Reviewer’s report

Title: Diagnostic delay for giant cell arteritis. A systematic review and meta-analysis

Version: 0 Date: 28 Feb 2017

Reviewer: Susan Lester

Reviewer's report:

This manuscript describes a meta-analysis of the delay between symptom onset and diagnosis in Giant Cell Arteritis (GCA). This is of relevance because of the risks of stroke and blindness with untreated GCA.

The meta-analysis is meticulous and the paper is very well written. However, the meta-analysis does have a number of serious limitations, including the definition of diagnostic delay (which is a complex outcome, with many moving parts), treatment of the outcome variable as a normally distributed variable (when clearly it is not), a very high between-study heterogeneity and consequently extremely wide prediction intervals with values < 0. Collectively these issues hinder interpretability and generalisability of the results, however, without individual patient data, these issues are largely beyond the author's control. I found the author's consideration of these issues in the Discussion to be excellent, and I agree with their assessment that, in spite of the imperfections, the study does indeed provide useful "benchmarking" data.

Minor comments:

* Despite including the relevant "between-study" variables in Table 1 & 2, the authors make no comment as to whether sampling period, healthcare setting, or the requirement for a positive TAB, had any influence on the between study heterogeneity

* Although mentioned in the Abstract, there was no mention in the Discussion of "Fast Track" clinics for GCA and the reduction in diagnosis time they may realistically achieve with currently available diagnostic techniques
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

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

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal