

## Bronchoscopic Lung Volume Reduction with Endobronchial Valves

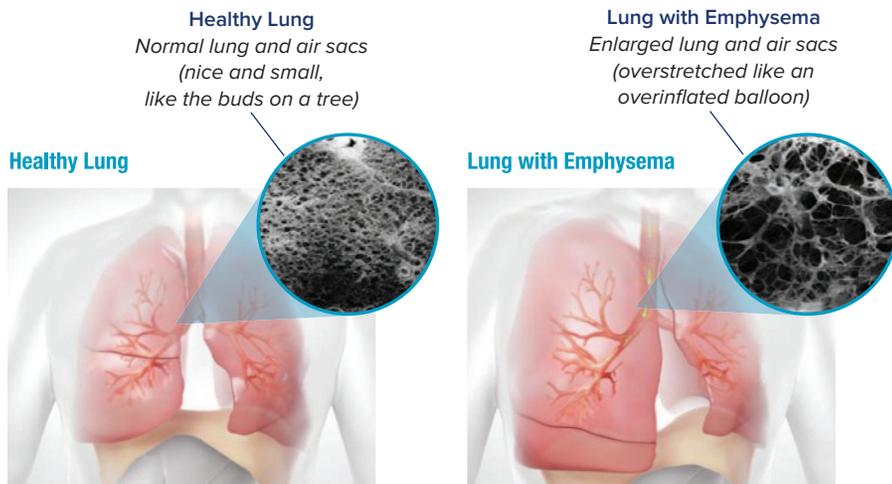


Inova Lung Services



## Breathe Easier with Bronchoscopic Lung Volume Reduction

Bronchoscopic lung volume reduction (BLVR) is a nonsurgical procedure to treat advanced emphysema by placing tiny valves in the airways. The procedure takes about an hour and requires no cutting or incisions. During BLVR, an interventional pulmonologist will place an average of four valves in your airways to help you breathe easier and experience a better quality of life.



## What are Endobronchial Valves?

Endobronchial valves are the first FDA-approved, minimally invasive devices available in the United States to treat patients with severe emphysema. These groundbreaking valves allow one lobe of the lung to deflate and release the trapped air. This lets healthier parts of the lung expand and take in more air. Patients treated with endobronchial valves have reported immediate relief, including:

- Breathing easier with reduced shortness of breath
- Feeling more active and energetic
- Enjoying a significantly improved quality of life compared to untreated patients

Inova uses two types of endobronchial valves: the Zephyr® Endobronchial Valve and the Spiration® Valve System. Our interventional pulmonology team will choose the best valve for you, based on your evaluation test results.

Zephyr® Endobronchial Valve



Spiration® Valve System



Zephyr Valve. Image courtesy of Pulmatrix Corp.



## Procedure Schedule

Procedure Date: \_\_\_\_\_

Time: \_\_\_\_\_

### Procedure Location and Check-in:

Inova Fairfax Medical Campus  
3300 Gallows Rd.  
Falls Church, VA 22042

On the day of your BLVR, **please arrive at Respiratory Services one hour before your scheduled procedure time.** We will send you detailed directions on how to get to the suite when your procedure is scheduled.

### Inpatient Hospital Stay

You will be admitted to the hospital for three to five days following your procedure.

## Your BLVR Procedure

### Step 1: Procedure

Your BLVR procedure will take about one hour. During the procedure:

- An anesthesiologist will administer medicine to put you to sleep.
- A small tube with a camera, called a bronchoscope, will be inserted through your mouth and into your lung.
- Three to seven endobronchial valves will be placed in your airways to block off the most diseased lobe of your lung.

### Step 2: Post-Procedure Recovery

Immediately following the procedure, you will be taken to the interventional pulmonology recovery area for approximately one hour. When you are awake and ready for visitors, the recovery nurse will notify your loved ones.

### Step 3: Hospital Stay

After recovery, you will be transported to an acute care unit and admitted as an inpatient, where:

- You will be monitored for risk of pneumothorax, or a “collapsed lung.” This can occur when lung tissue tears, allowing air to leak into the space between the lung and chest wall. The leaked air pushes on the outside of the lung, causing it to collapse.
- You will continue the medications your doctor has prescribed for your condition.
- You will be evaluated daily by the interventional pulmonology team.

During your hospital stay:

- You will be able to shower.
- You may use your own toiletries, slippers, walking shoes, entertainment material (books, games, etc.), and eat your favorite snacks.
- You will be encouraged to get up and walk, when appropriate.
- You may be asked to continue taking your medications from home. Check with the lung navigator about which medications you should bring with you.

<b>Day 1</b> <i>(Day of procedure)</i>	You will remain in your bed and rest.
<b>Day 2</b>	You will walk around your room.
<b>Day 3</b>	You will walk around the hospital unit.
<b>Additional Days</b>	Your physician will let you know if you need to stay in the hospital longer for additional monitoring and recovery.

#### Step 4: Hospital Discharge

When it is time for you to be discharged from the hospital:

- We will **schedule a follow-up appointment with your interventional pulmonologist within 15 days** of your procedure. We will notify you of the date and time.
  - We will issue you two critical items: a red silicone bracelet and an information card.
1. The **red silicone bracelet** alerts emergency medical teams to your endobronchial valves and increased risk of a tear in the lung. **Do not remove the red bracelet, even to bathe.** Your interventional pulmonologist will tell you when you can stop wearing it (typically at your follow-up appointment).
  2. The **information card** contains your interventional pulmonologist's contact information and a description of the endobronchial valves, including why one of the lobes in your lung is deflated. **Keep the information card with you at all times** and show it to anyone who gives you medical care, including emergency room staff, ambulance responders, radiology technicians, etc.

#### Step 5: Follow-up Care at Home

When you are at home, please follow these guidelines:

- Do not remove your red bracelet.
- Keep your information card with you at all times.
- Continue to use the medications your doctor has prescribed for you, including oxygen.
- Walk at a normal pace for short distances only. Do not exert yourself physically.
- Follow up with your interventional pulmonologist at your scheduled appointment. Be sure to note any questions you have for the doctor, and bring them with you to the appointment.
- Once cleared by your interventional pulmonologist, you may continue pulmonary rehabilitation.

#### When to Seek Medical Help



Seek medical help immediately if you experience any of the following symptoms:

- Sudden chest pain
- Shortness of breath
- Rapid breathing or coughing
- Rapid heart rate
- Sudden dizziness
- Coughing up blood (any amount)



**Your endobronchial valves will not set off metal detectors at security checkpoints.**

#### Questions or Concerns

If you have any questions after your BLVR, including questions about your endobronchial valves, call us at **703.776.4712**.

Interventional Pulmonology Program  
Inova Fairfax Medical Campus  
3300 Gallows Rd.  
Falls Church, VA 22042  
P: 703.776.4712  
[inovalung.org](http://inovalung.org)

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### Procedure Location

Inova Fairfax Medical Campus  
3300 Gallows Rd.  
Falls Church, VA 22042

### Clinic Location

Inova Schar Cancer Institute  
White Oak Clinic  
8081 Innovation Park Dr.  
Fairfax, VA 22031