Reviewer's report

Title: Inhibition of Interleukin-1beta-Stimulated dedifferentiation of Chondrocytes via Controlled Release of CrmA from hyaluronic acid-Chitosan Microspheres

Version: 2 Date: 18 September 2014

Reviewer: Roman Krawetz

Reviewer's report:

The study by Ma et al., examines the use of chitosan micro-particles to delivery crma to rescue rat chondrocytes from IL1b expose. While the manuscript would be of interest to the field, it suffers from a couple issues that should be addressed to strengthen the study.

Major compulsory revisions.
1.) The authors suggest that they have an OA in vitro model. If this is the case, significant more evidence needs to be provided that these chondrocytes and indeed representative/equivalent of cells from cells obtained from a validated OA model system, or modify the text to remove the references to their OA treatments.
2.) Figure legends need to be added.
3.) In the discussion, proliferation is mentioned however, there is no data provide on the proliferation rates of cell under the different treatments.
4.) The claims that these particles will be useful for the treatment of OA or regenerating OA chondrocytes is not supported and should be removed or tempered.

Minor Essential Revisions
1.) The paper has numerous spelling and grammatical errors and should be thoroughly re-edited.
2.) The missing symbols throughout the text needs to be corrected.

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'