Reviewer's report

Title: Expression of RECK and matrix metalloprotease-2 in ameloblastoma and their relevance

Version: 1 Date: 16 September 2009

Reviewer: Thasvir Singh

Reviewer's report:

Overall this is a good study that explores the underlying factors of why the ameloblastoma can be locally invasive and has a high tendency to recur following surgical management, even though it is a benign tumour.

Being a clinician I cannot reliably comment on the biochemical methods used in this study and further consultation with a specialist in this area should be made if the editors require an accurate opinion on this aspect of the study. This also applies to analysing the statistics used in this study.

From a clinical point of view this study is extremely useful in trying to understand the behaviour of this tumour. It appears that MMPs balanced with Tissue Inhibitors of Matrix Metalloproteinases (TIMPs) play a major role in its aggressive nature. This study further confirms this relationship.

Major Compulsory Revisions:
Nil

Minor Essential Revisions:
1) Multiple spelling and grammatical errors. A simple english spellcheck would easily correct this. Using the word 'bad' to describe a tumour's behaviour in a scientific journal is inadequate. Editors please address this issue with the authors.

2) Paragraph one under Background - 'distant metastasis'. Ameloblastomas rarely metastasise and this should be emphasised.

3) It is accepted that the most common odontogenic tumour is the odontoma, not the ameloblastoma.

4) Clarification of what the HT1080 cells are involved in e.g. fibrosarcoma. This would be useful for clinicians unfamiliar with this cell line.

5) Discussion third paragraph. 'MMP-2 is the most important proteolytic enzyme degrading basement membrane ...'. I am not sure if this is true given other studies showing the presence and importance of MMP-1 and MMP-9 along with MMP-2.

Examples
Discretionary Revisions: Nil

**Level of interest:** An article of importance in its field

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.