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OPEN PEER REVIEW

# The Evaluation of 660, 810, and 940nm Laser Wavelengths on Nystatin-Resistant *Candida albicans*: An *In-Vitro* Study

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**About this report**

This open peer review (OPR) report shows the public comments made on this article during peer review, by the reviewers, the associate editor and the editor-in-chief, for every revision round, together with the authors' replies. Comments appear only with the consent of the people who wrote them. Reviewers who chose to sign their report are named; the others are shown as "Referee". Comments are edited for language only, and confidential remarks to the editors are not included.

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## 1 Original submission

1 comment · 28 Jan 2024

**Referee 1** Reviewer

REJECT 28 Jan 2024

The article is not suitable for publication in this journal. It does not have enough data and/or novelty.

2

# Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

# “Peer Review”

**Manuscript ID:** 144680

**Title:** The Evaluation of 660, 810, and 940nm Laser Wavelengths on Nystatin-Resistant Candida albicans: An in-vitro Study

**Dear Dr. Ali Zarei Mahmoudabadi,**

Thank you for allowing me to submit a revised draft of my manuscript. We appreciate the time and effort you and the reviewers have dedicated to providing your valuable feedback on the manuscript, and we are grateful to the reviewers for their insightful comments on my paper. We have been able to incorporate changes to reflect the suggestions provided by the reviewers. We have highlighted the changes within the manuscript.

Here is a point-by-point response to the reviewers’ comments and concerns:

**Reviewer comments**

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**Reviewer 1:**

I received the manuscript entitled "The Evaluation of 660, 810, and 940nm Laser Wavelengths on Nystatin-Resistant Candida albicans: An in-vitro Study" which aims to evaluate the effects of 660, 810, and 940nm laser wavelengths on nystatin-resistant C. albicans.

I believe that this article can be accepted for publication with some major comments and questions as follows:

1. No explanation has been given on how different lasers work. What is the reason for using lasers for this treatment?

Response: Thank you for your valuable comment. The explanation has been added to the introduction.

2. What is the reason for choosing these three specific wavelengths?

Response: Thank you for your comments. The explanation has been added to the introduction.

3. Why is the better performance of the medium wavelength not explained in the discussion section?

Response: Thank you for your comment. This part has been added to the discussion.

4. Why was a laser used when nystatin is effective against non-resistant strains?

Response: Thank you for your comment. Laser therapy has several advantages over conventional nystatin therapy which are described in the introduction part.

5. In the resistant strain, the lasers performed almost better. Why was no explanation given?

Response: Thank you for your comment. This explanation has been added to the discussion part.

6. On what basis were the selection times of 40 and 80 seconds chosen?

Response: Thank you for your valuable comment. The reference has been added to the methods section.

7. In Fig 1, "The mean number of colonies" are too high (1.00E8=10^8 means 100 million). Have I understood correctly or the numbers on vertical axis have problems?

Response: Thank you for your valuable comment. All figures have been revised.

Sincerely,

**********

**Reviewer 2:**

Dear author

The basis of your research was the number of colonies, and 0.5 McFarland 1.5 × 108 CFUs/mL was wrongly written as, if you had done it with a wavelength of 530 nm you would have just corrected the number, but considering that the wavelength of 540 nm was used it is suggested should be repeated for several samples with the wavelength of 530 nm and compared with the current results.

Response: Thank you for your valuable comment. The results obtained using the 530 nm wavelength were consistent with those obtained at 540 nm, indicating no significant changes in colony counts.

Thank you

Decision:

Minor revision

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**Reviewer 3:**

The article is not suitable for publication in this Journal. it does not have enough data and/or novelty

Rejected

Response: Thank you for your valuable comment. While previous studies have investigated the use of laser and light-based treatments against various strains of *C. albicans*, the focus has often been on non-resistant strains. This study is novel in its evaluation of 660, 810, and 940nm wavelengths, which have not been extensively studied in the context of nystatin-resistant strains. By targeting these specific wavelengths, our research aims to uncover potential wavelength-specific effects on fungal eradication. This work not only broadens the understanding of laser applications in antifungal treatments but also provides a foundation for developing innovative therapeutic strategies to combat resistant *C. albicans* infections, which are increasingly problematic in clinical settings. The findings of this study could pave the way for optimized laser therapies that are effective against drug-resistant fungal pathogens, addressing a critical need for alternative treatments in the era of rising antifungal resistance.

**Best regards**

**S L, DMD**

**Assistant professor, Oral Medicine Department, Islamic Azad University of Medical Sciences, Dental branch, Tehran, Iran.**

## 2 Revision 1

0 comments

*No public comments in this round.*