Can Treatment with a Strong Antiresorptive Be Expected to Increase Cortical Thickness of the Femur?

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To the Editor:

Poole and colleagues1 recently described the use of techniques, developed previously,2 to compare changes in femur CT data from treated and control individuals in a large completed denosumab trial. Their original technique improved on the prevailing precision of cortical measurement, but was not applied to measuring changes over time or after therapy. Although the authors are entitled to be enthusiastic about their imaging technique and product, one is left with the impression from their abstract that the subjects treated with denosumab were found unequivocally to have increased femoral cortical thickness compared to controls. This is contradicted by the full article. They acknowledge that filling of cortical porosity, rather than increased thickness, may also explain their data. I see no reason first to postulate a hitherto unobserved mechanism of action and then mention only that novelty in the abstract. It is not my intention to dispute the details of the authors’ analysis (this was done quite effectively by Zebaze and Seeman3 in the accompanying commentary), but to urge that, in this and in future analogous situations, the most plausible explanation consistent with the data should appear in the abstract, reserving less likely even if intriguing possibilities for the discussion. I believe that the general application of this policy would eliminate much opportunity for confusion.

References
2. Treece AM, Gee AH, Mayhew EM, Poole KE. High resolution cortical measurement from clinical CT data. Med Image Anal. 2010;14:276–90.