**PEER-REVIEW REPORT**

**Name of journal:** *World Journal of Clinical Cases*

**Manuscript NO:** 75036

**Title:** Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer’s code:** 03011144

**Position:** Peer Reviewer

**Academic degree:** DNB, FACS, FICS, MBBS, MCh, MNAMS

**Professional title:** Additional Professor

**Reviewer’s Country/Territory:** India

**Author’s Country/Territory:** China

**Manuscript submission date:** 2022-01-17

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-01-19 10:59

**Reviewer performed review:** 2022-01-22 05:46

**Review time:** 2 Days and 18 Hours

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| Re-review          | [ ] Yes                       | [Y] No                      |
SPECIFIC COMMENTS TO AUTHORS
1. Was the local average connectivity-based method considered for the PPI network? 2. How was the molecular docking scored? Was Root Mean Square Deviation considered? 3. How is molecular docking linked to the clinical activity / drug response? 4. Does PPI network activity guarantee the desired clinical response? 5. Is the interaction between core genes and hub genes taken into consideration? 6. What are the study limitations? 7. "Biyu decoction is useful in psoriasis treatment through multi-component, multi-target, and multi-channel synergy". Is the statement valid (based on the molecular mechanisms alone without an animal model / human study)?
**Name of journal:** World Journal of Clinical Cases

**Manuscript NO:** 75036

**Title:** Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer’s code:** 05936182

**Position:** Editorial Board

**Academic degree:** MD

**Professional title:** Assistant Professor

**Reviewer’s Country/Territory:** Thailand

**Author’s Country/Territory:** China

**Manuscript submission date:** 2022-01-17

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-02-07 15:41

**Reviewer performed review:** 2022-02-07 15:52

**Review time:** 1 Hour

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SPECIFIC COMMENTS TO AUTHORS

Firstly, thank you for opportunity to review very interested article. I don't feel qualified to judge about the English language and style due to not native language. 1. The title reflect the main subject about Biyu decoction treatment for psoriasis, title was clear and easy to understand. 2. The abstract summarize and reflect the work described in the manuscript. 3. The key words reflect the focus of the manuscript. 4. The manuscript adequately describe the background, present status, and significance of the study. The authors explain nature of Psoriasis disease and standard treatment. However, the Biyu decoction (BYT) was a main treatment of study, so that I suggested the authors to more explain about that. 5. The manuscript describe methods in adequate detail, study subjects were clear. 6. The research objectives achieved by the experiments used in this study. 7. The manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly, and logically. 8. Tables and figures sufficient, good quality and appropriately illustrative of the paper contents. 9. The manuscript meet the requirements of biostatistics. 10. The manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections.
Name of journal: World Journal of Clinical Cases

Manuscript NO: 75036

Title: Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 06079635

Position: Peer Reviewer

Academic degree: BSc, MSc, PhD

Professional title: Assistant Professor

Reviewer’s Country/Territory: Pakistan

Author’s Country/Territory: China

Manuscript submission date: 2022-01-17

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-02-09 07:43

Reviewer performed review: 2022-02-09 11:39

Review time: 3 Hours

| Scientific quality       | [ ] Grade A: Excellent | [ ] Grade B: Very good | [ ] Grade C: Good |
|                         | [ Y] Grade D: Fair     | [ ] Grade E: Do not publish |

| Language quality         | [ ] Grade A: Priority publishing | [ Y] Grade B: Minor language polishing |
|                         | [ ] Grade C: A great deal of language polishing | [ ] Grade D: Rejection |

| Conclusion               | [ ] Accept (High priority) | [ ] Accept (General priority) |
|                         | [ ] Minor revision | [ Y] Major revision | [ ] Rejection |

| Re-review                | [ Y] Yes | [ ] No |
SPECIFIC COMMENTS TO AUTHORS

"Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study", by Wang et al., is computational work exploring the interactions among chemical components of a traditional medicine with potential genes in psoriasis. Psoriasis is an autoimmune disorder that remains to benefit from an accepted therapeutic regime and hence at best managed symptomatically currently in clinical practice. Therefore the present work by the authors is an interesting theoretical attempt to address the potential drugs like benefits of a traditional decoction.

Few suggestions for the authors to address are: 1. The title of the study is rather vague since the molecular mechanisms are not investigated and only gene targets from the available data sources are curated and their binding under defined conditions are explored using computational tools. Hence, it will be good to modify the title to reflect the work undertaken. 2. Introduction section is too brief and does not adequately provide the background of the proposed work. 3. Authors have not established the use of BYT as traditional treatment and no experimental evidence is provided to the effect. 4. The authors have also not established the use of BYT in clinics but have alluded in the Introduction section that it has verified clinically. 5. Discussion section does not elaborate the importance of such analyses since these interactions are mapped computationally under defined set of conditions which of course is not the case in cellular environment.
Name of journal: World Journal of Clinical Cases

Manuscript NO: 75036

Title: Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 06186852

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer’s Country/Territory: Sudan

Author’s Country/Territory: China

Manuscript submission date: 2022-01-17

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-23 10:43

Reviewer performed review: 2022-02-10 02:37

Review time: 17 Days and 15 Hours

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| Re-review          | [ ] Yes                    | [ Y] No                     |
SPECIFIC COMMENTS TO AUTHORS

"I would like to thank authors for conducting this study “Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study” Overall: However, the manuscript is good and it will add valuable information. Abstract Abstract is written well. However, it’s too lengthy. Please make abstract in less than 300 words Introduction Too short. Please add information about psoriasis in China. Methods Please included the duration of data obtaining in methods Results No comments. It was written good Discussion Please add “strengths and limitations” of your study in the discussion section, and write each one of them in a separate paragraph. Conclusion If you could add recommendations for further, it will be good. Please add them."
PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases
Manuscript NO: 75036
Title: Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study
Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed
Peer-review model: Single blind
Reviewer’s code: 06130469
Position: Peer Reviewer
Academic degree: Doctor
Professional title: Doctor
Reviewer’s Country/Territory: Italy
Author’s Country/Territory: China
Manuscript submission date: 2022-01-17
Reviewer chosen by: AI Technique
Reviewer accepted review: 2022-02-06 01:55
Reviewer performed review: 2022-02-16 14:38
Review time: 10 Days and 12 Hours

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SPECIFIC COMMENTS TO AUTHORS

In this manuscript, the authors describe the molecular mechanisms of Biyu decoction in the treatment for psoriasis. The title is informative, the abstract is complete. In the introduction section, there are poor information about basic characteristics of Psoriasis including the age of presentation, risk factor and pathogenesis, and the correct therapeutic approach. Additionally, for line 94 to line 114 there are no references and more than one should be included. Especially for this sentence "BYT comprises Zicao, Diyu, Cebaiye, and Gancao, which have definite curative effects on psoriasis. The therapeutic effects of BYT on PSO have been verified clinically" Reference must be included and additionally also if the therapeutic effect were proved by a or more randomized clinical trials. The material and methods section is complex but complete. In the discussion, there are just a few references and many topics are discussed that should be supported by evidence. In the text, the strength and limits of the study are missing and should be included. "Our results confirm that BYT can treat PSO through multi-component, multi-target, and multi-channel synergy and provide a basis for further in-depth clinical research of BYT treatment for PSO" this study was not done in vitro or in vivo so in my opinion, it is not able to confirm. This study may represent a start for further and more complex research. Minor English revisions are needed.
RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 75036

Title: Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 0301144

Position: Peer Reviewer

Academic degree: DNB, FACS, FICS, MBBS, MCh, MNAMS

Professional title: Additional Professor

Reviewer’s Country/Territory: India

Author’s Country/Territory: China

Manuscript submission date: 2022-01-17

Reviewer chosen by: Li-Li Wang

Reviewer accepted review: 2022-03-28 13:26

Reviewer performed review: 2022-03-28 13:59

Review time: 1 Hour

Scientific quality

[ ] Grade A: Excellent [ ] Grade B: Very good [ Y] Grade C: Good
[ ] Grade D: Fair [ ] Grade E: Do not publish

Language quality

[ Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing
[ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection

Conclusion

[ ] Accept (High priority) [ Y] Accept (General priority)
[ ] Minor revision [ ] Major revision [ ] Rejection

Peer-reviewer

Peer-Review: [ Y] Anonymous [ ] Onymous
SPECIFIC COMMENTS TO AUTHORS

The changes suggested have been appropriately included in the revised manuscript.
RE-REVIEW REPORT OF REVISED MANUSCRIPT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 75036

Title: Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 06130469

Position: Peer Reviewer

Academic degree: Doctor

Professional title: Doctor

Reviewer’s Country/Territory: Italy

Author’s Country/Territory: China

Manuscript submission date: 2022-01-17

Reviewer chosen by: Li-Li Wang

Reviewer accepted review: 2022-03-28 10:15

Reviewer performed review: 2022-03-29 14:58

Review time: 1 Day and 4 Hours

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SPECIFIC COMMENTS TO AUTHORS
The authors have answered most of my questions. The abstract is complete. -I would change the title into Molecular mechanisms of Biyu decoction as a possible future treatment for psoriasis: a network pharmacology and molecular docking study. In the introduction -"The therapeutic effects of BYT on PSO have been verified clinically" Reference is highly needed to support this sentence. -"According to Chinese medicine, "blood-heat" runs through psoriasis from beginning to end[10]. "Blood heat" is mainly characterized by bleeding and fiery heat. "Heat" stagnates blood collaterals, and erythema is seen on the skin. "Heat" forces blood to rush out of the veins, and causes spot-like bleeding. These correspond to the bright red patches, bleeding spots of a psoriatic rash" I suggest deleting this part. -Methods and results are complete but fairly reproducible for the complexity and since the mechanisms of the study are not ubiquitously known. -In the discussion: "TCM treatment of PSO has a therapeutic effect that is not inferior to the therapeutic effects of modern conventional medical therapies[21]. This reference is a study on Acitretin so I would change TCM into Acitretin, since this reference cannot support this sentence in this way. - "Most of the BYT ingredients have good oral bioavailability and drug-like properties. The 124 active ingredients screened out during this study have an affinity for 213 cell targets, thus providing a pharmacodynamic basis for the diversity and effectiveness of TCM formulations" this part is not supported by any references in the text and many parts of this section is not supported by the reference. -Strengths and limits have been added.
## RE-REVIEW REPORT OF REVISED MANUSCRIPT

**Name of journal:** *World Journal of Clinical Cases*

**Manuscript NO:** 75036

**Title:** Molecular mechanisms of Biyu decoction as treatment for psoriasis: a network pharmacology and molecular docking study

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer’s code:** 06186852

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

**Reviewer’s Country/Territory:** Sudan

**Author’s Country/Territory:** China

**Manuscript submission date:** 2022-01-17

**Reviewer chosen by:** Li-Li Wang

**Reviewer accepted review:** 2022-03-29 02:11

**Reviewer performed review:** 2022-04-18 05:35

**Review time:** 20 Days and 3 Hours

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SPECIFIC COMMENTS TO AUTHORS
Thank you very much for your revision. I am agreed with all revisions done by the authors.