



# COPD Treatment Options

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## Find Your Best COPD Treatment Options

The Global Initiative for Chronic Obstructive Lung Disease (GOLD) and the American Thoracic Society (ATS)/European Respiratory Society (ERS) have set guidelines for their recommendations of stable, effective management of chronic obstructive pulmonary disease (COPD). The recommendations include:

1. Assessing the disease
2. Monitoring the disease
3. Reducing any risk factors that become evident
4. Managing the disease while it is stable
5. Managing any exacerbations of COPD

There are many goals of COPD therapy and by following the approaches outlined below, the disease can be better managed.

- Seek to offer relief of symptoms
- Try to prevent the advancement of the disease
- Attempt to increase activity without exacerbations
- Improve overall health
- Prevent and treat complications and exacerbations
- Reduce mortality rate

The overall approach to treating COPD is treating the disease by the severity of the symptoms. So, if a person has mild COPD symptoms, the treatment regimen will be more conservative than someone who has a severe case of COPD. Patient education is very important with COPD so patients are aware of how the treatments help keep their symptoms under control and help reduce the number of exacerbations. The goal is to reduce or get rid of the symptoms and increase activity without any exacerbations.

## Pharmacological Treatments

### Bronchodilator Therapy

Many patients who have COPD are prescribed bronchodilators, of which there are several types. This medication is aimed to increase a person's FEV1 (forced expiratory volume in one second) or other factors related to spirometry. The medication helps by relaxing and expanding the airways.

**Short-acting  $\beta$ 2-agonists (SABA):** This is a short-acting bronchodilator that lasts four to six hours. It can be given orally or by inhalation. Inhalation offers a quicker onset and is preferred as it has fewer side effects.

**Long-acting  $\beta$ 2-agonists (LABA):** LABAs are long-acting types of bronchodilators that last 12 hours or more.

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They also can be given by oral or inhalation routes.

**Anticholinergic agents:** Anticholinergics are excellent bronchodilators. They offer minimal side effects and are only available as an inhaler. This type of bronchodilator is beneficial for patients who cannot take B-agonists or methylxanthines because of heart issues.

**Methylxanthines:** The mechanism of how this type of bronchodilator works is unknown but it is believed that it improves respiratory muscle strength. Methylxanthines often used to treat COPD patients who are unresponsive to  $\beta_2$ -agonists and to treat acute exacerbations.

### **Corticosteroid Therapy**

In exacerbations of COPD, the airways become inflamed and causes the airflow obstruction that prevents a patient from breathing freely. Corticosteroid inhalers can open these airways up quickly and oftentimes keep patients from needing to go to the ER.

### **Combination Therapy**

The use of combination therapy with bronchodilator medication seems to be safe and even offers fewer side effects in some cases. It increases the effectiveness of bronchodilation with the combination of the medications as well. For example, combining a SABA and an anticholinergic produces superior effects in improving lung function and alleviating symptoms than any of the drugs acting alone.