Reviewer’s report

Title: The impact of bisphosphonates on the osteoblast proliferation and Collagen gene expression in vitro

Version: 1 Date: 5 May 2010

Reviewer: Thomas Mücke

Reviewer’s report:

First, the author should be congratulated to an interesting and promising work in the understanding of bisphosphonate related osteonecrosis of the jaws (BRONJ). The article is very interesting and the material presented sufficient to publish. Nevertheless, there are some shortcomings in the manuscript which should be addressed by the authors.

Major Compulsory Revisions

The results of the work should be compared (investigated gene vs. housekeeping gene) with each other to present facts. For statistical analysis the Mann-Whitney U-test or Wilcoxon test should be appropriate, a linear regression model may be also possible. The test should be described in the Statistical Analysis section in the revised manuscript and a p-value should be given in the results. The other methods described in the Statistical Analysis section are not related to statistics and should also appear in the methods.

Minor Essential Revisions

The authors describe the ## CT method in the Statistical Analysis section. This is a method used for calculating concentrations of diluted genes, but should be put into the materials and methods section as there is no statistical test associated with.

In Table 1 the primer should be described with the accession number (e.g. in PrimerBlast from NCBI).

Discretionary Revisions

There are some problems associated with the presentation of genes in the figures as well as in the results. I would recommend not using the mean with the standard deviation, but the median and 25% and 75% quartiles as these are not that error-prone. If the results are normally distributed the format can be still given as present. Then, there should be information given within the statistical section (and how was this assessed?).

In general, the present work is very interesting and an actual topic. The question posed by the authors is innovative and contributes much to our knowledge regarding BRONJ. The methods are appropriate, but should be complemented by the mentioned methods. If the author can provide these data the manuscript would be of high value.
Level of interest: An article of outstanding merit and interest 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:

I declare that I have no competing interests.