Reviewer’s report

Title: Efficacy and safety of calcitonin-gene-related peptide binding monoclonal antibodies for the preventive treatment of episodic migraine – An updated systematic review and meta-analysis

Version: 0 Date: 31 Oct 2019

Reviewer: Armando Perrotta

Reviewer's report:

The Authors focused their attention on the interesting and actual field related to the efficacy of the anti-CGRP mAbs in the preventive treatment of episodic migraine.

They have proposed an updated meta-analysis performed to assess the efficacy and safety of CGRP mAbs investigated by 5 phase II and 6 phase III high-quality RCT.

The issue could be of interest for the readership of BMC neurology.

The analysis is well conducted and results are clear, however I have some points need to be addressed before consider it for publication.

Introduction

References should be checked as some of them are inappropriate (ie. Number 3).

Authors should specify that episodic migraine, that occurs for less than 15 days per month, is defined according to the current ICHD, the 3rd ed., edited by IHS.

The Authors should clearly specify that the recommendation to start a preventive treatment is demanded to several guidelines and that it could be different from a country to another.

Methods are appropriate

In the methods section, authors stated that they have excluded additional 4 studies for not better specified reasons. Could the authors better clarify that?

In the results section (row 10 page 5) the references related to the studies with a 24 wks follow-up should be clearly reported.

In the monthly migraine days analysis, it is unclear if the authors included in the pooling analysis the data from eptinezumab too (reference 15) as it appears from the figure 2. Anyway, they should report if the changes in monthly migraine days are statistically significant or not for
Eptinezumab at 9-12 weeks compared to baseline (reference 15). It is due to the fact the study ref. 15 reports efficacy data expressed in migraine days between baseline and weeks 5-8.

In the monthly acute migraine-specific medication days results, authors didn't report data from eptinezumab (reference 15).

In the adverse events section should be reported that one study reported serious adverse events under eptinezumab.

In the label of the figure 2 should be clearly reported that data represent changes from baseline to weeks 9-12.

In figure 4, the forest plot clearly indicates values for both single studies and meta-analysis, but results seem to be in favor of the placebo.

In the discussion section, the authors stated that based on the results of their meta-analysis CGRP mAbs, including eptinezumab, resulted effective and safe in migraine preventive treatment.

However, as the authors correctly reported, data on eptinezumab are limited. The authors should page 7 row 27, please change eptinezumab for erenumab.

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 am able to assess the statistics

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