09-J5000-28

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Reviewed: 03/11/26

Revised: 04/15/26

Subject: Brensocatib (Brinsupri) Tablets

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

DESCRIPTION:

Non-cystic fibrosis bronchiectasis (NCFB) is a chronic, often progressive suppurative lung disease characterized by irreversibly dilated bronchi and bronchial infection and inflammation that may be focal or diffuse with involvement of both lungs. The condition is marked by recurrent respiratory infections and frequent pulmonary exacerbations (PExs) with about one-half of patients experiencing two or more PExs per year and one-third requiring at least one hospitalization per year. The prevalence of bronchiectasis is more common in females than males and increases significantly with age, with 562 cases per 100,000 in adults greater than and equal to 65 years of age. Diagnosis of NCFB is based on a combination of clinical history (e.g., cough, sputum production, history of exacerbations) and chest computed tomography (CT) scan features such as bronchial airway dilatation, airway wall thickening, and lack of tapering of the airways towards the periphery of the chest. Management includes systemic and inhaled antibiotics for infections, expectorants, inhaled bronchodilators, anti-inflammatory medications, and anti-gastroesophageal reflux therapies to reduce sputum production and exacerbations. Non-drug therapies include pulmonary rehabilitation and use of airway clearance devices/techniques.

On August 12, 2025, the FDA approved brensocatib (Brinsupri) for the treatment of non-cystic fibrosis bronchiectasis (NCFB) in adult and pediatric patients 12 years of age and older. Brensocatib (Brinsupri) is a competitive, reversible inhibitor of dipeptidyl peptidase 1 (DPP1). DPP1 activates pro-inflammatory neutrophil serine proteases (NSPs) during neutrophil maturation in the bone marrow. Activated NSPs are implicated in the pathogenesis of neutrophil-mediated NCFB inflammation. In cell-based assays, DPP1 inhibition by brensocatib (Brinsupri) reduces the activity of NSPs including neutrophil elastase, cathepsin G, and proteinase 3.

According to the prescribing information, the efficacy and safety of brensocatib (Brinsupri) were evaluated in two randomized, double-blind, placebo controlled, parallel-group, multicenter, multinational clinical trials (ASPEN and WILLOW). ASPEN was a 52-week trial that included 1,721 adult and pediatric patients 12 years of age and older with NCFB (1,680 adults and 41 pediatric patients) who were randomized to brensocatib 10 mg (n = 583), brensocatib 25 mg (n = 575), or placebo (n = 563) administered orally once daily. Adult patients had a history of confirmed NCFB by chest computed tomography with at least 2 documented pulmonary exacerbations with need for an antibiotic prescription prior to screening in the past 12 months, and pediatric patients had at least one PEx in the prior 12 months. The primary efficacy endpoint was the annualized rate of PEx over the 52-week treatment period. Pulmonary exacerbations

were defined as worsening of 3 or more of the following major symptoms over 48 hours (i.e., increased cough, increased sputum volume or change in sputum consistency, increased sputum purulence, increased breathlessness, decreased exercise tolerance, fatigue and/or malaise, and hemoptysis, resulting in a healthcare provider's decision to prescribe systemic antibiotics). Pulmonary exacerbations were considered severe if requiring treatment with intravenous antibacterial drugs and/or resulted in hospitalization. Treatment with brensocatib (Brinsupri) 10 mg or 25 mg in patients with NCFB demonstrated reductions in the mean rate of PEx over 52 weeks compared with placebo. Table 1 summarizes the study results.

Table 1: Primary and Secondary Efficacy Analyses of Pulmonary Exacerbations and FEV1 Over 52 Weeks in the ASPEN study

	Placebo (N=563)	Brensocatib 10 mg (N=583)	Brensocatib 25 mg (N=575)
Annualized Rate of PEx	1.29	1.02	1.04
Rate Ratio (95% CI)	--	0.79 (0.68, 0.92)	0.81 (0.69, 0.94)
Median Time to First PEx (weeks)	36.71	49.00	50.71
Hazard Ratio (95% CI)	--	0.81 (0.70, 0.95)	0.83 (0.70, 0.97)
Proportion of Patients that were PEx Free at Week 52 (%)	40.3	48.5	48.5
Odds Ratio (95% CI)	--	1.41 (1.11, 1.81)	1.40 (1.10, 1.79)
Annualized Rate of Severe PEx	0.19	0.14	0.14
Rate Ratio (95% CI)	--	0.74 (0.51, 1.09)	0.74 (0.52, 1.06)
LS Mean Change from Baseline in Post-Bronchodilator FEV1 (mL) at Week 52	-62	-50	-24
Difference vs Placebo (95% CI)	--	11 (-14, 37)	38 (11, 65)
Abbreviations: FEV1, forced expiratory volume in 1 second; LS, least squares; PEx, pulmonary exacerbation			

WILLOW was a 24-week trial that included 256 adult patients with NCFB who were randomized to brensocatib 10 mg (n = 82), brensocatib 25 mg (n = 87), or placebo (n = 87) administered orally once daily. All adult patients had a history of confirmed NCFB by chest computed tomography with at least 2 documented pulmonary exacerbations (PEx) prior to screening in the past 12 months. The primary efficacy endpoint in WILLOW was the time to first PEx over the 24-week treatment period. The time to first PEx was longer for patients receiving brensocatib 10 mg and 25 mg compared to placebo (hazard ratio for brensocatib 10 mg and 25 mg versus placebo; 0.58 and 0.62, respectively; 95% CI: 0.35 to 0.95 and 0.38 to 0.99, respectively).

The most common adverse reactions with brensocatib (Brinsupri) (incidence >2%) are upper respiratory tract infection, headache, rash, dry skin, hyperkeratosis, and hypertension.

POSITION STATEMENT:

Comparative Effectiveness

The Food and Drug Administration has deemed the drug(s) or biological product(s) in this coverage policy to be appropriate for self-administration or administration by a caregiver (i.e., not a healthcare professional). Therefore, coverage (i.e., administration) in a provider-administered setting such as an

outpatient hospital, ambulatory surgical suite, physician office, or emergency facility is not considered medically necessary.

Initiation of brensocatib (Brinsupri) **meets the definition of medical necessity** when **ALL** of the following criteria are met:

1. Diagnosis of non-cystic fibrosis bronchiectasis
2. Member is at least 12 years of age
3. Clinical symptoms consistent with bronchiectasis (e.g., cough, chronic sputum production, recurrent respiratory infections) – Documentation must be submitted
4. One of the following ("a" or "b"): - Documentation must be submitted
    a. If 18 years of age or older, evidence of at least two pulmonary exacerbations that required an antibiotic prescription within the past 12 months
    b. If 12 to 17 years of age, evidence of at least one pulmonary exacerbation that required an antibiotic prescription within the past 12 months
5. CT scan confirming bronchiectasis (e.g., bronchial airway dilatation, airway wall thickening, lack of tapering of the airways towards the periphery of the chest) – Documentation must be submitted
6. Prescribed by, or in consultation with, a specialist with experience in managing bronchiectasis

    (e.g., pulmonologist, infectious disease)
7. Dose will not exceed 25 mg by mouth once daily

Approval duration: 1 year

Brensocatib (Brinsupri) is considered **experimental** or **investigational** for any other indications due to insufficient evidence in the peer-reviewed medical literature to support safety, efficacy, and net health outcome.

Continuation of brensocatib (Brinsupri) **meets the definition of medical necessity** for members meeting the following criteria:

1. Authorization/reauthorization for the requested agent has been previously approved by Florida Blue or another health plan in the past 2 years (if another health plan, documentation of a health plan-paid claim during the 90 days before the authorization request must be submitted), OR the member has previously met ALL indication-specific initiation criteria.
2. Member has a clinical meaningful response (i.e., stabilization or reduction in cough, sputum production, recurrent respiratory infections, pulmonary exacerbations)
3. Prescribed by, or in consultation with, a specialist with experience in managing bronchiectasis

    (e.g., pulmonologist, infectious disease)
4. Dose will not exceed 25 mg by mouth once daily

Approval duration: 1 year

DOSAGE/ADMINISTRATION:

THIS INFORMATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE USED AS A SOURCE FOR MAKING PRESCRIBING OR OTHER MEDICAL DETERMINATIONS. PROVIDERS SHOULD REFER TO THE MANUFACTURER'S FULL PRESCRIBING INFORMATION FOR DOSAGE GUIDELINES AND OTHER INFORMATION RELATED TO THIS MEDICATION BEFORE MAKING ANY CLINICAL DECISIONS REGARDING ITS USAGE.

FDA-approved

- Brensocatib (Brinsupri) is a dipeptidyl peptidase 1 (DPP1) inhibitor indicated for the treatment of non-cystic fibrosis bronchiectasis in adult and pediatric patients 12 years of age and older.
- The recommended dosage of brensocatib (Brinsupri) is 10 mg or 25 mg orally once daily with or without food.

Dose Adjustments

- None

Drug Availability

- Brensocatib (Brinsupri) is available as tablets:
  - 10 mg - brown, round, film-coated tablets debossed with “10” on one side and “BRE” on the other side (NDC: 71558-001-30)
  - 25 mg - gray, round, film-coated tablets debossed with “25” on one side and “BRE” on the other side (NDC: 71558-002-30)

PRECAUTIONS:

Boxed Warning

- None

Contraindications

- None

Precautions/Warnings

- **Dermatologic Adverse Reactions:** Treatment with brensocatib (Brinsupri) is associated with an increase in dermatologic adverse reactions, including rash, dry skin, and hyperkeratosis. Monitor patients for development of new rashes or skin conditions and refer patients to a dermatologist for evaluation of new dermatologic findings.
- **Gingival and Periodontal Adverse Reactions:** Treatment with brensocatib (Brinsupri) is associated with an increase in gingival and periodontal adverse reactions. Refer patients to dental care services for regular dental checkups while taking brensocatib (Brinsupri). Advise patients to perform routine dental hygiene.
- **Live Attenuated Vaccines:** The concomitant use of brensocatib (Brinsupri) and live attenuated vaccines has not been evaluated. It is unknown whether administration of live attenuated vaccines during brensocatib (Brinsupri) treatment will affect the safety or effectiveness of these vaccines. The use of live attenuated vaccines should be avoided in patients receiving brensocatib (Brinsupri).

BILLING/CODING INFORMATION:

The following codes may be used to describe:

HCPCS Coding

J8499	Prescription drug, oral, non-chemotherapeutic, not otherwise specified

ICD-10 Diagnosis Codes That Support Medical Necessity

J47.0	Bronchiectasis with acute lower respiratory infection

J47.1	Bronchiectasis with (acute) exacerbation
J47.9	Bronchiectasis, uncomplicated

REIMBURSEMENT INFORMATION:

Refer to section entitled **POSITION STATEMENT**.

PROGRAM EXCEPTIONS:

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Part D: Florida Blue has delegated to Prime Therapeutics authority to make coverage determinations for the Medicare Part D services referenced in this guideline.

Medicare Advantage: The following National Coverage Determination (NCD) was reviewed on the last guideline revised date: Self-administered Drug List (A54770). No Local Coverage Determination (LCD) was found at the time of the last guideline revised date.

If this Medical Coverage Guideline contains a step therapy requirement, in compliance with Florida law 627.42393, members or providers may request a step therapy protocol exemption to this requirement if based on medical necessity. The process for requesting a protocol exemption can be found at Coverage Protocol Exemption Request.

DEFINITIONS:

None

RELATED GUIDELINES:

None

OTHER:

None

REFERENCES:

1. Brinsupri (brensocatib) [package insert]. Bridgewater, NJ: Insmed Incorporated; August 2025.
2. Clinical Pharmacology powered by ClinicalKey [Internet]. Tampa, FL: Elsevier.; 2025. Available at: https://www.clinicalkey.com/pharmacology/. Accessed 2/25/26.
3. DRUGDEX System [Internet]. Greenwood Village (CO): Thomson Micromedex; Updated periodically [cited 2026 February 25].
4. DynaMed [database online]. Ipswich, MA: EBSCO Information Services.; 2025. URL http://www.dynamed.com. Accessed 9/26/25.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Pharmacy Policy Committee on 03/11/26.

GUIDELINE UPDATE INFORMATION:

01/01/26	New Medical Coverage Guideline: Brensocatib (Brinsupri) for the treatment of non-cystic fibrosis bronchiectasis in adult and pediatric patients 12 years of age and older who have confirmed disease based on clinical history and CT scan.
04/15/26	Revision to the position statement to allow one rather than two pulmonary exacerbations requiring an antibiotic prescription within the past 12 months for patients 12 to 17 years of age and extending the initial approval from 6 months to 1 year and updating references.