

Review Form 3

Journal Name:	Journal of Advances in Medicine and Medical Research
Manuscript Number:	Ms_JAMMR_130739
Title of the Manuscript:	Photobiomodulation Mitigates Oxidative Stress Induced by Bothrops jararacussu Venom in C2C12 Myoblast Cells
Type of the Article	Original Research Article

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PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	Photobiomodulation therapy (PBMT) has emerged as an interesting bioprotective tool against snake envenomation in recent years. Low-level laser (LLL) or Light-emitting diode (LED) light has exhibited protective role in multiple in vitro and in vivo experiments. In this manuscript, the authors have studied the bioprotective role of PBMT in C2C12 myoblast cells treated with <i>Bothrops jararacussu</i> venom. Although the exact mechanism of this protective role is not fully understood, the authors tried to shed light on the role of PBMT in oxidative stress, antioxidant activity and lipid peroxidation. The study helps to push forward the current state of knowledge regarding the effect of PBMT on cellular processes.	Thank you for your valuable feedback. Indeed, the emerging role of PBMT in snake envenomation treatment is fascinating. Your recognition of its potential as a bioprotective tool is encouraging.
Is the title of the article suitable? (If not please suggest an alternative title)	The title of the article is suitable.	Thank you
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is comprehensive.	Thank you
Is the manuscript scientifically, correct? Please write here.	The manuscript is scientifically sound.	Thank you
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	References are mostly adequate. However, I would insist to add reference/s on the role of PBMT on the viability of C2C12 cells which seems missing from this manuscript. The citation should be placed in the discussion and based on the protective role of PBMT on viability of C2C12 cells and the findings of this study, the conclusions should be drawn.	Thank you for your valuable suggestion. We have added a paragraph detailing the effects of photobiomodulation on cell viability in myoblasts, endothelial cells, and macrophages following incubation with <i>Bothrops</i> venom.

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Is the language/English quality of the article suitable for scholarly communications?	The standard of English in this manuscript needs further improvement. Punctuations and grammar needs to be improved. I would suggest requesting a colleague from non-scientific background to review your manuscript for English language.	Thank you for your valuable comment. As per your suggestion we have used the DeepSeek , an AI-powered writing assistant, to improve the clarity, grammar, and readability of the manuscript.
<u>Optional/General</u> comments	<p>In addition to the above comments, I would suggest the following additional comments</p> <p>1. Scientific names (especially “<i>Bothrops</i>”) should be uniformly italicized in the manuscript</p> <p>2. Section 2.2: “Dulbeccos modified Eagles medium” should be written as “Dulbecco’s Modified Eagle Medium”</p> <p>3. Section 2.5: “accumulation of nitrite (NO)” should be written as “accumulation of nitrite (NO₂)”</p> <p>4. Section 2.6: “H₂O production” should be written as “H₂O₂ production”</p> <p>5. Section 2.6: Before writing any abbreviation, for eg. “BjssuV” the full form should be written first and then the abbreviation should be used throughout the rest of the manuscript</p> <p>6. Section 2.6: “incubated at 370°C in a 5% CO” should be written as “incubated at 37°C in a 5% CO₂”</p> <p>7. Section 2.7: Reference “[23]” should be written in (Author, Year) format</p> <p>8. Section 2.7: "H₂O₂/min/mg protein” should be written as “H₂O₂/min/mg protein”</p> <p>9. Section 2.7: The full form of “LV” should be written before using the abbreviation</p> <p>10. Section 2.9: Font size of the section should be adjusted in line with rest of the manuscript</p> <p>11. Figure 1: In figure legend “H₂O₂” should be written as “H₂O₂”</p> <p>12. Section 3.3: “TBars” should be written as “TBARS”</p> <p>13. Figure 3: In the figure legend ELISA is mentioned. However, it is not evidently described in the “Material and Methods” section 2.8.</p> <p>14. In the “Discussion” section, full form of “LBI” should be written before the abbreviation.</p> <p>15. Conclusion: “PBM can protect cells” should be written as “PBM plays a protective role”</p> <p>16. Conclusion. A last line may be added highlighting the need of further in vivo studies to validate the findings of this study and to decipher the mechanism of action of PBMT.</p>	<p>1. We standardize all scientific names in italics.</p> <p>2. we exchanged Dulbeccos for Dulbecco's</p> <p>3. we exchanged (NO) for (NO₂)</p> <p>4. We correct H₂O production to H₂O₂ production</p> <p>5. The abbreviation <i>BjssuV</i> is written in full form in Section 2.1 and is used in its abbreviated form throughout the remainder of the manuscript.</p> <p>6. We exchanged 370°C in a 5%CO for 37°C in a 5% CO₂</p> <p>7. We correct the reference [23] on section 2.7</p> <p>8. We exchanged H₂O₂/min/mg protein for H₂O₂/min/mg protein</p> <p>9. We exchanged LV homogenates for C2C12 cell homogenates</p> <p>10. The font size has been adjusted to match the rest of the manuscript.</p> <p>11. We exchanged H₂O₂ to H₂O₂</p> <p>12. We exchanged (TBars) for (TBARS)</p> <p>13. We corrected “The lipid peroxidation concentration was evaluated in the supernatant by ELISA method” for “The concentration of lipid peroxidation in the supernatant was evaluated spectrophotometrically”.</p> <p>14. We exchanged “LBI” for “PBM”for consistency</p> <p>15. We exchange “PBM can protect cells” for “PBM plays a protective role”</p> <p>16. We included in the last line of the conclusion.” Finally, it is important to highlight the need for further <i>in vivo</i> studies to validate the findings of this study and to elucidate the mechanism of action of PBM therapy”.</p>

PART 2:

	Reviewer’s comment	Author’s comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	