

## **Clinical Champion Update**

Date: 6/3/24

Subject: COPD

\*\*COPD is 4<sup>th</sup> cause of death in U.S. and worldwide.

In U.S., COPD is 2<sup>nd</sup> leading cause of reduced disability-adjusted life years (DALYs), trailing only ischemic heart disease.

\*\*Please do not label patient as having COPD without spirometry data. About half of patients who report being diagnosed with COPD have not undergone spirometry.

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

\*\*Do not give albuterol refills on patients who got it the first time when having a URI and continue to ask for refills, send them for PFTs to diagnose/rule out underlying asthma or COPD.

\*\*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.

\*\*Regular treatment with ICS in COPD increases the risk of pneumonia especially in those with severe disease.

If a patient with COPD and no features of asthma has been treated – for whatever reason – with LABA+ICS and is well controlled in terms of symptoms and exacerbations, continuation with LABA+ICS is an option. Yet, if the patient has a) further exacerbations, treatment should be escalated to LABA+LAMA+ICS; b) major symptoms, switching to LABA+LAMA should be considered

\*\*When to check DLCO:

DLCO should be measured in any person with symptoms (dyspnea) disproportionate to the degree of airflow obstruction since reduced DLCO values <

60% predicted are associated with increased symptoms, decreased exercise capacity, worse health status, and increased risk of death, independently of the severity of airflow obstruction and other clinical variables.

Additionally, in COPD patients, low DLCO values help preclude surgical lung resection in patients with lung cancer.

In smokers without airflow obstruction, values < 80% predicted (as a marker of emphysema) signal an increased risk for developing COPD over time.

\*\*When to check ABG: Consider ABG for Gold 3 and definitely for GOLD 4 to check for hypercapnia. Also when O2 sat below 92 on RA and for hypercapnia assessment.

\*\* Consider/rule out other diagnosis in patients presenting with suspected COPD exacerbation, including pneumonia, pulmonary embolism, heart failure, pneumothorax, pleural effusion, MRI and cardiac arrhythmia.

**\*\*For management of COPD exacerbation:** 

Systemic corticosteroids can improve lung function (FEV1), oxygenation and shortterm recovery time and hospitalization duration. Duration of therapy should not normally be more than 5 days.

Antibiotics, when indicated, can shorten recovery time, reduce the risk of early relapse, treatment failure, and hospitalization duration. Duration of therapy should normally be 5 days.

Consider antibiotics in cases with increased or change in sputum, FEV1 less than 50% predicted, frequent exacerbations, comorbid conditions and age over 65, and persistent symptoms. Macrolides possibly have added anti-inflammatory affect. Avoid quinolones unless guided by culture/sensitivity date.

Daily azithromycin decreases acute exacerbation frequency.

\*\* Exacerbations are important events impacting disease progression and health care costs.

Treat the right diagnosis.

Maximize treatment with inhalers.

More steroids is not always better.

Discharge on maintenance inhalers from the hospital.

Follow-up post discharge in 1-2 weeks.

Refer to pulmonary rehab, \*Pulmonary rehab decreases hospital admissions in patients with COPD.

**\*\*** YouTube links available on intranet on use of various inhalers.

Thanks,

Niloufar Shoushtari

**COPD** Clinical Champion