Reviewer's report

**Title:** A Population-based Survey of Low Bone Mass with Well-prepared Quantitative Ultrasound In A Community without Dual-energy X-ray Absorptiometry

**Version:** 4 **Date:** 8 December 2005

**Reviewer:** Masayuki Iki

**Reviewer's report:**

**General**
The authors revised the manuscript according to the comments raised by the reviewer but several problems still remain.

**Major Compulsory Revisions**
1. The objectives of the study have been changed but the second one cannot be achieved by the present study design. The reviewer does not clearly get what “low QUS values survey” means but the present study design cannot determine whether the screening by the QUS is equal to the screening by DXA.

2. The racial differences in QUS values are interesting. However, they should be evaluated with the same models. Even T-score cannot always be compared when the models used are different.

**Minor Essential Revisions**
3. P7 L11 Again, “reliability” analysis is suitable for the description in the text rather than “accuracy” analysis.

4. P8 L11 The information for the reference population is still insufficient. The authors stated the subjects were randomly selected (P8 L13) but they stated the same subjects as healthy “volunteers” (L16). Random samples are not volunteers.

5 P10 L5 Again, the exclusion criteria for the subjects should be stated in the subjects section.

6 P11 L11 The reviewer did not still understand the meaning of “proportion of different cutoff values” which should be corrected.

7 P20 L9 The reviewer did not get a meaning of “the simpler correlation”.

8 Table 2 The mean and SD of BUA for combined male and female subjects are not necessary.

9 Table 2 One decimal place is enough for the mean and SD for BUA because its CV is 3.5% which is much larger than 0.01 dB/MHz or even 0.1 dB/MHz.

10 Table 2 The independent variables in the regression models are different between the males and females. Did the author use any selection procedure for independent variables in the regression analysis? This should be specified.

**Discretionary Revisions**

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of limited interest

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

**Statistical review:** No
Declaration of competing interests:

I declare that I have no competing interests.