Reviewer’s report

Title: A Single-Center Retrospective Study of Factors Related to the Effects of Intravenous Glucocorticoid Therapy in Moderate-To-Severe and Active Thyroid-associated Ophthalmopathy.

Version: 0 Date: 05 Nov 2017

Reviewer: Christine May

Reviewer’s report:

The paper sets out to identify factors that could be used to predict response to intravenous glucocorticoids (ivGC) in patients with Thyroid Eye Disease (TED).

If the statistics (when reviewed by a statistician) are accurate, the article identifies possible factors, based I believe from a single centers experience, which could be used to help identify patients that may respond better to ivGC.

The article would benefit from improvement in its English grammar and language. There are certain phrases that do not appear to be correct and it does affect the ease of reading.

The retrospective nature of the study does not appear in the title or abstract. Personally I think this should be clearly stated in the abstract and title. The title should be altered to better describe the paper, e.g. "A single centre retrospective study….." If this is what the authors feel it is.

It would be useful to know more about how you identified your study population, including more details on how you identified the patients? Who was excluded from the study at the start and through the study? Over what time period did these patients present? Including if this is a single centre experience. This would significantly help the reader understand who the study is therefore treating and which of their own patients it can be applied to.

You include CAS <3/7 with MRI changes but I cant find the percentage of your patients that fell into this category in the study. You then later discuss this in the discussion section of the article as a group you felt responded to steroids. The percentage of your sample made up from this group should be defined in the initial data.

Specific comments:

- Abstract Your p-value for the duration of eye symptoms was within 3 months is different from that in the text, which is correct (see comment below).

- Page 1 line 39, the word "useless" is an odd word no doctor would advise a useless treatment; do you mean non-effective or ineffective therapy?
- Page 1 method: grammar point- This is a "retrospective" study not "retrospectively". (Same on page 8 line 48)

- Page 1 study design and patients: You do not discuss race of the population but later in the discussion discuss differences between Caucasian and Asian patients in CAS scoring. A short statement of the race if possible would therefore be useful to have in patient demographics to strengthen your discussion later.

Results:

- Page 4 line 33, what do you mean by "present"? Do you have other studies that you have published or will publish? You use the word again on page 7 line 51. This second time do you mean this study in the paper, I wonder if this is a due to language problem.

- Page 4 line 37, why repeat "the response rate was 57.8%"? Is this not what you mean by responsive group in the lines above?

- Page 6 line 7, do you really mean a p-value =0.000, this is different to your abstract p-value for this statement. Which is correct?

- Page 7 line 56-59, page 8 1-2: in the UK typically a person who has never smoked throughout there life is termed a "non-smoker", is this what you mean by never? Someone who is currently smoking at present is called a "current smoker" and someone who has stopped smoking is called an "ex-smoker". Where as "passive smoker" is someone who is in an environment with smokers. What do you mean by a passive smoker? Just clarify the UK definitions and what you mean.

- Page 8 line 11: you mention short follow up time, was there only 4 week follow up CAS? If not what was your follow up time? I would advise it is include in study methods.

Conclusion:

- You never discuss side effects of treatment in your paper but your last sentence talks about liver damage, it is not relevant to your study aim or discussed earlier in your paper. I do not feel this is appropriate sentence to end on.

- Page 8 line 34: correct abbreviations ivGC has corrected to IvGC

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:

Not suitable for publication unless extensively edited

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