Reviewer’s report

Title: Effects over time of two platelet gel supernatants on growth factor, cytokine and hyaluronan concentrations in normal synovial membrane explants conditioned with lipopolysaccharide.

Version: 2

Date: 6 March 2015

Reviewer: Nicholas Robert Forsyth

Reviewer’s report:

The manuscript by Rios et al is designed to explore the roles of L-PRG and P-PRG on the stimulation of signalling from synovial membranes. This has particular reference to their roles in producing anti-inflammatory and anabolic responses in injured or diseased synovial joints.

The manuscript is interesting but unfortunately must undergo some revision before being deemed acceptable for publication. In general the quality of written English is not at an acceptable level for publication and the authors are encouraged to seek assistance with proof-reading in a bid to correct the multiple grammatical errors found throughout the manuscript.

Comments relating to specific sections are listed below;

Abstract.
The conclusion is relatively weak as presented and would benefit from the inclusion of a further rationale supporting the conclusion.

Introduction.
The introduction ends with a hypothesis. It would be valuable to have some insight into the reasoning behind this hypothesis.

Methods.
The rationale behind the inclusion of LPS, the role of LPS ‘conditioning’ (not convinced that ‘conditioning’ is the correct word, and the methodology of this are not included. This should be corrected.

Complete media characteristics should be supplied. High glucose, low glucose, hepes etc etc? No mention is made of L-glutamine? Is this a purposeful omission?

Results.
The 2nd paragraph of results; Page 10, In 189 – 200 should be rewritten with a focus on clustering results. For instance “Synovial fluid demonstrated highest levels of.....whereas low levels were observed in ... etc.”

A symbol error has crept in from line 262 onwards where p values are indicated.

The results section in general is presented as a statement of facts. The authors should attempt to draw some form of summary before progressing to the
discussion. This would help remove a lot of the text from the discussion which is very inward looking and less focussed on the external view (which should be its focus).

Figure footnotes.
The figure titles should not contain the “mean standard errors [m.s.e]” text. This is repeated in all but plays no role in a title. This should be included in the figure legend.

Figures 2, 4, 5, and 6. Can the authors provide a clarification in regards to these figures as to why the control values are inconsistent between panels a and b and why the 48hrs and 49hrs values are so different?

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.