Reviewer's report

Title: Effect of Payena dasyphylla on hyaluronidase enzyme activity and MMPs expression in IL-1beta stimulated human chondrocyte cell line (NHAC-kn)

Version: 2 Date: 20 November 2012

Reviewer: Christelle Sanchez

Reviewer's report:

Major Compulsory Revisions

This is a very interesting work with very promising data. The only missing element, for me, is data on cell toxicity of the extract. Without that, we could think that all effects report in the paper could be due to a toxicity or cell suffering, resulting in a decrease of protein production by the cells.

An other point is the choice of IL-1b concentration. The authors used 100 ng/ml for some experiments, 10 ng/ml for other experiments. Why? 100 ng/ml is a huge supra-pathological stimuli.

Minor Essential Revisions

Material and method, Cell culture: could you precise how many passages did you used for NHAC

Discretionary Revisions

Background:

change " is the pathological characteristic of this disease" by " is the mean pathological feature in this disease"

paragraph 2 : other factor too are known : other factors are also known metalloproteases : metalloproteinase

paragraph 4 : MMP is also describe

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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