



Clinical Spotlight

Improving Patient Quality of Life with Zephyr® Valves

Patient: Male, 65 years old

Patient Profile

Quality of Life Goal

Be able to breathe without struggling and move around without difficulty

Condition

- Diffuse homogeneous emphysema

Smoking History

- 30 pack-years

Management Medications

- Maximal medical therapy with a LAMA, LABA, ICS, prednisone 5mg daily, and roflumilast

Oxygen Use

- 3L/min

Baseline FEV₁

- 24% predicted

Symptoms

- Shortness of breath
- Incapacitating dyspnea

Special Notes

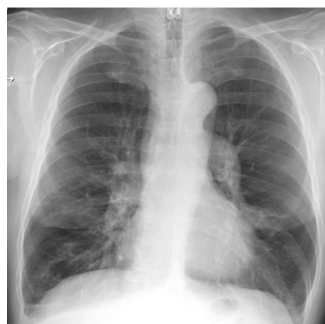
- Comorbidities: Chronic hypoxia, lupus, rheumatoid arthritis, diastolic heart failure, and pulmonary hypertension (TTE: PASP 59 mm Hg., RHC:PAP 35/21/26)

Procedure Details:

- Collateral ventilation negative (confirmed with Chartis® Pulmonary Assessment System)
- Six Zephyr Valves placed in left upper lobe (LUL)
- Total procedure time—25 mins

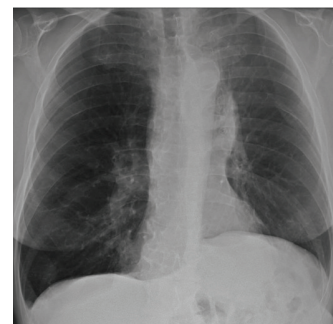
Pre and Post-Procedure Imaging:

PRE-PROCEDURE



Evidence of hyperinflation with flattening of the diaphragm

POST-PROCEDURE



Atelectasis of LUL with elevation of left hemidiaphragm

zephyr®
valve

Pre and Post-Procedure Lung Function Chart:

ASSESSMENT	PRE-PROCEDURE	POST-PROCEDURE (3 MONTHS)
FEV ₁ (% pred)	24%	31%
RV (% pred)	235%	129%
TLC (% pred)	126%	95%
DLCO (% pred)	46%	53%
6MWD	160 m	320 m
Oxygen usage	3L/min	2L/min

Case was completed by Dr. Jonathan Kurman at Medical College of Wisconsin, Wauwatosa, WI

Patient Outcomes:

- 33% decrease in oxygen use
- 100% increase in 6MWD
- 30% increase in FEV₁
- Post-treatment StratX® Lung Report shows 100% Target lobar volume reduction (TLVR) with 1532 mL inspiratory volume
- Disease symptoms are more controlled
- Overall improvement in quality of life
- Able to handle everyday tasks around the house

100% INCREASE IN 6MWD, 30% INCREASE IN FEV₁, AND 33% DECREASE IN OXYGEN USE

How the Zephyr Valve Works:

The Zephyr Valve is a one-way valve designed to reduce hyperinflation of the lungs caused by severe emphysema/COPD. In a minimally invasive bronchoscopic procedure, an average of four tiny valves are placed in the airways to block off the diseased parts of the lungs where air gets trapped, causing hyperinflation and severe shortness of breath. The Zephyr Valve reduces lung hyperinflation by allowing trapped air to escape and preventing new air from entering that diseased lobe. This allows the healthier parts of the lung to function better and results in patients being able to breathe more easily and experience less shortness of breath.¹

The Zephyr Endobronchial Valve is removable, and thus preserves future therapy options.

Zephyr Valve Patient Benefits & Risks:

Patients treated report significant improvements in lung function, exercise tolerance, and quality of life.¹

Complications of the Zephyr Endobronchial Valve treatment can include but are not limited to pneumothorax, worsening of COPD symptoms, hemoptysis, pneumonia, dyspnea and, in rare cases, death.

For more information visit www.Pulmonx.com/treat-copd

If you have a patient to refer, visit Pulmonx.com/zephyr-centers to find a treatment center in your area.

1. Criner, GJ, Sue, R, Wright, S, Dransfield, M, Rivas-Perez H, Wiese, T, Sciurba, FC, Shah, PL, Wahidi, MM, de Oliveira, HG, & Morrissey, B. A multicenter randomized controlled trial of Zephyr endobronchial valve treatment in heterogeneous emphysema (LIBERATE). Am J Respir Crit Care Med, 2018; 198(9), 1151–1164 and data on file for Zephyr Valve.



Clinical Spotlight

Improving Patient Quality of Life with Zephyr® Valves

Patient: Female, 62 years old

Patient Profile	
Quality of Life Goal	Wants to be more active, keep up with kids and grandkids
Condition	<ul style="list-style-type: none">Diagnosed with COPD/emphysema 12 years ago
Smoking History	<ul style="list-style-type: none">40 pack years (quit in 2015)
Management Medications	<ul style="list-style-type: none">Stiolto RespimatFloventXopenex
Oxygen Use	<ul style="list-style-type: none">None
Baseline FEV ₁	<ul style="list-style-type: none">32% predicted
Symptoms	<ul style="list-style-type: none">Shortness of breathDyspnea on exertionDifficult activities of daily livingDifficulty walking
Special Notes	<ul style="list-style-type: none">Increase in symptoms despite maximum medical therapy in years leading up to Zephyr Valve treatment

Procedure Details:

- Pulmonary rehab prior to treatment
- Collateral ventilation negative (confirmed with Chartis®)
- Four valves placed in left upper lobe (LUL)
- Patient tolerated the procedure well, no adverse events
- Three-night hospital stay for monitoring

Patient Outcome:

Patient had excellent response with:

- Marked improvement in exertional capacity, including long walks
- No hospitalizations since treatment
- Breathing is easier, less shortness of breath
- Remains on daily maintenance medications
- Overall improvement in quality of life

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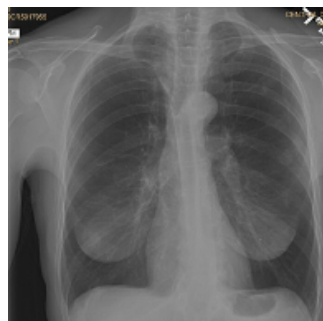
ASSESSMENT	PRE-PROCEDURE	POST-PROCEDURE (3 MONTHS)
FEV ₁	0.68 L	1.04 L
FEV ₁ (% pred)	32%	49%
RV	584 mL	358 mL
RV (% pred)	386%	237%
TLC	786 mL	568 mL
TLC (% pred)	195%	141%
DLCO (% pred)	40%	45%
6MWD	335 m	457 m

Case was completed by Dr. Benjamin Seides
at Central DuPage Hospital, Winfield, IL

Patient was referred by Dr. Linda M. Lam
(Pulmonary, Critical Care)

Pre and Post-Procedure Imaging:

PRE-PROCEDURE



POST-PROCEDURE



MARKED REDUCTION
IN VOLUME IN THE
TREATED LUNG

Individual results may vary.

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