Dear editor:

The increased use of antibiotics and chemicals with various side effects is now persuading scientists to develop natural substitutes with appropriate effectiveness and protection for humans. The outbreak of the world's emerging and re-emerging infectious diseases has prompted pharmaceutical companies to develop new medicines. Valerian is one of the world-wide recognized medicinal herbs that consume abundantly for the treatment of various human diseases and disorders. The Valerianaceae family contains 10 genera and approximately 300 species [1]. It has widely cultivated for commercial purposes in some regions of Iran, including ornamental, edible, and medical [1]. Valerianaceae family contains two major constituent groups, including volatile oil sesquiterpenes and valpotriates. Both active components are present in the rhizomes in large thin-cells at the roots, and rhizomes periphery [2]. Although there are still some disagreements about the relative efficacy of various groups of Valerian, rhizomes compounds, it is widely accepted that valerianic acid is the most important biologically active component [3, 4]. Valerianic acid and its derivatives are commonly considered to contribute to valerian extracts' pharmaceutical effect, characterized and isolated by different analytical methods [5]. Valerianic acid can be used in different disorders such as depression, chronic anxiety, and sleep disorders on the basis of previous studies [4]. Based on previous literatures, the valerianic acid component had antimicrobial effects on different microorganisms such as Helicobacter pylori, Staphylococcus aureus and Candida albicans and its methanolic extract functions were dose-dependent [6-8]. Since the antimicrobial activity of V. officinalis in the total extract was correlated with abundant monoterpenoids and sesquiterpenoids, more research on various aspects of pharmaceutical effects is suggested.

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Authors’ contribution

All authors contributed equally to the manuscript.

Conflicts of interest

The authors declared no competing interests.

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