Reviewer's report

Title: Vasorelaxant effects of Angelica dahurica on isolated rat aortic rings

Version: 2
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Reviewer: Daniel Arcanjo

Reviewer's report:

The present work reports the mechanisms underlying the vasorelaxant effect of Angelica dahurica methanolic extract on rat aortic rings. Considering the background of the use of this species in the treatment of hypertension, as well as the previous studies which support this pharmacological study and its novelty, I consider this article is able for publication in BMC Complementary and Alternative Medicine, after minor essential revision.

Title: The title is very simple and does not represent the major goal of this work. The vasorelaxant effect has already been reported for this plant. Therefore, reference the title to either the investigation of mechanisms or even the action on transmembrane calcium influx could be more suitable for the work, and then increase the number of readers and citations.

Line 18: "has been used"

Line 20: Please, the sentence needs a revision. As suggestion: "Interestingly, it has been used in the treatment of".

Line 24 and 25: This sentence should be revised. "The effects... were assessed..." is better suitable instead of "We assessed the effects...". The sentence "...on several vasorelaxant and vasoconstrictive factors..." does not have any sense to me, considering only vasoconstrictors was used. Then, I suggest report the effects... and its underlying mechanisms on rat thoracic aorta".

Lines 28 and 30: I recommend to remove the words "hydrochloride" and "chloride" in this context due to any pharmacological relevance is attributed to this ions in the studied protocols. The, it is not necessary to report along the manuscript, but just in "Chemicals and Drugs" section. Please, revise it throughout the manuscript.

Line 49: Please, use another word to correct this sentence, such as "furthermore", "moreover", etc. An English assistance throughout the manuscript might be useful.

Line 51: As suggestion: "due to".

Line 53: Please, see comments for Line 49.

Line 58: Determine the "exact mechanism" imply in additional protocols with calcium channels activators as well as evaluation of expression de proteins or
patch clamp measurements. Therefore, I suggest "... the probably mechanisms involved in" is better suitable.

Line 60: This sentence is not related to the current protocols in this paper. Then, I recommend to remove it.

Line 82: Please write "at the ratio of 6:4".

Line 86: Please write "Male Sprague-Dawley rats.....were used".

Line 86 and 87: This sentence can be removed from the text.

Line 90 and 91: I recommend transfer this sentence to the next section, "Experimental Protocols", Line 94. Then, the section should be named just "Animals".

Line 95: Please, state the name of the solution before the symbol, as: "Krebs-Henseleit (K-H)".

Line 100: I suggest "in order to". Please, revise the use of this sentences throughout the manuscript.

Line 107 a 110: I suggest "in order to". It is better to connect with the next sentence, because you are justifying it. Then, I also suggest "the contractile activity...... were investigated on endothelium-denuded..... after pretreatment with ADE...."

Please, following this recommendations in the whole manuscript, in order to improve the quality of prowriting.

Besides, the quality of the results are acceptable, and I appreciate the inclusion of original traces in all vasorelaxant studies, due to the reliability of data is reinforced.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**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.