Reviewer’s report

Title: Quantitative ultrasound does not identify patients with an inflammatory disease at risk of vertebral deformities

Version: 2 Date: 24 February 2008

Reviewer: Tuan V Nguyen

Reviewer’s report:

Many thanks for the revised manuscript which I found much clearer than the previous version. I just have a number of minor comments as follows:

Although I agree that the authors’ conclusion is consistent with their data, I do have a concern about the tone of conclusion. The study was based on a relatively small sample size, and the estimates were rather unstable. Indeed, there were only 54 events in the study; it is therefore possible that the study did not have adequate power to delineate an association between QUS and vertebral fracture. A more modest conclusion seems to be more appropriate.

Tables 2 and 3: please show the unit of comparison. In other words, please show the actual standard deviation used in the calculation of OR. Also, please show exact p-value in these tables. It is not a good practice to indicate "ns" which does not mean much.

The authors argue that the logistic regression was not for predictive purpose, but their conclusion is about prediction! In any case, I think it would be helpful to readers if the authors could provide the estimates of OR of the multivariable logistic regression model. In fact, it is true that by the authors’ result, QUS was not predictive of vertebral fracture, but even femoral neck BMD was not a good predictor too.

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.