Reviewer’s report

Title: Efficacy of mepolizumab for patients with severe asthma and eosinophilic chronic rhinosinusitis

Version: 0 Date: 07 Oct 2018

Reviewer: G. J. Braunstahl

Reviewers report:

This manuscript describes a retrospective study in 28 patients with severe eosinophilic asthma. The design of the study is fine and focusses on the presence of ECRS. This co-morbid condition appears to be a predictive factor regarding response to mepolizumab. The study is small and prone to selection bias but adds new data to the literature. The methods are not always that clear and need clarification.

Major comments:

1. One of the major concerns is the duration of therapy: it is not clear to me what time points are compared and how long the follow-up of the patients was.

2. Were the two groups comparable? The group with ECRS seemed to have more eo's and a lower FEV1/FVC than the group without ECRS. So did they have more severe asthma? Also this group contained 4 patients with EGPA. Could this have influenced the results?

3. Although it is a retrospective study, new privacy guidelines require informed consent to publish patients results. In particular since the number of patients is really low and individual patients could be identified in the study.

Minor concerns:

1. Why was ACOS mentioned in the methods section? I see no need for this.

2. Line 2 page 16 (discussion) needs to be rephrased.

3. It is not clear to me why the authors spend quite some space in the discussion on the role of FeNO in anti-IL5 treated patients. This could be shorter.

4. I see no information about ICS/LABA use in these patients. This should perhaps be added to baseline characteristics.
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.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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

Needs some language corrections before being published

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