Reviewer’s report

Title: Combination therapy with alfacalcidol and risedronate improves the mechanical property by ameliorating the biological apatite c-axis orientation of bone in ovariectomized rat model of osteoporosis.

Version: 2 Date: 20 January 2009

Reviewer: James K Yeh

Reviewer’s report:

The revised MS has been improved extensively. However, there are some minor suggestion need be considered.

Abstract:
Result (2): Are you trying to say” The improvement of material --- was mainly contributed to -----“?

Results 1: Effects on the body weight and --- (Table 3)
Keep the Table in sequence for readers to follow. This Table 3 should be i.

Page 12, line 6: Was the urinary Ca excretion lower in the RIS groups than in the Sham group? Your Table 3 does not show a statistical significance.

The Table 1 and 2 should be after the respect Table 3 and 4 because the analyses were based on those data.

The one-way ANOVA column should be deleted from Table 1 and 2 since the group comparison results of the one-way ANOVA have been illustrated in the respective Table 3 and 4.

Results 3: Page 13, line 11:”In contrast, both the stiffness and energy of the vertebral body were not significantly changed among all groups.”

According to the result of 2-way ANOVA (TABLE 1), ALF-L effect is significant.

Results 4, line 4: Both the ultimate load, stiffness and energy of the cortical ---.

Page 14, Line 4: There is a significant effect of RIS-L on femur energy by 2-way ANOVA as shown in the TABLE 1. The additive effect in the femur energy should be indicated.

Results 5 Since the paper is focusing on interaction of ALF-L and RIS-L, the result of 2-way ANOVA of the micro structural indices and 3-D BMD listed in the Table 2 should be mentioned.

The significant interaction of ALF-L x ROS-L on 3D-BMD should be discussed.

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