



Clinical Champion Update

Date: 11/9/23

Subject: COPD

*When a person presents with symptoms suggesting of COPD or flareup of COPD please keep in mind **differential diagnosis** including asthma, congestive heart failure, bronchiectasis, tuberculosis, and obliterative bronchiolitis.

***forced spirometry showing the presence of a postbronchodilator FEV1/FVC < 0.7 is mandatory to establish the diagnosis of COPD.**

*When a person presents with **chronic cough** please consider other causes besides COPD such as asthma, lung cancer, tuberculosis, bronchiectasis, left heart failure, interstitial lung disease, cystic fibrosis, idiopathic cough, chronic allergic rhinitis, postnasal drip, upper airway cough syndrome, acid reflux, and medications such as ACE inhibitors.

***Systemic glucocorticoids** for treating acute exacerbations in hospitalized patients, or during emergency department visits, have been shown to reduce the rate of treatment failure, the rate of relapse and to improve lung function and breathlessness.

***Azithromycin** (250 mg/day or 500 mg three times per week) or erythromycin (250 mg two times per day) for one year in patients prone to exacerbations reduced the risk of exacerbations compared to usual care. Azithromycin use was associated with an increased incidence of bacterial resistance, prolongation of QTc interval, and impaired hearing tests. A *post-hoc* analysis suggests lesser benefit in active smokers. There are no data showing the efficacy or safety of chronic azithromycin treatment to prevent COPD exacerbations beyond one-year of treatment.

***Non-pharmacological management of COPD:**

Group A, smoking cessation, physical activity, and vaccinations

Group B and E, smoking cessation, pulmonary rehab, physical activity, and vaccinations

***Pulmonary rehabilitation** should be considered as part of integrated patient management, and usually includes a range of healthcare professionals to ensure optimum coverage of the many aspects involved. Patients should undergo careful assessment prior to enrollment, including identification of the patient's goals, specific healthcare needs, smoking status, nutritional health, self-management capacity, health literacy, psychological health status and social circumstances, comorbid conditions as well as exercise capabilities and limitations. Optimum benefits are achieved from programs lasting 6 to 8 weeks. Available evidence indicates that there are no additional benefits from extending pulmonary rehabilitation to 12 weeks.

Pulmonary rehabilitation improves dyspnea, health status and exercise tolerance in stable patients **(Evidence A)**

Pulmonary rehabilitation reduces hospitalization among patients who have had a recent exacerbation (≤ 4 weeks from prior hospitalization) **(Evidence B)**

Pulmonary rehabilitation leads to a reduction in symptoms of anxiety and depression **(Evidence A)**

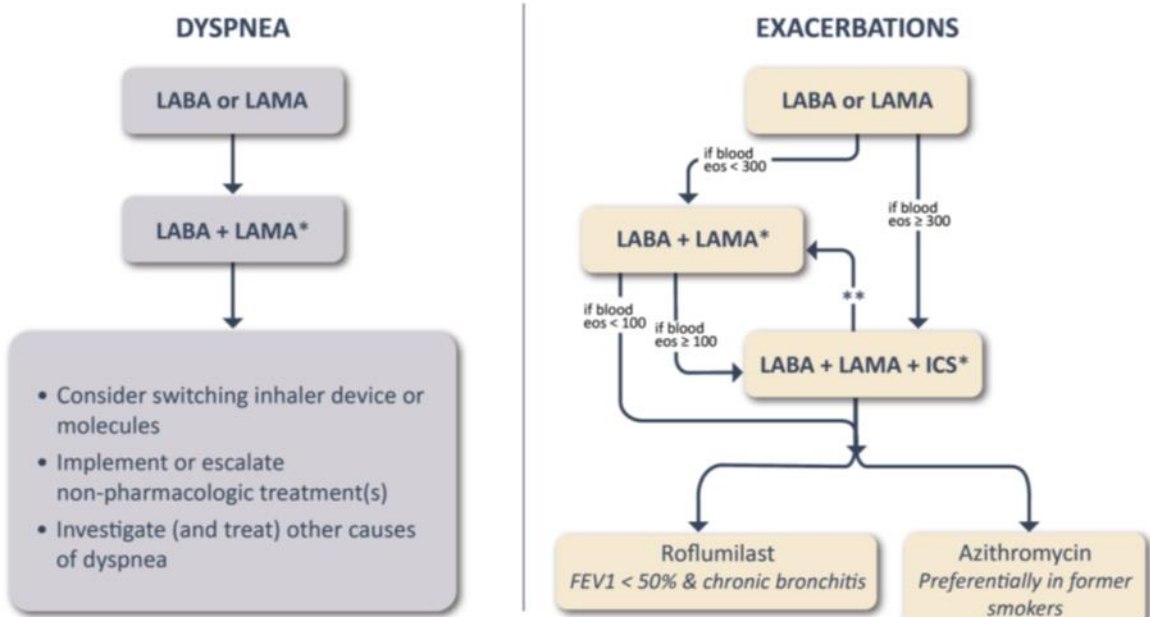
***Reminder** about changes from GOLD 2022 to 2023, **ABCD groups changed to ABE** and LAMA+LABA recommended for group B and E as initial pharmacological treatment with exceptions. See prior COPD presentation in July, figure 3.1 of GOLD 2023 report for factors to consider when initiating ICS treatment.

Follow up treatment from GOLD 2023 guidelines.

Follow-up Pharmacological Treatment

Figure 4.4

- 1 IF RESPONSE TO INITIAL TREATMENT IS APPROPRIATE, MAINTAIN IT.
- 2 IF NOT:
 - Check adherence, inhaler technique and possible interfering comorbidities
 - Consider the predominant treatable trait to target (dyspnea or exacerbations)
 - Use exacerbation pathway if both exacerbations and dyspnea need to be targeted
 - Place patient in box corresponding to current treatment & follow indications
 - Assess response, adjust and review
 - These recommendations do not depend on the ABE assessment at diagnosis



*Single inhaler therapy may be more convenient and effective than multiple inhalers

**Consider de-escalation of ICS if pneumonia or other considerable side-effects. In case of blood eos ≥ 300 cells/μl de-escalation is more likely to be associated with the development of exacerbations

Exacerbations refers to the number of exacerbations per year

*Consider hospitalization if:

Severe symptoms such as sudden onset resting dyspnea, high RR, decreased O2 sat, confusion and drowsiness

Acute respiratory failure

Onset of new physical signs such as cyanosis or peripheral edema

Failure of an exacerbation to respond to initial treatment

Presence of serious comorbidities such as CHF, new arrhythmia

Insufficient home support

Thanks,

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