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Subject: Bronchial Thermoplasty

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.

Position Statement	Billing/Coding	Reimbursement	Program Exceptions	Definitions	Related Guidelines
Other	References	Updates			

DESCRIPTION:

Bronchial thermoplasty (BT) is a procedure that delivers thermal energy to the airways via a flexible bronchoscope to ablate and reduce the mass of airway smooth muscle. Bronchial thermoplasty is intended as a supplemental treatment for patients with severe persistent asthma (i.e., steps 5 and 6 in the stepwise approach to care).

Bronchial thermoplasty procedures are performed on an outpatient basis with moderate sedation, and last approximately one hour each. During the procedure, a standard flexible bronchoscope is placed through the patient's mouth or nose into the most distal targeted airway and a catheter is inserted into the working channel of the bronchoscope. After placement, the electrode array in the top of the catheter is expanded and radiofrequency energy is delivered from a proprietary controller and used to heat tissue to 65 degrees Centigrade over a 5 mm area. The positioning of the catheter and application of thermal energy is repeated several times in contiguous areas along the accessible length of the airway. At the end of the treatment session, the catheter and bronchoscope are removed. A course of treatment consists of 3 separate procedures in different regions of the lung, scheduled approximately 3 weeks apart.

In April 2010, the Alair Bronchial Thermoplasty System (Asthmatx, Inc., Sunnyvale, CA) was approved by the FDA through the premarket approval (PMA) process for use in adults with severe and persistent asthma whose symptoms are not adequately controlled with inhaled corticosteroids and long-acting beta agonists. Use of the treatment is contraindicated in patients with implantable devices and those with sensitivities to lidocaine, atropine or benzodiazepines. It should also not be used while patients are experiencing an asthma exacerbation, active respiratory infection, bleeding disorder, or within 2 weeks of making changes in their corticosteroid regimen. The same area of the lung should not be treated more than once with bronchial thermoplasty.

Summary and Analysis of Evidence: Bronchial thermoplasty is an advanced therapy for severe asthma. It is a bronchoscopic procedure in which radiofrequency energy is applied to the airway wall, resulting in decreased airway smooth muscle burden. Human trials have shown that bronchial thermoplasty may reduce asthma exacerbations and improve quality of life in patients with severe uncontrolled asthma. It has been demonstrated to be a safe procedure, with most adverse events being early and mild. More studies are required to understand the precise effects of bronchial thermoplasty on the asthmatic airway and optimal para meters to appropriately select patients for this novel procedure (Mainardi et al 2019).

In a report from the National Asthma Education and Prevention Program Coordinating Committee Expert Panel Working Group, the Expert Panel states that most individuals ages 18 years and older with uncontrolled, moderate-to-severe, persistent asthma should not undergo BT to treat asthma because the benefits are small, the risks are moderate, and the long-term outcomes are uncertain. Some individuals with moderate-to-severe persistent asthma who have troublesome symptoms may be willing to accept the risks of BT and, therefore, might choose this intervention after shared decision-making with their health care provider. Clinicians should offer the procedure in the setting of a clinical trial or a registry study to enable the collection of long-term data on the use of BT for asthma (Elward, 2021).

POSITION STATEMENT:

Bronchial thermoplasty for the treatment of asthma and all other indications is considered **experimental or investigational**. There is insufficient clinical evidence published in the peer-reviewed literature regarding safety and long-term efficacy of bronchial thermoplasty on health outcomes.

BILLING/CODING INFORMATION:

CPT Coding:

31660	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with bronchial thermoplasty, 1 lobe **(investigational)**
31661	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with bronchial thermoplasty, 2 or more lobes **(investigational)**

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 Advantage products: No National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) were found at the time of the last guideline reviewed 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:

Stepwise approach to care: Guidelines from the National Heart, Lung and Blood Institute (NHLBI) define 6 pharmacologic steps for the treatment of asthma (step 1 for intermittent asthma, and steps 2 – 6 for persistent asthma) for individual's ≥ 12 years of age.

The preferred daily medications:

Step 1 Short-acting beta-agonists as needed;

Step 2 Low-dose inhaled corticosteroids (ICS);

Step 3 ICS and long-acting beta-agonists (LABA) or medium-dose ICS;

Step 4 Medium dose ICS and LABA;

Step 5 High-dose ICS and LABA; **AND**

Step 6 High-dose ICS and LABA, and oral corticosteroids.

RELATED GUIDELINES:

None applicable.

OTHER:

Note: The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.

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COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 08/28/25.

GUIDELINE UPDATE INFORMATION:

08/15/10	New Medical Coverage Guideline.
08/15/11	Annual review; position statement unchanged; references updated.
01/01/12	Annual HCPCS coding update: added 0276T and 0277T.
09/15/12	Annual review; position statement unchanged; references updated.
01/01/13	Annual HCPCS coding update: added 31660 and 31661; removed 0276T and 0277T.
09/15/13	Scheduled review; position statement unchanged; Program Exceptions section updated; references updated.
09/15/14	Annual review; position statement unchanged; Program Exceptions section updated; references updated.
11/01/15	Revision: ICD-9 Codes deleted.
09/15/16	Review; no change in position statement. Updated description and references.
03/06/17	Updated program exceptions.
08/15/17	Review; no change in position statement. Updated references.
11/15/17	Revised position statement; added and all indications.
09/15/18	Review; revised position statement. Updated references.
08/15/19	Review; no change in position statement. Updated references.
09/15/21	Review; no change in position statement. Updated references.
09/15/23	Review; no change in position statement. Updated references.
09/15/24	Review; no change in position statement. Updated references.

09/15/25	Review; no change in position statement. Updated references.