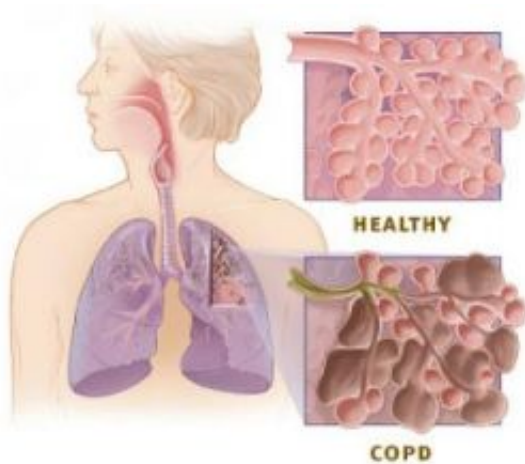


# Advance toward early diagnosis of chronic obstructive pulmonary disease

December 8 2008

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Researchers have identified a "biomarker" that could lead to early detection of chronic obstructive pulmonary disease. Credit: National Heart Lung and Blood Institute

Researchers in Finland are reporting identification of the first potential "biomarker" that could be used in development of a sputum test for early detection of chronic obstructive pulmonary disease (COPD). That condition, which causes severe difficulty in breathing — most often in cigarette smokers — affects 12 million people in the United States.

In an article scheduled for the December 5 issue of *ACS' Journal of Proteome Research*, a monthly publication, Vuokko L. Kinnula and colleagues point out that no disease marker for COPD currently exists,

despite extensive efforts by scientists to find one. Past research pointed to a prime candidate — surfactant protein A (SP-A), which has a major role in fighting infections and inflammation in the lung.

The scientists compared levels of a variety of proteins obtained from the lung tissues of healthy individuals, patients with COPD, and those with pulmonary fibrosis. They found that the lungs of COPD patients contained elevated levels of SP-A. The scientists also found elevated levels of SP-A in the sputum samples of COPD patients. "This suggests that SP-A might represent a helpful biomarker in the early detection of COPD and other related disorders," the article notes.

Article: "Proteomics of Human Lung Tissue Identifies Surfactant Protein A as a Marker of Chronic Obstructive Pulmonary Disease", [pubs.acs.org/stoken/presspac/p ... ll/10.1021/nl801495p](https://pubs.acs.org/stoken/presspac/p...ll/10.1021/nl801495p)

Source: ACS

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