Reviewer’s report

Title: Randomized Controlled Trials of Pharmacological Treatments to Prevent COPD Exacerbations: Applicability to Real-life Patients

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Reviewer: Hannah Whittaker

Reviewer's report:

Pahus and colleagues present their work on eligibility of "real world" COPD patients in RCTs aimed at reducing exacerbations. Using the Initiatives-BPCO French cohort and previous RCTs, the authors aimed to: i) identify the number of patients who meet each RCT criteria to determine the most frequent criteria; ii) identify how many patients meet the set of inclusion criteria from each RCT; and iii) compare eligibility rates between different types of RCTs. The main outcome suggests that very few "real world" COPD patients meet the inclusion criteria for RCTS assessing interventions on COPD exacerbations. This paper is clearly written and aims to investigate a clinically important research questions.

Below are my comments and questions:

Discussion

1. The point on the exclusion criteria is important and should be expanded on. The authors should note that eligibility numbers would be even smaller.

2. Variables within the cohort were collected via a questionnaire. This should be mentioned in the limitations.

3. A paper by Rothnie et al (2018) found that 50% of "real world" COPD patients did not exacerbate in the first year of follow-up. This could be referenced to further highlight the point that RCT eligibility criteria is not generalizable.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess
Are the conclusions drawn adequately supported by the data shown?
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Yes

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I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

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