# **Peer-Review Comments and Author Responses**

#### **Reviewer 1:**

Recommendation: Revisions Required

#### 1. METHODS:

The author reviewed vitamin D as a treatment for uterine fibroids. This is not only an interesting topic, but very important considering the prevalence of uterine fibroids and the variety of treatments available for this disease. Methodologically speaking, the author did a good job collecting and assembling data. However, there is room for improvement in displaying and communicating your findings. At this time, find attached some considerations for your manuscript.

I would like to express my sincere gratitude for your valuable feedback on my manuscript. Your insightful comments have significantly contributed to improving the quality of my work.

I have carefully considered all of your suggestions and have made the necessary modifications to the manuscript. I believe these changes have strengthened the overall clarity and presentation of my findings.

I appreciate your recognition of the importance of the topic and my efforts in data collection and assembly. I have diligently addressed your comments regarding the presentation and communication of my results.

The methods were well written. I suggest informing the software used in the methods section.

Thank you for your valuable feedback. I have incorporated the specific software used for our analysis in the methods section. This addition provides greater transparency regarding our scientific methods and enhances the reproducibility of our research.

## 2. RESULTS:

"Our review incorporated a diverse range of studies." - at the beginning of this paragraph, it is important to demonstrate all the results, for example: "Our search retrieved a total of 388 articles after duplicate removal. After the initial screening by title and abstract, xxx articles were reviewed for eligibility criteria, resulting in xxxxx articles included in this review."

Thank you for your insightful comment. The beginning of the relevant paragraph was revised to include a detailed account of our search results.

The author reported pooled information on the use of vitamin D. However, it does not describe the different dosages used in each study, only on the figures. I suggest organizing better this section with straightforward information regarding the papers that were found and screened. Also, about the different sizes of the fibroids in the studies, and vitamin D dosages used.

I have reorganized the results section to include a more detailed description of the different dosages of vitamin D used in each study. Additionally, I have provided clearer information regarding the sizes of the fibroids reported in the studies. This restructuring aims to present the findings in a more straightforward manner, enhancing the reader's understanding of the pooled

The number of studies shown in the Prisma flow figure does not match. Please double-check the information there.

Thank you for your valuable feedback. I have carefully reviewed the PRISMA flow figure and made the necessary corrections to ensure that it accurately reflects the number of studies included in the review. The updated figure now aligns with the reported data, providing a clearer representation of the study selection process.

## 3. DISCUSSION:

"While CCTs offer valuable data, they can be more susceptible to bias compared to RCTs due to inherent limitations like non-randomization and typically smaller sample sizes." - I would put this explanation on the discussion part; here, you can only say studies a, b, c was classified as xxxx risk of bias, in the other hand e, d, f, was xxx risk of bias. The explanation behind this should be included in the discussion section.

Thank you for your valuable feedback. I have taken your suggestion into account and moved the detailed explanation regarding the susceptibility of CCTs to bias into the discussion section of the manuscript.

## 4. RELEVANCY:

As mentioned above, this is a very interesting topic due to the prevalence of uterine fibroid. This is a very important paper since vitamin D supplementation remains uncertain as a treatment or an adjuvant treatment for fibroids.

Thank you very much.

## 5. CLARITY AND PRESENTATION:

The main author's points and ideas were clear to understand. However, the paper could be better organized, especially the results section. My main suggestion is to make the result section straightforward and emphasize the main findings of the articles. The interpretation of the results should be in the discussion part.

Thank you for your valuable feedback. I have reorganized the results section to enhance clarity and focus on the main findings of the articles. The results are now presented in a more straightforward manner, with key findings emphasized. Additionally, I have ensured that the interpretation of these results is clearly delineated and discussed in the discussion section, as you suggested.

#### **Reviewer 2:**

Recommendation: Revisions Required

#### 1. INTRODUCTION:

From my point of view, it's an interesting topic to be addressed. The use of alternative therapies for uterine fibroids is a true challenge for the clinician in daily practice, especially in patients with several contraindications for surgery or just for women's desire. Vitamin D use could be offered in a cheaper and more accessible way for this. However, the Introduction section does not completely inform about the evidence about the Vit D efficacy because just three articles were mentioned.

Thank you for your valuable feedback. The suggested revisions have been incorporated.

#### 2. METHODS:

The paper review comprehensively examines eight articles, all of them with a high-quality assessment. For me, this is one of the paper's strengths. I would have liked to read if another reviewer had been chosen because this would have given the manuscript more robustness.

Thank you for your feedback on the systematic review. You raise a fair point about the potential benefit of having a second reviewer independently assess the selected studies. I want to acknowledge that this review was conducted by myself as a sole author, due to resource and time constraints. While I aimed to be as thorough and rigorous as possible in the study selection, data extraction, and quality assessment processes, I recognize that having an independent second reviewer would have further strengthened the robustness of the findings. This is a limitation of the current review that I will explicitly note in the manuscript.

## 3. RESULTS:

Results section shows the main findings, but it's not completely clear. The tables help, but the redaction of the section repeats the bibliography many times, which leads to confusion for the reader. Also, there are some parts that should be put in the Discussion section (i.e. "Despite the methodological variations, the findings regarding the influence of vitamin D supplementation on fibroid size were inconclusive")

Thank you for your valuable feedback. I have revised the results section to improve clarity and reduce redundancy by minimizing repeated references to the bibliography.

## 4. DISCUSSION:

The discussion section is good due to the interpretation being precise. I would recommend, as in the Results section, do not repeat the bibliography and separate the different findings.

I have taken your suggestion into account and revised the discussion section to eliminate any repetitive references to the bibliography. I have also organized the findings more distinctly to enhance clarity and facilitate better understanding for the reader.

## 5. CONCLUSION:

The conclusion must be shorter than presented, but it is good in general. The first part paraphrases the first line of the discussion part, so it must be removed or changed.

Thank you for your valuable feedback. The suggested revisions have been incorporated. I have shortened the conclusion and removed or altered the paraphrased content that echoed the first line of the discussion. This adjustment aims to ensure that the conclusion is concise and distinct from the discussion.

6. SUGGESTION: I recommend using the APA format for references. It's more well organized.

Thank you for your valuable feedback. I have updated the references to conform to APA formatting guidelines, ensuring a more organized and standardized presentation.

### **Reviewer 3:**

Recommendation: Revisions Required

1. ABSTRACT: It lacks the conclusion, which is required by the PPCR journal. The instructions for authors are here:

https://journal.ppcr.org/index.php/ppcrjournal/about/submissions.

Thank you for your valuable feedback. The conclusion was written in the abstract.

#### 2. INTRODUCTION:

In the third paragraph, there is a sentence "which may offer a natural and safe approach for managing this prevalent condition." The use of the word "natural" is not appropriate because when you supplement vitamin D, you are giving a medicine, so it leaves it to be a natural process. Then, I would change the sentence to "which may offer a noninvasive and safe approach ..."

Thank you for your valuable feedback. I have revised the sentence in the introduction to replace "natural" with "noninvasive," resulting in a clearer and more accurate statement.

# 3. METHODS:

It is written that reference manager software was used in the process, but it is not said which one, so you should mention it. Also, although the main topics of the search strategy used are written, the search strategy in its entirety should be available to the reader, at least as an appendix.

Thank you for your valuable feedback. I have specified the reference manager software used in the methods section. Additionally, I have included the complete search strategy as an appendix to ensure transparency and accessibility for the reader.

When it comes to the text, the first thing is that the title should be changed to a "plain review" and not a "systematic review." Although it seems the author followed a rigorous methodology, evidence shows that one author review is susceptible to bias, and Cochrane states that there are at least three authors for a truly systematic review (I've attached one paper and one commentary to justify this point). Also, there are many parts of the text using the pronouns "we" and "our" that need to be changed since there is no "we" when it is a single-author paper.

Thank you for your feedback on our manuscript. I appreciate your thoughtful critique and recommendations for improving the transparency and rigor of our review.

You raise a valid point regarding the use of the term "systematic review" for a study conducted by a single author. I acknowledge that having multiple independent reviewers would further strengthen the robustness of the review, as per the Cochrane guidance you referenced.

However, I want to emphasize that I did in fact follow a rigorous, systematic methodology in conducting this review. This included a comprehensive literature search, pre-defined inclusion/exclusion criteria, quality assessment of the included studies, and a structured synthesis of the findings. I have also explicitly noted the single-author limitation as a potential constraint in the Limitations section.

Additionally, the pronouns were changed.

#### 4. RESULTS:

I have made some corrections in the tables attached, mainly excluding extra blank spaces and/or bad punctuation, and changed a little bit the format to make it cleaner and easily readable. Of course, it is a suggestion, but I would consider using it or, at least, removing the extra black spaces and punctuation.

Thank you for your valuable feedback. I appreciate your help and have incorporated your suggestions into the tables. I have removed the extra blank spaces and corrected any punctuation issues to enhance clarity and readability. Your input has significantly improved the presentation of the tables.

## 5. DISCUSSION:

The second paragraph is almost the same as the second paragraph of the results. Here, the possible reasons for the mixed results of the primary outcome should be discussed. Also, the discussion fails to address the main biases found among the eight articles included. Yet, although there is a little bit discussed about possible confounders, it fails to mention two relevant potential confounders for the context: the age of the patients in the studies (since older patients could have lower estrogen levels and, therefore, smaller

fibroids), and the geographical origin of the patients or the studies included address different geographical regions (because a lower latitude implies great solar incidence, which may result in higher levels of vitamin D).

Thank you for your valuable feedback. I have revised the discussion section to differentiate the second paragraph from the results section and included a discussion on the possible reasons for the mixed results of the primary outcome. Additionally, I have addressed the main biases found among the eight articles included. I have also incorporated a discussion of the two relevant potential confounders: the age of the patients and the geographical origin of the studies, highlighting their significance in the context of vitamin D levels and fibroid size.