Reviewer's report

Title: Water extract of Rumex crispus prevents bone loss by inhibiting osteoclastogenesis and inducing osteoblast mineralization

Version: 0 Date: 11 Jul 2017

Reviewer: Hongtao Bi

Reviewer's report:

Rumex crispus is used as Yang-Ti, a common folk herb with the functions of treating various kinds of bleeding, ringworm and hepatitis in China for thousands of years. The present study was aimed to investigate the effect of water extract of R. crispus on preventing bone loss. It is an interesting and meaningful work. The experimental design is straightforward and properly carried out. The data are clearly presented and convincing. Besides these, there is a drawback to be concerned. Antliraquinone is the main active ingredient of R. crispus, so the alcohol extraction is better than water extraction for extracting antliraquinone from R. crispus. According to extraction method and the elution profile of RP-HPLC in the present manuscript, it is obvious that emodin, chrysophanol, and physcion are not the main components of WERC. So, authors should focus on the water-soluble active components of WERC, such as polysaccharides, phenols, flavonoid glycosides, etc, which might be the main active ingredients of WERC for prevention and treatment of osteoporosis.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

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Yes

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I am able to assess the statistics.
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Needs some language corrections before being published

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