Prevention of COPD Exacerbations

GRADE recommendations on mucolytics, LAMA vs. LABA, roflumilast, macrolides, and fluoroquinolones for exacerbation prevention in COPD.

2017 ERS/ATS Guideline
Prevention of COPD Exacerbations
Wedzicha et al. · Eur Respir J
2017;50:1602265

GRADE — Strong · Conditional For · Conditional Against

1 Oral Mucolytics

Cond. Low

Moderate/severe airflow obstruction with exacerbations despite optimal inhaled therapy — treat with an oral mucolytic agent.

2 LAMA vs. LABA

Strong Moderate

Moderate/severe obstruction (FEV1/FVC <0.70, FEV1 30–79% pred) with ≥1 exacerbation in the past year — prescribe a **LAMA in preference to LABA** monotherapy.

3 Roflumilast

Cond. Moderate

Severe/very severe obstruction (FEV1 <50% pred) with chronic bronchitis symptoms and exacerbations despite optimal inhaled therapy — treat with **roflumilast**.

4 Macrolide Antibiotics

Cond. Low

Moderate–very severe obstruction (FEV1 <80% pred) with exacerbations despite optimal inhaled therapy — treat with a **macrolide antibiotic**. Assess cardiovascular risk (ventricular arrhythmias) before prescribing; no efficacy/safety data beyond 1 year.

5 Fluoroquinolones

Cond. Moderate

Stable COPD, prevention purposes only — NOT suggested for the sole purpose of preventing exacerbations.

Rationale: places high value on avoiding unproven therapy given adverse-event and bacterial-resistance risk, lower value on potential exacerbation prevention.

Wedzicha JA, Calverley PMA, Albert RK, et al. Prevention of COPD Exacerbations: A European Respiratory Society/American Thoracic Society Guideline. *Eur Respir J.* 2017;50(3):1602265.