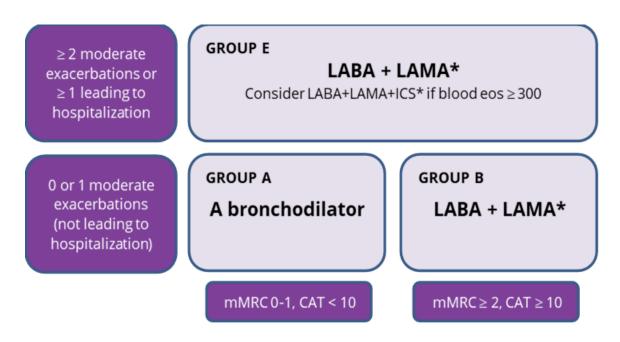
2023 GOLD Report Pharmacological Updates

Key Changes

- Revised definition identifying Chronic Obstructive Pulmonary Disease (COPD) as a heterogeneous lung condition and introduced Proposed Taxonomy (Etiotypes) for COPD including non-smoking related origins.
- New opportunities to diagnose COPD earlier and treat appropriately. Recognized
 environmental risk factors other than tobacco smoking, COPD can start early in life
 affecting young individuals, and that there are precursor conditions (Pre-COPD, PRISm
 (Preserved Ratio Impaired Spirometry)).
 - Pre-COPD is defined as respiratory symptoms, lung lesions, or physiological abnormalities without airflow obstruction (FEV1/FVS ≥ 0.7 post-bronchodilation)
 - PRISm is defined as a preserved ratio (FEV1/FVC ≥ 0.7 after bronchodilation) but impaired spirometry (FEV1 < 80% of reference after bronchodilation)
- A new ABE Assessment Tool that places greater emphasis on exacerbations.
- Initial Pharmacological Treatment and Follow-up Pharmacological Treatment have been changed.
- Strong emphasis on Adherence and issues related to inhaled delivery systems. Addition
 of a summary table on main principles for selecting an appropriate device for individual
 patients.
- Vaccine recommendations have been updated to reflect current guidance from the CDC

New ABE Assessment Tool

The previous ABCD Assessment Tool has been changed to ABE to recognize the clinical relevance of exacerbations, independent of symptoms. Group C (less symptomatic/high exacerbation risk) and Group D (more symptomatic/high exacerbation risk) have been merged. The new Group E represents exacerbation prone individuals.



^{*} single inhaler therapy may be more convenient and effective than multiple inhalers

Definition of abbreviations: LABA: Long-Acting Beta-Agonist; LAMA: Long-Acting Muscarinic Antagonist; ICS: Inhaled Corticosteroid; mMRC: modified Medical Research Council dyspnea questionnaire; CAT: COPD Assessment Test; eos: blood eosinophil count in cells per microliter

Initial Pharmacological Treatment

Rescue short-acting bronchodilators should be prescribed to all patients for immediate symptom relief.

- **Group A**: A long-acting bronchodilator is the preferred choice except in patients with very occasional breathlessness
- Group B: LABA+LAMA is the recommended initial pharmacological choice
 - If LABA+LAMA combination is not appropriate, there is no evidence to recommend one monotherapy bronchodilator over another. The choice should be dependent on patient's perception of relief

- **Group E**: LABA+LAMA is the recommended initial pharmacological choice
 - o If indication for ICS, then LABA+LAMA+ICS should be used

Key Points			
Bronchodilators		Anti-Inflammatory Agents	
•	LABAs and LAMAs are preferred over short-acting agents for maintenance therapy except for patients with only occasional dyspnea (Evidence A).	•	Long-term ICS monotherapy is not recommended (Evidence A). If there is an indication for an ICS the
•	When initiating treatment with a long acting bronchodilator, the preferred choice is a LAMA+LABA. If persistent dyspnea on a single long acting bronchodilator treatment should be escalated to two (Evidence A).	•	combination LABA+LAMA+ICS has been shown to be superior to LABA+ICS and is the preferred choice.* If patients with COPD have features of asthma, treatment should always contain an ICS.
		•	ICS regimens have little or no effect at blood eos count < 100 cell/µL. Incremental increase of ICS effects observed at higher eos counts.

^{*} If a patient with COPD and no features of asthma is actively being treated with LABA+ICS and is well controlled in terms of symptoms and exacerbations, continuation with LABA+ICS is an option.

Therapeutic Interventions to Reduce COPD Mortality

Recent evidence from two large randomized clinical trials, IMPACT and ETHOS show that fixed-dose inhaled triple combinations (LAMA+LABA+ICS) reduce all-cause mortality compared to dual inhaled long-acting bronchodilation therapy. These trials were enriched for symptomatic patients (CAT \geq 10) with a history of frequent (\geq 2 moderate exacerbations) and/or severe exacerbations (\geq 1 exacerbation requiring hospitalization).

References

Global Initiative for Chronic Obstructive Lung Disease, Available at 2023 GOLD Report

NOTE:

This newsletter focuses on the pharmacotherapy changes. Please visit **2023 GOLD Key Changes** for other important updates.

Written by Lindsay Carvalho, PharmD