

# Review of: "Teeth Whitening: Optimization with Violet LEDs"

Daphne Velazquez<sup>1</sup>

<sup>1</sup> Midwestern University

**Potential competing interests:** No potential competing interests to declare.

## Review: Teeth Whitening Optimization with Violet LED's

This article describes a clinical whitening case where the treatment was successful in its whitening effect according to the results of the shade change measurement of one of the teeth. It is innovative in the combination of whitening modalities used. The treatment consisted of the sole use of hydrogen peroxide gel followed by the application of a violet LED light treatment. It ended with light application alone, following the removal of the gel. The strength of the study is the possible implementation of a successful whitening protocol that does not cause notable sensitivity. The weaknesses of the study include the conclusions were based on the shade measurement of one tooth versus multiple of the teeth that were treated. In the write-up, there was a lack of references in some areas, and language revision is advised. Recommend revision of the manuscript.

Some general recommendations for the authors:

- If there were any additional shade measurements taken on any of the other teeth, these should be included to provide additional data.
- In the abstract, I would specify why the protocol that is presented is innovative by also including that it is a combination of treatment modalities.
- Please review the manuscript for additional references that could be added, especially in paragraphs 4-7 under the heading "Action of violet lights on pigments that cause stains on the tooth."
- As an additional suggestion, you could include an infographic of the whitening protocol used to summarize it.
- In the conclusion, did the patient report decreased sensitivity as compared to how she felt before the procedure? How was this determined? Was there a questionnaire before and after the procedure?