Reviewer’s report

Title: FULL TITLE OF MANUSCRIPT: The utility of ESR, CRP and Platelets in the diagnosis of GCA

Version: 0 Date: 09 Dec 2018

Reviewer: Kenneth J. Warrington

Reviewer’s report:

Dr Chan and colleagues describe the results of a retrospective cohort study designed to investigate the utility of 3 biomarkers for the diagnosis of GCA: ESR, CRP, platelet count. There continues to be a great unmet need for specific diagnostic markers for GCA. Several previous studies have conducted similar analyses looking at ESR and CRP. Based on the data presented in this manuscript, platelet count appears to provide additional value when combined with CRP.

The manuscript is well-written; however certain aspects require clarification:

1. Introduction: The sensitivity of TAB also relates to GCA phenotype (cranial versus large vessel) and this is noted in the discussion section of the manuscript. It should also be mentioned in the introduction.

2. Methods: ESR, CRP and platelets are obviously influenced by glucocorticoid therapy. The authors should specify whether the reported values were obtained prior to initiation of therapy (or percentage of patients evaluated with markers before starting therapy).

3. The inclusion of patients with biopsy negative ‘GCA’ - the authors should specify length of follow-up as the diagnosis may change if patients are followed longer; also were any of the biopsy negative patients diagnosed by imaging?

4. The negative predictive value of these markers can be very useful to a clinician. What is the negative predictive value for GCA if all 3 markers (ESR, CRP and platelets are normal)?

5. Discussion: the authors indicate that the sensitivity of TAB may be as low as 70%, but again this depends on the clinical phenotype of GCA. Cohort studies of patients with LV-GCA have reported a biopsy positivity rate of about 50% e.g. Rheumatology (Oxford). 2015 Mar; 54(3):463-70. Therefore the discussion should be revised accordingly.

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?
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I am able to assess the statistics

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