**New Hope for Those with Chronic Bronchitis***OSF Saint Francis Medical Center participating in clinical trial for procedure that targets cause of chronic bronchitis; first in the state to treat a patient*   
OSF HealthCare Newsroom  
Shelli Dankoff – Media Relations Supervisor

[OSF HealthCare Saint Francis Medical Center](https://www.osfhealthcare.org/saint-francis/) in Peoria is the first in Illinois and among the first hospitals in the world to use a new, investigational medical technology designed to improve the cough and mucus symptoms of chronic bronchitis. As part of the RheSolve pivotal trial, Patrick Whitten, M.D., performed the first local procedure evaluating the RheOxTM Bronchial Rheoplasty System in a patient who has chronic bronchitis.

The RheOx system from [Gala Therapeutics Inc.](https://galatherapeutics.com/disease-state/) delivers non-thermal pulsed energy to mucus-producing cells in the airways of the lungs. It was granted U.S. Food and Drug Administration Breakthrough Device Designation in 2019. RheOx is an investigational device in the U.S. Currently there are no other treatment options targeting the mucus-producing cells that cause the disease.

According to Bryan McVay, D.O., sub-investigator for the clinical trial at OSF Saint Francis, the study is a huge development for chronic bronchitis patients, offering them a new, non-pharmacological therapy that alleviates their symptoms and targets the cause of the disease.

“Before this, the patients were treated with antibiotics and steroids and our current selection of inhalers to just try and help squash the amount of mucus they’re producing everyday, which is somewhat relieving but not always,” says Dr. McVay.

Chronic bronchitis is a type of chronic obstructive pulmonary disease (COPD) that involves prolonged inflammation and excess mucus production in the airways, causing severe coughing spells, mucus, wheezing, chest pain and shortness of breath. According to the Centers for Disease Control and Prevention (CDC) chronic bronchitis affects an estimated 9 million people in the U.S. and can develop after exposure to cigarette smoke, vaping, airborne chemicals, and other pollutants and irritants.

The RheOx system includes an electrosurgical generator and single-use catheter that deliver non-thermal energy to the airways to reduce the number of abnormal mucus-producing cells in the lungs, making way for normal cells to redevelop.

“The goal of the procedure is to help eliminate goblet cells, which are the mucus cells in the lungs, to help clear those up. It's two separate procedures done over two days - about 30 days apart. The procedure basically has a small catheter that is placed into the lung. That catheter then sends a small electrical charge into those goblet cells and destroys the goblet cells. Healthy epithelium tissue is then produced into the cells,” explains Dr. McVay.

The typical patient being considered for the trial is between 40 and 75 years old with known chronic bronchitis and underlying moderate COPD.

The RheSolve trial is a double-blind, randomized, sham-controlled study in COPD patients with moderate to severe chronic bronchitis. A total of 270 consenting participants will be randomized in a 2:1 ratio to receive treatment using RheOx or a sham procedure, at up to 40 U.S. centers, including the one in Peoria.

“We have a pretty unique practice in the fact that we have a significant population of COPD and chronic bronchitis patients in our area, just because of our huge catchment area that we serve. We initially found out about this study a couple of years ago at one of our national meetings and then shortly thereafter we were asked about joining the study. Due to COVID it slowed down but now we’re fully open and enrolling and looking for patients.

To learn more about the study contact the [Illinois Lung & Critical Care Institute](https://www.osfhealthcare.org/pulmonology/) – Peoria at (309) 672-5682.