Reviewer's report

Title: Arthropod steroid hormone (20-Hydroxyecdysones) suppress IL-1beta-induced catabolic gene expression in cartilage

Version: 3 Date: 17 November 2014

Reviewer: Bin Wang

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Minor Essential Revisions

Concern:

1. The authors used 10-8 M (10 nM) of 20-Hydroxyecdysones (Edc) in chondrocyte culture. From two cited papers in the revised manuscript, Zhang X, et al (Drug Development Research, 2014:195) used 10-4 M (100 uM) in the chondrocyte culture, and Hu J, et al (Plos one, 2012:e50764) also used the similar concentration in neuroblastoma cells. Please make sure your calculation of Edc concentration is correct, and explain these huge differences.

2. There are still some grammar mistakes in the revised manuscript, for examples, "Suppress" should be changed to "suppresses" in the title of this manuscript; "enhance and suppress" should be changed to "enhances and suppresses" in Page 9 line 18.

3. IL-1 beta and MMPs in the Abstract should have full name.

Level of interest: An article of importance in its field

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

No