Reviewer's report

Title: GENETIC BASIS OF ROTATOR CUFF INJURY: A SYSTEMATIC REVIEW

Version: 0 Date: 07 Apr 2019

Reviewer: Brigitte Glanzmann

Reviewer's report:

Rotator cuff disease is a widespread musculoskeletal pathology and a major cause of shoulder pain for which the aetiology remains unknown. As rotator cuff disease is a multifactorial condition, no genes or loci have been associated with the disease. The authors aimed to review existing data which provides evidence that some genes are responsible for predisposition to rotator cuff disease. The authors concluded that a genetic predisposition could contribute to rotator cuff disease.

Comments:

Line 20 page 3: "The search identified 13 studies involving 26156 (patients, with 4525 rotator cuff tears and 21631 healthy controls).

Please rephrase this sentence and put the brackets in the appropriate position.

Line 23 and 24 page 3: "SAP30BP" and "SASH1" should be italicized as they are gene names.

Line 38 page 4: The authors mention "healthy shoulders" - this should be described in context especially since

RESULTS

Line 116 page 8: The authors talk about the identification of 13 relevant reviews/studies. However, in line 120 on the same page, the authors refer to 10 articles. In addition, the figure also highlights 13 articles. This disparity between numbers makes results difficult to follow.

Line 307 page 13: "it has been shown" - what has been shown? This sentence is very unclear.

All gene names should be in italics, which is not the case in the entire review section.

General comments:

Page 23 should be removed as it is a blank page.
The line numbering is both confusing and inaccurate and should be rectified.

Although the manuscript is well written, there is insufficient data as of yet to support the conclusion that there is a genetic predisposition for rotator cuff injury. The data examined in this manuscript deal with different types of rotator cuff injuries as well as individuals who are affected at different stages and therefore data may not be successfully compared to each other.
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.

Unable to assess

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

Unable to assess

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.

Not relevant to this manuscript

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 declare that 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