



## Question

Should I prescribe gabapentinoids to patients with chronic obstructive pulmonary disease (COPD)?

## Answer

We recommend caution in prescribing gabapentinoids to patients with COPD, especially if moderate to severe.

## Background

The article "Gabapentinoids and Risk for Severe Exacerbation in Chronic Obstructive Pulmonary Disease," published in *Annals of Internal Medicine* on January 16, 2024, reports on a large, population-based, retrospective cohort study conducted in Quebec, Canada, which investigated the relationship between the use of gabapentinoids (gabapentin and pregabalin) and the risk of severe exacerbations in patients with COPD. Amid international warnings about the respiratory risks of gabapentinoids, this research provides key insights into their safety in a vulnerable population.

## Study Summary

The study included patients with COPD who were  $\geq 55$  years of age and initiated gabapentinoid therapy (gabapentin or pregabalin) or received no such treatment. They were propensity-matched 1:1 based on clinical and demographic factors. The primary outcome was severe COPD exacerbations requiring hospitalization or resulting in death. Results showed that severe exacerbations occurred more frequently in the gabapentinoid group than in the nonuser group (hazard ratio = 1.39; 95% CI 1.29–1.50). Subgroup analyses supported these findings across different indications, including epilepsy, neuropathic pain, and other chronic pain.

## Key Considerations

- **Methodology:** Despite its use of propensity matching, the study is retrospective, not prospective, which limits its ability to infer causality.
- **Data:** The absolute increase in severe COPD exacerbations, while modest, was significant and aligns with data from prior observational studies.
- **Analysis:** Multiple sensitivity analyses did not change results.

## Bottom Line

Considering the findings of this study alongside other observational research, caution is warranted when prescribing gabapentinoids to patients with COPD, particularly those with severe disease.