

**Clinical Policy: Tobramycin (Bethkis, Kitabis Pak, TOBI, TOBI Podhaler)**

Reference Number: CP.PHAR.211

Effective Date: 05.01.16

Last Review Date: 02.18

Line of Business: Commercial, Medicaid

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

**Description**

Tobramycin (Bethkis<sup>®</sup>, Kitabis<sup>™</sup> Pak, TOBI<sup>®</sup>, TOBI<sup>®</sup> Podhaler<sup>™</sup>) is an aminoglycoside antibacterial drug.

**FDA Approved Indication(s)**

Bethkis, Kitabis Pak, TOBI, and TOBI Podhaler are indicated for the management of cystic fibrosis (CF) in patients with *Pseudomonas aeruginosa*. Kitabis Pak is specifically indicated for patients 6 years of age and older.

Limitation(s) of use: Safety and efficacy have not been demonstrated in patients under the age of 6 years, patients with forced expiratory volume in one second (FEV<sub>1</sub>) < 25% or > 75% predicted (< 40% or > 80% predicted for Bethkis), or patients colonized with *Burkholderia cepacia*.

**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<sup>®</sup> that Bethkis, Kitabis Pak, TOBI, and TOBI Podhaler are **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. Therapeutic plan does not include concurrent or alternating use of inhaled tobramycin with inhaled aztreonam (Cayston<sup>®</sup>);
5. Dose does not exceed (a or b):
  - a. Inhalation solution (Bethkis, Kitabis Pak, TOBI): 600 mg/day administered on a 28 days on/28 days off cycle;
  - b. Inhalation powder (TOBI Podhaler): 224 mg/day administered on a 28 days on/28 days off cycle.

**Approval duration:**

**Medicaid** – 6 months

**Commercial** – Length of Benefit

**B. Other diagnoses/indications**

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1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial and CP.PMN.53 for Medicaid.

**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 inhaled tobramycin with inhaled aztreonam (Cayston);
4. If request is for a dose increase, new dose does not exceed (a or b):
  - a. Inhalation solution (Bethkis, Kitabis Pak, TOBI): 600 mg/day administered on a 28 days on/28 days off cycle;
  - b. Inhalation powder (TOBI Podhaler): 224 mg/day administered on a 28 days on/28 days off cycle.

**Approval duration:****Medicaid** – 12 months**Commercial** – Length of Benefit**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 the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial and CP.PMN.53 for Medicaid.

**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 policies – CP.CPA.09 for commercial and CP.PMN.53 for Medicaid or evidence of coverage documents.

**IV. Appendices/General Information***Appendix A: Abbreviation/Acronym Key*

CF: cystic fibrosis

FDA: Food and Drug Administration

FEV<sub>1</sub>: forced expiratory volume in one second*Appendix B: Therapeutic Alternatives*

Not applicable

*Appendix C: General Information*

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- Tobramycin 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<sub>1</sub> 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

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

#### VI. Product Availability

Drug Name	Availability
Tobramycin inhalation solution (Bethkis)	4 mL single-dose ampule: 300 mg
Tobramycin inhalation solution (Kitabis Pak)	5 mL single-dose ampule: 300 mg Co-packaged with a PARI LC PLUS Reusable Nebulizer
Tobramycin inhalation solution (TOBI)	5 mL single-dose ampule: 300 mg
Tobramycin inhalation powder (TOBI Podhaler)	Capsule: 28 mg

#### VII. References

1. Bethkis Prescribing Information. Woodstock, IL: Catalent Pharm Solutions, LLC; July 2017. Available at <http://www.bethkis.com>. Distribution network available at [https://bethkis.com/wp-content/uploads/2015/10/BETHKIS-SpecialtyPharmacyInsert\\_R1-PRB.pdf](https://bethkis.com/wp-content/uploads/2015/10/BETHKIS-SpecialtyPharmacyInsert_R1-PRB.pdf). Accessed October 27, 2017.
2. Kitabis Pak Prescribing Information. Woodstock, IL: Catalent Pharm Solutions, LLC; November 2014. Available at <http://kitabis.com>. Accessed October 27, 2017.
3. TOBI Prescribing Information. East Hanover, NJ: Novartis Pharmaceuticals Corporation; October 2015. Available at <https://www.pharma.us.novartis.com/sites/www.pharma.us.novartis.com/files/tobi.pdf>. Accessed October 27, 2017.

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4. TOBI Podhaler Prescribing Information. East Hanover, NJ: Novartis Pharmaceuticals Corporation; October 2015. Available at <https://www.tobipodhaler.com>. Accessed October 27, 2017.
5. 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.
6. 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*. April 1, 2013; 187 (7): 680-689.
7. 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.

#### Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J7682	Tobramycin, inhalation solution, FDA-approved final product, noncompounded, unit dose form, administered through DME, per 300 mg
J7685	Tobramycin, inhalation solution, compounded product, administered through DME, unit dose form, per 300 mg

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 TOBI/TOBI Podhaler therapy in one or more of the following areas: pulmonary function, quality of life, pulmonary exacerbations.” Approval periods are extended from 3 to 6 and 6 to 12 months. Added Kitabis Pak.	05.16	5.16
Bethkis added (limited distribution – see references for distribution network). Kitabis authorized generic added. FEV1 delineation of $\leq 90\%$ added to initial criteria. Allergy contraindication removed. Efficacy statement edited to indicate a general positive response to therapy.	05.17	05.17
1Q18 annual review: - Policies combined for Centene Medicaid and Commercial lines of business.	10.27.17	02.18

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Reviews, Revisions, and Approvals	Date	P&T Approval Date
<ul style="list-style-type: none"> <li>- Medicaid: Removed baseline FEV requirement.</li> <li>- Commercial: Added requirement for no concurrent/alternating use with aztreonam.</li> <li>Added Appendix B: General Information</li> <li>- References reviewed and updated</li> </ul>		

#### **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.

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**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.

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