Reviewer’s report

Title: Screening of protein kinase inhibitors identifies PKC inhibitors as inhibitors of osteoclastic acid secretion and bone resorption

Version: 2 Date: 8 June 2010

Reviewer: Koichi Matsuo

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Major Compulsory Revisions

In the revised manuscript, the authors concluded “acid secretion by osteoclast is specifically regulated by PKC in osteoclasts” (Abstract). Unfortunately, however, this conclusion is currently not supported by functional data and depends solely on the yet unclear specificity of the inhibitors. Mere detection of PKC alpha by Western blotting is apparently not sufficient. Therefore, the inhibitory effects of Rottlerin and GF109203X on acid influx and bone resorption, which are convincing and interesting, should not be generalized to PKC inhibitors in the absence of functional data supporting PKC involvement.

Discretionary Revisions

The principle of acridine orange assays should briefly be described.

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