

PEER-REVIEW REPORT

Name of journal: *World Journal of Translational Medicine*

Manuscript NO: 76667

Title: Photobiomodulation Therapy For Osteoarthritis: Mechanisms Of Action

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05731995

Position: Editorial Board

Academic degree: BSc, MSc, PhD, RN

Professional title: Assistant Professor

Reviewer's Country/Territory: United Arab Emirates

Author's Country/Territory: Brazil

Manuscript submission date: 2022-03-24

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-03-24 20:45

Reviewer performed review: 2022-03-24 21:23

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input checked="" type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The abstract section looks like a background section. It needs to be re-written summarising the paper and stating the aim of this review. The introduction started by defining the Photobiomodulation without providing a reference to where this definition came from. The abbreviations of the terms are reversed. For example, the paper states "LASER (Light Amplification by the Stimulated Emission of Radiation)". This is incorrect academic use of the abbreviation. It should be Light Amplification by the Stimulated Emission of Radiation (LASER). PBM abbreviation should be defined at the first instance in the introduction. It is not sufficient to define it in the abstract. There are many appropriate uses of English and in appropriate academic writing style. For example, the authors should not start a new paragraph say, "This orthopedic disorder is still listed...." What is referred to by the term "This" while it is the first sentence in the paragraph? The introduction is lacking focus. I struggle to understand what the authors are trying to explain. The review is about photobiomodulation. Therefore, the introduction should basically define it, provide some history, then explain potential benefits and risk. There is no need for a lengthy unclear introduction. I would have expected some details about if this treatment is recommended by some guidelines or not. The second section "THE ORIGINS OF PBM" starts by vague question that does not make sense. There are many sentences that are not references while they should be, especially in "PARAMETERS". For example, how did the author know that "LLLT typically employs the use of light in the red or near-infrared region, where the wavelengths fall in between 600 to 700nm, and 780 to 1100 nm". Where did this information come from? This is a review, not a primary research data. Therefore, it would be expected that these details are supported with evidence not based on the

authors' opinion or expertise. There are many problems in the sentences structure and many sentences are too long. Although this is a review not a systematic review, it would be expected that the authors would provide a method section describing the search strategy on how they identified the papers that they used to discuss the review.

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Reviewer's code: 06250380

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: China

Author's Country/Territory: Brazil

Manuscript submission date: 2022-03-24

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-03-25 00:45

Reviewer performed review: 2022-03-25 00:54

Review time: 1 Hour

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
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Authors should strongly justify the necessity to conduct the described research. This part of the introduction is insufficient. Both, in the introduction and in the discussion, the following paragraphs are often thematically unrelated. Authors should take care of the quality of the text. PBM is a non-invasive therapeutic modality with demonstrated effects in many fields related to regenerative medicine. PBM may offer medical experts ease of application, non-invasiveness, financial viability, efficacy, and lack of serious adverse events, it may prove to be a suitable ally in the management of mild to moderate degrees of OA. Overall, the manuscript has a relatively wide coverage, and the content is novel and interesting. But, figures 1- -4, figure legends and notes should be provided.