



UM-CDG-046 Endobronchial Valves for the Treatment  
of Emphysema

Approved By:  
Director, Health Services

Effective Date:  
10/22/2025

*This Policy applies to all SECUR affiliates, associates, and subsidiaries.*

Approved by Courtney Gonzales, Director of Health Services on behalf of the Utilization Management Committee.

## PURPOSE

This coverage determination guideline serves to address endobronchial valves for the treatment of emphysema, a long-term, progressive form of chronic obstructive pulmonary disease (COPD) involving damage to the alveoli where oxygen and carbon dioxide exchange occurs. The lung tissue eventually loses elasticity and may hyperinflate, resulting in poor gas exchange and breathing difficulties.

Endobronchial valves (EBVs) are less invasive alternatives to lung volume reduction surgery (LVRS) in emphysema where damaged tissue is surgically removed to make the lungs smaller and allowing for better function. EBVs treat those with shortness of breath and hyperventilation associated with severe emphysema in regions of the lung that have evidence of little to no collateral ventilation. During the placement of the EBVs, a bronchoscope is inserted through the mouth and passes through the larynx and trachea into the bronchial pathways. Once the scope reaches the damaged area of the lung, a one-way valve is implanted to prevent airflow into the area while allowing trapped air and fluid to escape. Based on the condition of the lung, multiple valves may be implanted.

Examples of US Food and Drug Administration (FDA) approved devices include Spiration Valve System and Zephyr Endobronchial Valve. The SeleCT system, used with the Spiration Valve System, is a quantitative computed tomography (QCT) based screening tool used to determine if a person is eligible for valve placement. The Chartis System, used with the Zephyr Endobronchial Valve consists of a console and catheter and provides precise flow and pressure reading to assess for the presence of collateral ventilation prior to valve placement.

For SECUR Health Plan members, National Coverage Determinations (NCD) and Local Coverage Determinations (LCD) will be applied to requests when applicable. SECUR Health Plan Coverage Determination Guidelines (CDG) will be utilized in the absence of an appropriate NCD and/or LCD.

## DEFINITIONS

None

## POLICY

SECUR Health Plan considers endobronchial valve placement for the treatment of severe emphysema as medically necessary when the following are met:

1. Absence of contraindications, and
2. Body mass index (BMI) is greater than 15 kg/m<sup>2</sup> and less than 35 kg/m<sup>2</sup>, and
3. Devices is FDA approved, and

4. Diffusion capacity for carbon monoxide (DCLO) greater than 20% predicted value at initial evaluation, and
5. Forced expiratory volume (FEV1) greater than or equal to 15% and less than or equal to 45% of predicted value at initial evaluation, and
6. High resolution computed tomography (HRCT) obtained within the last ninety days demonstrates at least one of the following:
  - Emphysema heterogeneity score of greater than 15%, or
  - Large bullae encompassing less than 30% of either lung, or
  - Parenchymal destruction score of less than 75% in all three right lobes or both left lobes, and
7. Member is not actively smoking any substance for at least four (4) months prior to the date of anticipated surgery, and
8. Member completes the 6-minute walk test with greater than 100 meters at initial evaluation, and
9. Member is at least 18 years of age, and
10. Little to no collateral ventilation (CV-) as determined using the Chartis or SeleCT systems, and
11. PaCO<sub>2</sub> less than 55 mmHg on room air at initial evaluation, and
12. PaO<sub>2</sub> greater than 44 mmHg on room air at initial evaluation, and
13. Recent completion within six (6) months of evaluation of a supervised pulmonary rehabilitation program, and
14. Residual volume(RV) greater than 150% predicted at initial evaluation, and
15. Stable with 20 milligrams or less of prednisone daily, and
16. Total lung capacity (TLC) greater than or equal to 100% predicted at initial evaluation

SECUR Health Plan will consider endobronchial valve placement as not medically necessary for any of the following:

1. COPD exacerbation or respiratory infection requiring hospitalization within the last 90 days
2. Evidence of active pulmonary infection
3. Homogenous emphysema (for Spiration valves only)
4. Member has not quit smoking
5. Member unable to tolerate bronchoscope procedures
6. Known allergy to Nitinol (nickel-titanium) or its constituent metals (nickel and/or titanium) or known allergy to silicone
7. Presence of alpha-1 anti-trypsin deficiency
8. Prior lung transplant, LVRS, bullectomy, or lobectomy
9. Uncontrolled pulmonary hypertension (systolic pulmonary arterial pressure greater than 50 mmHg) or evidence or history of cor pulmonale as determined by recent echocardiogram

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