

COPD: Advances in Pharmacological Therapy

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By the next decade, Chronic obstructive pulmonary disease (COPD) will become the third leading cause of mortality and fifth leading cause of disability worldwide. In recent years, advances in the treatment of COPD has shown that COPD is a preventable and treatable condition. Smoking cessation is the single most effective intervention to reduce the risk of developing COPD and the only intervention that has been shown to slow its progression. Domiciliary oxygen therapy for those who are hypoxemic at rest results in improved survival. Vaccinations and immunizations against influenza and pneumococcus reduce mortality and morbidity. Although the main indication of bronchodilators are used for symptomatic relief at rest and during exercise, there is convincing evidence that long acting bronchodilators, both long acting beta-agonist [LABA] and Long acting anti-cholinergic drug [tiotropium] also reduce the number of exacerbations and improve quality of life. Bronchodilator combinations may have additional benefits to the individual components. Antioxidants have been shown in small studies to reduce the frequency of exacerbations. Inhaled corticosteroids are indicated for severe COPD because they reduce frequent exacerbation and hospitalization. Combined treatment with ICS and LABA appear to have added benefit. Recent metanalysis of previous randomized controlled trials [RCTs] followed by findings from a recently completed large global longterm RCT, the TORCH study have provided provocative evidence that maintenance treatment with ICS may be associated with survival benefits, with potential implications for future COPD management.