

Medicines for Chronic Lung Disease

Types of Medicines	How They Work	Inhaled	Swallowed
Bronchodilators			
Short-acting beta-2 agonists (SABA)	- Relax and open airways - Help lessen shortness of breath - Help prevent exercise-induced wheezing - Help stop attacks	X	
Long-acting beta-2 agonists (LABA)	- Relax and open airways - Help lessen shortness of breath - Take effect more slowly and work longer than short-acting beta-2 agonists	X	
Anticholinergics	- Relax and open airways - Help lessen shortness of breath - Take effect more slowly than short-acting beta-2 agonists	X	
Methylxanthines	- Stimulate the diaphragm and breathing - May be useful if symptoms occur during sleep - Are long-acting		X
Corticosteroids	- Reduce inflammation and swelling in airways - Reduce mucus production - Decrease sensitivity of airways to irritants and allergens	X	
	- Reduce inflammation and swelling in airways - Reduce mucus production - Decrease sensitivity of airways to irritants and allergens		X
Selective phosphodiesterase-4 (PDE-4) inhibitor	Reduce number of flare-ups or worsening symptoms (breathlessness, cough, excess mucus) due to bronchitis form of COPD		X
Combination medicines	Combine effects of different types of medicine	X	

Examples of Medicines	Possible Side Effects and Special Precautions
Albuterol sulfate (ProAir, Proventil HFA, Ventolin HFA); levalbuterol HCl (Xopenex HFA); metaproterenol sulfate; terbutaline sulfate	Trembling, nervousness, insomnia, fast heartbeat, or increased blood pressure. Should be taken before other bronchodilators and inhaled corticosteroids.
Formoterol fumarate (Foradil); indacaterol maleate (Arcapta Neohaler); salmeterol xinafoate (Serevent)	Fast heartbeat, headache, nervousness, or trembling. Do not use for quick relief. Don't take more often than prescribed.
Ipratropium bromide (Atrovent HFA); tiotropium bromide (Spiriva)	Dry mouth, dizziness, drowsiness, headache, upset stomach, constipation, or nervousness.
Theophylline (Elixophyllin, Theolair, Theochron, Theo-24)	Headache, nervousness, insomnia, irregular heartbeat, diarrhea, or nausea. Can interact with other medicines. Blood levels must be monitored regularly. Limit caffeine intake.
Beclomethasone dipropionate (QVAR); budesonide (Pulmicort); flunisolide (Aerospan HFA); fluticasone propionate (Flovent HFA)	Very little enters bloodstream, so less side effects. Don't use for fast relief of shortness of breath. Must be used every day. Rinse mouth, gargle, and spit after use. Do not stop using without consulting your provider. High doses must be tapered, not stopped abruptly.
Methylprednisolone (Medrol); prednisone (many brand names)	Enters bloodstream, so may cause insomnia, mood changes, skin bruising, weight gain, stomach problems, high blood pressure, glaucoma, cataracts, osteoporosis, or high blood sugar. Always take with food or milk. Don't stop using without consulting your provider. High doses must be tapered, not stopped abruptly.
Roflumilast (Daliresp)	Diarrhea, nausea, headache, insomnia, back pain, reduced appetite, dizziness. Don't take for sudden breathing problems (acute bronchospasm). Not to be taken by persons under 18.
Fluticasone propionate plus salmeterol xinafoate (Advair); budesonide plus formoterol fumarate (Symbicort)	Varies depending on medicine. Talk to your healthcare provider.