#### Tuesday, November 14, 2023 8:35 AM – 9:50 AM

#### 2023 GOLD International COPD Conference

Session #1: Definition and Severity Classification of COPD Exacerbations: Time for a Change?

- 1. A review by Calverley et al in 2021 of 3 large multicenter international trials (TORCH, SUMMIT, IMPACT) found rates of exacerbations in Western Europe, North America, and the Southern Hemisphere differed vs Eastern European countries by a rate of which of the following?
  - a. Twofold
  - b. Threefold
  - c. Fourfold

**Rationale:** Calverley et al found that rates of moderate and severe exacerbations per year in Western Europe, North America, and the Southern Hemisphere ranged from 1.07-1.51 vs 0.19-0.34 per year in Eastern Europe.

- 2. GOLD 2023 has adopted which of the following to approach assessment of severity of a COPD exacerbation because it includes easy-to-obtain clinical variables that can help define the severity of exacerbations at the point of contact?
  - a. ROME Proposal
  - b. COPD Severity Score
  - c. Visual Analog Scale

**Rationale:** GOLD 2023 has adopted the ROME proposal to approach ECOPD severity because it includes easy-to-obtain clinical variables that can help define the severity of exacerbations at the point of contact.

- 3. The criteria for an exacerbation of COPD, per the 2023 GOLD report, include VAS dyspnea score ≥5; respiration ≥24 breaths/minute; heart rate ≥95 bpm; CRP ≥10 mg/dL; hypercapnia or acidosis. To meet the definition of an exacerbation of COPD, patients must meet how many of these criteria?
  - a. ≥2 criteria
  - b. ≥3 criteria
  - c. ≥4 criteria

**Rationale:** GOLD 2023 states that patients should meet  $\geq 3$  of the following criteria to meet the definition of an exacerbation of COPD: VAS dyspnea score  $\geq 5$ ; respiration  $\geq 24$  breaths/minute; heart rate  $\geq 95$  bpm; CRP  $\geq 10$  mg/dL; hypercapnia or acidosis.

#### Tuesday, November 14, 2023 10:15 AM – 11:30 AM

# 2023 GOLD International COPD Conference Session #2: Role of Respiratory Infections in Patients With COPD

- 1. As many as what percentage of COPD exacerbations are associated with viruses?
  - a. 20%
  - b. 40%
  - c. 60%

**Rationale:** Seemungel et al reported that as many as 60% of COPD exacerbations are associated with viruses and that viruses are more often found in sputum samples than nasal samples.

- 2. The HOPE COPD study found that 30% of pneumococcal vaccinated patients with a COPD exacerbation required ICU care vs what percentage of non-pneumococcal vaccinated patients with a COPD exacerbation?
  - a. 38%
  - b. 48%
  - c. 58%

**Rationale:** The HOPE COPD study found that 30% of patients with an exacerbation of COPD that were vaccinated against pneumococcal disease required ICU care while 58% of unvaccinated patients required ICU care (*P*=.002).

- 3. A 65-year-old patient presents with an exacerbation of COPD. A nasopharyngeal swab reveals the presence of a respiratory virus. Which of the following is true about the presence of the pathogen?
  - a. The presence of a pathogen definitively implicates a virus in the exacerbation of COPD
  - b. The presence of a pathogen indicates this is not an exacerbation of COPD
  - c. The presence of a pathogen by molecular testing could represent chronic carriage or a recent acquisition

**Rationale:** Distinguishing chronic carriage from acute infection is difficult because 13%-15% of nasopharyngeal swabs or sputum samples show a respiratory virus in stable disease, 30%-50% of sputum samples will contain a pathogen in stable disease by molecular detection, and the presence of a pathogen by molecular testing could represent chronic carriage or a recent acquisition.

## Tuesday, November 14, 2023 11:30 AM – 12:30 PM 2023 GOLD International COPD Conference Session #3: GOLD 2024 Update

- 1. The GOLD 2024 report defines PRISm (preserved ratio impaired spirometry) as which of the following?
  - a.  $FEV_1/FVC < 0.7$  and  $FEV_1 < 80\%$  predicted
  - b. FEV<sub>1</sub>/FVC >0.7 and FEV<sub>1</sub> <80% predicted
  - c.  $FEV_1/FVC < 0.7$  and  $FEV_1 > 80\%$  predicted

**Rationale:** The GOLD 2024 report has expanded information related to PRISm and defines it as  $FEV_1/FVC > 0.7$  and  $FEV_1 < 80\%$  predicted.

- 2. A patient presents with symptoms that indicate likely COPD and a pre-bronchodilator  $FEV_1/FVC$  <0.70. According to GOLD 2024, what is the appropriate next step?
  - a. Confirm diagnosis via post-bronchodilator spirometry
  - b. Confirm diagnosis without post-bronchodilator spirometry
  - c. Conduct HRCT or chest x-ray to rule out alternative causes

**Rationale:** The GOLD 2024 report indicates that post-bronchodilator spirometry is recommended in patients with likely COPD with pre-bronchodilator FEV<sub>1</sub>/FVC <0.7 and in patients with pre-bronchodilator FEV<sub>1</sub>/FVC >0.7 if a high suspicion of COPD exists.

#### Tuesday, November 14, 2023 1:45 PM – 3:05 PM

### 2023 GOLD International COPD Conference Session #4: Reducing Mortality in COPD: Achieving the Holy Grail

- 1. Clinical trials of triple therapy investigating mortality have been consistent. IMPACT and ETHOS both reported significant mortality benefits with which of the following?
  - a. ICS/LAMA/LABA vs LAMA or LABA monotherapy
  - b. ICS/LAMA/LABA vs LAMA/LABA dual therapy
  - c. ICS/LAMA/LABA vs ICS/LABA dual therapy

**Rationale**: Mintz et al reported clinical trials of triple therapy investigating mortality have been consistent. IMPACT and ETHOS both reported significant mortality benefits with ICS/LAMA/LABA vs LAMA/LABA dual therapy but no significant difference vs ICS/LABA dual therapy. Pooled analysis reported a significant mortality benefit with ICS-containing regimens.

- 2. GOLD recommends which of the following nonpharmacologic interventions that has been found to impact patient mortality be initiated at discharged or within 4 weeks of discharge for patients with a COPD exacerbation?
  - a. Long-term oxygen therapy
  - b. Pulmonary rehabilitation
  - c. Non-invasive ventilation

**Rationale:** GOLD lists smoking cessation, long-term oxygen therapy, pulmonary rehabilitation, non-invasive ventilation, and lung-volume reduction surgery as nonpharmacologic interventions that may impact mortality in COPD. Pulmonary rehabilitation is recommended to be implemented for patients with a COPD exacerbation at or within 4 weeks of hospital discharge.

#### Tuesday, November 14, 2023 3:05 PM – 4:25 PM

## 2023 GOLD International COPD Conference Session #5: Assistive Devices in Patients with COPD

- 1. A patient presents with severe chronic hypoxemia at rest. Long-term oxygen therapy for 15 hours per day would be recommended in this patient based on which of the following findings?
  - a. PaO2 ≤45 mm Hg or O2 sat ≤88%
  - b. PaO2 ≤55 mm Hg or O2 sat ≤88%
  - c. PaO2 ≤55 mm Hg or O2 sat ≤93%

**Rationale**: American Thoracic Society documents outlining home oxygen therapy for patients with chronic lung diseases makes a strong recommendation to prescribe LTOT for at least 15 h/day in a patient with severe chronic hypoxemia at rest demonstrated by PaO2 ≤55 mm Hg or O2 sat ≤88%.

- 2. The treatment of patients with OSA-COPD overlap syndrome has been shown to significantly improve overall survival. Compared to the general population, the prevalence of OSA in patients with chronic obstructive lung disease is which of the following?
  - a. Prevalence is greater in patients with chronic obstructive lung disease
  - b. Prevalence is no higher in patients with chronic obstructive lung disease vs the general population
  - c. Prevalence is lower in patients with chronic obstructive lung disease

**Rationale:** Studies have shown that 11% of OSA patients had obstruction on spirometry, 14% of patients with mild obstructive disease had moderate OSA, and the prevalence of OSA in patients with obstructive lung disease was no higher than in the general population.

## Tuesday, November 14, 2023 4:55 PM – 5:55 PM 2023 GOLD International COPD Conference Session #6: The Future of COPD

- 1. Multiple exposures have been linked to worse COPD outcomes, including smoking. What percentage of smokers develop COPD?
  - a. 15% to 20%
  - b. 20% to 25%
  - c. 25% to 30%

**Rationale:** Approximately 15%-20% of smokers develop COPD. One out of four Americans with COPD never smoked and only 15% of variability in FEV<sub>1</sub> can be explained by smoking.

- 2. In a study by Agusti et al of studied treatable traits in patients with asthma and COPD, the mean number of treatable traits per patient with asthma was 4.6 vs how many for COPD?
  - a. 5.0
  - b. 5.4
  - c. 5.8

**Rationale:** Agusti et al found that patients with COPD had a mean of 5.4 treatable traits per patient (+/- 2.6).