not statistically significant.

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
CF	One dose (one single use vial and ampule of diluent) inhaled 3 times a day for 28 days (followed by 28 days off Cayston therapy)	225 mg/day

VI. Product Availability

Vial: 75 mg

VII. References

1. Cayston Prescribing Information. Foster City, CA: Gilead Sciences, Inc.; May 2014. Available at www.cayston.com. Accessed October 27, 2017.
2. Flume PA, Mogayzel PJ, Robinson KA, et al. Cystic fibrosis pulmonary guidelines: treatment of pulmonary exacerbations. Am J Respir Crit Care Med. 2009; 180: 802-808.
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(7): 680-689.
4. Flume PA, Clancy JP, Retsch-Bogart GZ, et al. Continuous alternating inhaled antibiotics for chronic pseudomonal infection in cystic fibrosis. J Cyst Fibrosis. 2016; 15(6): 809-815.

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy split from CP.PHAR.54 CF Treatments. Concurrent use of Cayston with TOBI/TOBI Podhaler is restricted per 2015 expert review citing lack of evidence. Appendix C (clinical reasons to continue CF therapy) is replaced by "Member continues to respond positively to Cayston therapy in one or more of the following areas:	05.16	5.16

Reviews, Revisions, and Approvals	Date	P&T Approval Date
pulmonary function, quality of life, pulmonary exacerbations". Approval periods are extended from 3 to 6 and 6 to 12 months.		
FEV1 delineation of ≤ 90% added to initial criteria. Allergy contraindication removed. B. cepacia restriction removed as it is not a contraindication. Efficacy statement edited to indicate a general positive response to therapy.	05.17	05.17
1Q18 annual review: - Initial: Modified age restriction from ≥ 7 to ≥ 6 years per ATS guideline recommendations. - Removed baseline FEV requirement. - Added Appendix C: General Information -References reviewed updated.	10.27.17	02.18

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.