The Latest News Surrounding COPD Research

by LANA BARHUM

The Latest News About COPD Research

The following are summaries related to new research on various COPD studies and reports.

New Treatment to Combat COPD

A new report published in *The FASEB Journal* discusses a new drug to fight off the effects of COPD.

The study examined the effectiveness of a receptor type medication which researchers believe could reverse the inflammatory response of COPD by blocking a molecule risk factor.

Researchers found by impeding RAGE (receptor for advanced glycan end products), inflammatory responses up to 20% can reduce COPD flares, and there was reduced airway damage in mice. RAGE has been identified as a risk gene for COPD development.

New Report Shows Large Drop for In-Hospital COPD Mortality from 2005-2014

A new report finds the number of COPD hospitalizations in the United States has varied from 2005 to 2014. The number of in-hospital COPD deaths has decreased according to new research reported at the American Thoracic Society's (ATS) 2017 International Conference.

The researchers looked at data from the Healthcare Cost and Utilization Project Inpatient Sample. The data represented 95% of hospital discharges and found over 8.5 million were COPD related.

During that period, it appears there was a 62% decrease in the number of deaths related to COPD. While the researchers noted the decline was due to improvements in care for various lung conditions and COPD exacerbations, they were still surprised by the magnitude of the decline.

Researchers also noted the majority of the hospitalizations were of women patients with COPD, which they attributed to the growing number of female smokers, increased number of symptoms women experience, and longer life expectancies.

New Triple Inhaler Offers a 20 Percent Reduction in COPD Flares

One study out of The University of Manchester in the United Kingdom finds COPD flares can be reduced by up to 20% by using a triple inhaler. The study published in *The Lancet* reports the results of a one-year drug trial of over 2,600 patients.

Over a thousand patients were given a new inhaler to manage COPD symptoms. The new inhaler contained three different compounds.

Another thousand patients were given the most commonly used inhaler, and the remaining 500 were given the triple combination in two inhalers.

The patients who used the triple inhaler reported the most reduced number of COPD flares, improvement in lung function, and overall fewer symptoms.

New Genetic Markers for COPD Discovered

Researchers out of Brigham and Women's Hospital (BWH) have identified new genetic markers associated with COPD. This discovery shows a genetic link to COPD and brings with it a potential for new therapies.

The researchers revealed 13 new genetic areas associated with COPD, including four that were previously not considered part of any lung function. In the past, research indicated age, gender, and smoking were primary risk factors.

New Research Finds Adverse Cardiac Events with Opioid Use in Older Adults with COPD

New research published in the *European Journal of Clinical Pharmacology* finds older adults with COPD who have recently used opioids have an increased risk for cardiac events compared to those who have not used opioids.

Among new opioid users, there is 215% increase in coronary artery disease for older adults in long-term assisted care and 83% for those who live at home. According to lead author, Dr. Nicholas Vozoris, this information raises an alarming concern about use opioid use in older adults with COPD.

Home Noninvasive Therapy Can Reduce Hospital Readmissions or Death after COPD Exacerbations

Research from the NIHR Biomedical Research Centre at Guy's and St Thomas' and King's College London looks at a new oxygen therapy that could potentially change the lives of people with COPD.

The HOT-HMV trial (Home Oxygen Therapy-Home Mechanical Ventilation) gave selected patients breathing machines to be used in addition to their oxygen therapy.

The HOT-HMV model was found to reduce hospital readmissions following COPD exacerbations. This discovery is important because it means the patient's quality of life is improved and it also decreases the need for hospital stays after COPD flares and allows patients to be at home rather than in a hospital.

Asthma-COPD Overlap Research Needed, According to Panel

The best treatment strategies for people with both COPD and asthma (asthma-COPD overlap) are unknown because these patients have previously been excluded from research trials, according to a panel of COPD researchers out of the American Thoracic Society (ATS) and the National Heart, Lung and Blood Institute (NHLBI).

Their report, released last month in the *American Journal of Respiratory and Critical Care Medicine*, identifies two dozen research goals to investigate the asthma-COPD overlap.

Eighteen researchers met at a workshop held last year and rejected the notion of a single universal protocol for diagnosing and treating the asthma-COPD overlap. The workshop participants also identified high priority research goals and recommendations for disease prevention and personalized therapy.