Author’s response to reviews

Title: Geijigajakyak Decoction inhibits the motility and tumorigenesis of colorectal cancer cells

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Author’s response to reviews:

11, June 2016
Dr. Armelle T. Mbaveng
BMC Complementary and Alternative Medicine Editorial Office
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Dear Dr. Armelle T. Mbaveng,
Thank you very much for the expeditious 2nd review of our revised manuscript entitled Gejjigajakyak Decoction inhibits the motility and tumorigenesis of colorectal cancer cells which was submitted for consideration of publication in BMC Complementary and Alternative Medicine (BCAM-D-16-00097R1). We have addressed all of the comments made by the Reviewers and provided a detailed response on the following pages.

The main change was:

a) We have revised Abstract, Introduction, Methods, Results, Discussion, Conclusion, and References according to the reviewers comments and have improved the whole manuscript with aids of experts who major in Oriental Medicine and are performing cancer research.

b) We have provided the clarification for Reviewer only regarding the quality of the herbal material used in this study and revised the sentences about the method of plant raw material hot water extraction. We also revised Figure 6 according to the reviewers comment.

Once again, we appreciate your assistance with this manuscript, and hope that the second revised manuscript will be suitable for publication in BMC Complementary and Alternative Medicine.

Sincerely yours,

Sincerely,

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Detailed Response to Reviewer 3 Comments:

Thank you for your efforts and comments on our study. Your suggestions are really helpful to improve the presentation of our data. Our response is listed below.

Reviewer #3: This study examines the potential effect of herbal medicine (Geijigajakyak Decoction) on CRC. It is relatively novel findings. However, need to follow scientific writing format. It requires improvement, particularly, in introduction and discussion section of manuscript. Please ask to medical journal editor to edit and proof read the manuscript prior to resubmission. Overall the paper reports very interesting information which has potential to improve cancer care.

A: Thanks for your critical comments. We have revised Abstract, Introduction, Methods, Results, Discussion, Conclusion, and References according to the reviewers comments and have improved the whole manuscript with aids of experts who major in Oriental Medicine and are performing cancer research.

To follow scientific writing format and to give a better introduction why we examine the effects of GJD on gastrointestinal cancer, we deleted sentence explaining terms in ancient oriental medicine and Shanghanlun in the Introduction, and we deleted unnecessary sentences describing the differences between GJD and GD in the Discussion. Therefore, we rearranged the Introduction, Results and Discussion, and revised the References.

Detailed Response to Reviewer 4 Comments:

Thank you for your efforts and comments on our study. Your suggestions are really helpful to improve the presentation of our data. Our response is listed below.

Reviewer #4: This paper is improved following the requested revisions. The only remaining issues are the need for more clarification regarding the quality of the herbal mateiral used in the study and method of plant raw material hot water extraction. On page 7 the methods of preparation of GJD are incomplete. Line 19: "10 volumes of distilled water' is not clear. What was the botanical raw material dry weight decocted in? 10 liters of H20? Needs clarification.
Otherwise the study is not replicable. The quality of the herbal material is questionable based on the authors report that a major constituent of one of the plants used in GJD was absent from the material in this study. See Page 15. If paeonol was not present in GJD doesn't this suggest that the quality of the herbal raw materials might have been low?

A: We appreciate your constructive comments. We have provided the clarification for Reviewer only regarding the quality of the herbal material used in this study.

Regarding to the method of plant raw material hot water extraction, amounts of each botanical raw material used to prepare decoction in this study are described in the Method section and Table 1 (Cinnamomi Ramulus, 18 gram; Glycyrrhizae Radix, 36 gram; Paeoniae Radix, 12 gram; Zingiberis Rhizoma, 18 gram; Ziziphi Fructus, 18 gram), and we revised the sentences describing the method of extraction. We also prepared aqueous extract of Paeoniae Radix (PE, 100g, dry weight) with the same method as GJD and included as another control for detecting paeonol.

We thus revised as follows; Aqueous extract of GJD was prepared by suspending the herb mixture (total 102g) in 1 liter of distilled water and heating to 100°C for 3 hours in a water bath (KSB-55; Sunil Developed ENG, CO., LTD., Korea). Aqueous extract of Paeoniae Radix (PE) was also prepared by suspending the herb (100g, dry weight) in 1 liter of distilled water and with the same method as GJD.

We also revised Figure 6 according to the reviewers comment and our additional results. We added aqueous extract of Paeoniae Radix (PE) in the LC-MS chromatograms to serve as another control for detecting paeonol.