Reviewer's report

Title: Inhibitory effect of ethanol extract of Ocimum sanctum on osteopontin mediated metastasis of NCI-H460 non small cell lung cancer cells

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Reviewer: Yubo Chai

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Minor Essential Revisions

Screening anti-cancer compounds with low toxicity is a hot topic in the current cancer research. The most potential candidates probably come from herbs. There are many compounds show anti-cancer activities through different mechanisms. In the current study, the author continues their previously studies, show that EEOS inhibits cancer metastasis not only through MMP-9, but also through PI3K-AKT pathway, which well-known as a target signaling for many cancers. They also point out that EEOS inhibit the expression of uPA, uPAR, EGFR and reduce VEGF production. The multiple pathway targeting makes this compound more potential in the anti-cancer, especially in the metastasis cancer treatment. Study was well-designed, experiments were carefully performed, data was well-analyzed and paper was well-organized. Therefore, it is deserve to publish. We will be happy to seeing the EEOS will be test in other cancers and animal studies will be performed.

Here is the minor issue should be concerned:

1. In Abstract-Results: remove “by RT-PCR”, “by ELISA”;
2. In Abstract-Conclusion: there is no enough uPA data (for example, uPA protein data) support the current conclusion, please change the conclusion to “anti----of EEOS is mediated by inhibition of PI3K/AKT signaling”;
4. Fig1. Add Error Bar to Fig 1. 200ug/ml column;
5. Double check the concentration of EEOS in Fig 2A, is 10ug/ml or 100ug/ml?
6. Removal “and uPA” in last sentence of Discussion.

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