Lung Function Improvement after Bronchoscopic Lung Volume Reduction with Pulmonx Endobronchial Valves used in Treatment of Emphysema (LIBERATE)

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Purpose: To investigate the safety and effectiveness of the Pulmonx Zephr Endobronchial Valve (EBV) that is designed to produce lung volume reduction for people suffering from emphysema compared to a standard medical therapy program.

Background: Emphysema is a serious disease and is one form of Chronic Obstructive Pulmonary Disease, or COPD that affects five million people in the US. Emphysema causes the lungs to lose the ability to move air in and out normally and to efficiently absorb oxygen. Eventually, breathing becomes more difficult as damaged parts of the lungs trap air. As the disease advances, the damaged, areas of the lung progressively expand within the chest cavity, leaving one constantly feeling out of breath.

Mechanism: Lung volume reduction is a concept by which the trapped air in the affected portions of the lungs is released, thereby allowing the normal areas of the lungs to work better. This can be done in minimally-invasive fashion with EBV valve inserted through a bronchoscope, a fiber-optic camera tube. The EBV is a one-way valve that blocks off the affected lung section to inhaled air but lets the trapped air already inside the area escape. With the placement of the EBV, affected part of the lung deflates which allows the healthier parts of the lung to expand to function more efficiently with improved breathing.

Eligibility: Patients who may qualify to participate in LIBERATE study include but not limited to

Inclusion Criteria
- Clinical and radiological evidence of emphysema
- Age: 40 Years to 75 Years
- Nonsmoking for 4 months prior to screening interview
- BMI less than 35 kg/m2

Exclusion Criteria
- Had two or more hospitalizations over the last year for a COPD exacerbation
- Had two or more hospitalizations over the last year for pneumonia
- Had a prior lung transplant, lung volume reduction surgery, bullectomy or lobectomy
- Had a heart attack or congestive heart failure within the last 6 months

If you are interested in learning more about this study please visit our website at www.elcaminohospital.org/ClinicalTrials or call Sharmila Vetri Villalan, Clinical Research Coordinator at 650-962-4463.
The Zephyr EBV is a one-way valve that blocks off the diseased lung section to inhaled air but lets the trapped air already inside the area escape as shown below in the diagram below.

In this minimally invasive procedure, Zephyr EBV valves are placed in the affected region of the lung. The one-way valves block airflow into the diseased region (green arrows) and allow trapped air and fluids to escape (orange arrows).

Disclaimer: The above Image isn’t scaled to reflect original size of the device.

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