Reviewer’s report

Title: Hyperthyroidism and Bone Status: Impact of Severity, Duration, and Etiology of Hyperthyroidism on Bone Turnover Markers and Bone Mineral Density

Version: 1 Date: 6 April 2011

Reviewer: Hiroshi Kaji

Reviewer’s report:

Major Compulsory Revisions

General comments
In this study, the authors measured bone metabolic indices and BMD at radius using DXA in 52 men with hyperthyroidism. The results seem to be compatible with the previous findings. There are several concerns, which should be addressed.

Specific comments
1. Re Title, “Hyperthyroidism and bone status” should be deleted. “ in men” should be added in the end of the title. Because all subjects in this study are men, and the data in both genders and women are published in many papers.

2. There are significant differences in body weight. Since body weight greatly affects BMD as well as bone metabolic indices, the correlation data should be analyzed using multiple regression analysis, adjusting with body weight or body mass index.

3. In all tables, P values should be shown as absolute values, and significant differences can be indicated as asterisk (*, ** etc).

4. Re: Table 2, Urinary calcium should be shown as the values corrected with urinary creatinine. However, this can be deleted, because it is not good indicators for bone resorption marker. Urinary DXP can be deleted. Only creatinine-corrected value will be necessary. The abbreviation of DXP is not popular in many papers.

5. Figure 1 ands Table 4 can be combined in one table. Better presentation is recommended in tables. Table 2 and 3 can be combined in one table.

6. For BMD data, only Z scores are shown. T score and BMD should be shown. Also the relationship between T score and thyroid function should be analyzed.

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

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.