Pharmacological Therapy and Treatment Options

Chronic Obstructive Pulmonary Disease (COPD)

Not all people with Chronic Obstructive Pulmonary Disease (COPD) have the same symptoms, and treatment may differ from person to person. Providers can work to create the best plan to address the COPD symptoms and an individual's personal needs. Please review the information below regarding pharmacological therapy and treatments for COPD.

Non-pharmacologic approaches to treatment for **all members with COPD** include the following:

- Avoidance of risk factor(s) such as smoking[1,2]
- Up to date with Influenza, pneumococcal, COVID-19 and pertussis vaccinations[3-6]
- Regular physical activity
- Regular review/correction of inhaler technique[7]
- Long-term oxygen therapy if chronic hypoxemia[7]
- Pulmonary rehabilitation[8]

Management of stable COPD: Initiation of therapy based on the GOLD ABCD assessment of symptoms and exacerbation[9]

Groups	Symptoms	Exacerbation History	Suggested Treatment
A	Less symptomatic (mMRC 0-1 OR CAT < 10)	0 or 1 (**not** leading to hospital admission)	Short acting bronchodilator as needed (**SABA, SAMA, or combination SABA + SAMA**)
B	More symptomatic (mMRC ≥ 2 OR CAT ≥ 10)	0 or 1 (**not** leading to hospital admission)	Regular treatment with a long-acting bronchodilator (**LABA or LAMA**) based on patient preference; **SABA** for symptom relief as needed
C	Less symptomatic (mMRC 0-1 OR CAT < 10)	≥2 or ≥1 leading to hospital admission	Regular treatment with a **LAMA**; **SABA** for symptom relief as needed
D	More symptomatic (mMRC ≥ 2 OR CAT ≥ 10)	≥2 or ≥1 leading to hospital admission	Regular treatment with a **LAMA**; consider **LAMA + LABA** if patient has more severe symptoms (CAT score > 20); consider **LABA + ICS** if patient has asthma/COPD overlap; **SABA** for symptom relief as needed

mMRC: Modified Medical Research Council Dyspnea Scale

CAT: COPD Assessment Test

SABA: Short acting beta agonist

SAMA: Short-acting muscarinic antagonist

LABA: Long-acting beta agonist

LAMA: Long-acting muscarinic antagonist

ICS: Inhaled corticosteroid

Treatment Modification Based on Dyspnea and/or Exacerbations[9]

Initial Treatment	New Treatment
LAMA or LABA	**LAMA + LABA;** if exacerbation and history of asthma then **LABA + ICS**
LABA + ICS	**LAMA + LABA** for most patients; if ICS is needed then **LAMA + LABA + ICS**

At a minimum, all members should have a SABA inhaler for as needed basis rescue inhaler. If they have been recently hospitalized, exacerbation should be treated with long-acting bronchodilator(s)[9] and short courses of oral corticosteroids (5-7 days)[10] and antibiotics (5-7 days)[(11,12)] when indicated.

Formulary options for all medications can be found on SuperiorHealthPlan.com.

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[9]Global Initiative for Chronic Obstructive Lung Disease. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease. Updated 2022. Global initiative for Chronic Obstructive Lung Disease website. Accessed 9/27/2022. https://goldcopd.org/wp-content/uploads/2021/12/GOLD-REPORT-2022-v1.1-22Nov2021_WMV.pdf
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[11]Masterton RG, Burley CJ. Randomized, double-blind study comparing 5- and 7-day regimens of oral levofloxacin in patients with acute exacerbation of chronic bronchitis. Int J Antimicrob Agents 2001; 18(6): 503-
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