

## Alveolar bone density measurement in risk assessment for bisphosphonate-related osteonecrosis of the jaw: response to comments by Taguchi

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Dear Editors,

We thank Dr. Taguchi [1] for his interest in our article [2] and would like to respond to the points he raises as follows:

1. Our new method of computerized alveolar bone density measurement (Bone Right®) was not applied to the panoramic radiograms presented in Figs. 2 and 3 for the purpose of providing the outline of the dental problems of these patients. As pointed out by Dr. Taguchi, panoramic radiograms have disadvantages for quantitative radiography.
2. Our computerized alveolar bone density measurement (Bone Right®) is entirely different from Kribb's method directly comparing the radiographic density of aluminum step wedge pasted on a dental X-ray film with that

of the alveolar bone. In our method aluminum step wedge is used to standardize the measurement simply for inter-measurement comparison. Exposure is strictly controlled by the Bone Right method based on the thickness and structure of the alveolar bone, so that the most efficient exposure time is automatically selected in each case including Case 5, so that the intra- and inter-measurement comparison is kept to the minimum.

3. The occurrence of condensing osteitis naturally cannot be absolutely excluded. The increase of alveolar bone mineral density not only in areas adjacent to the site of osteonecrosis or osteomyelitis, but also at other sites remote from the lesion, would strongly point out to the generalized changes of alveolar bone density rather than the consequence of the jaw necrosis. The threshold level of the increase of alveolar bone mineral density is estimated to be around 170 based on the data collected so far.

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