

New Treatment Strategies in Chronic Obstructive Pulmonary Disease

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Clinicians have been long aware that neither the traditional distinctions of “emphysema” versus “chronic bronchitis” nor the traditional clinical phenotypes of “blue bloater” and “pink puffer” are sufficient to categorize patients that suffer from chronic obstructive pulmonary disease (COPD). Recently, the Global Initiative for Chronic Obstructive Lung Disease (GOLD) Workshop has used quantitative measures (FEV₁ and FEV₁/FVC ratio) to define COPD, but this definition fails to take into account the full heterogeneity of COPD. With an increased understanding of pathophysiologic variation, COPD now clearly represents a spectrum of overlapping diseases with important extrapulmonary consequences.

Thus, the paradigm that COPD is one disease may be incorrect, and suggests that COPD should be considered as a spectrum of smoking-related diseases. Failure to consider COPD phenotypes is likely to limit the power of therapeutic trials since not all COPD patients are likely to benefit from each therapy. The challenge to future COPD researchers is to better characterize these phenotypes and identify their risk factors. In this presentation we will discuss about new concepts in the treatment of COPD, i) tailored treatment through dissection of heterogeneity, ii) new anti-inflammatory strategies, and iii) lung repair through stem cell approach.