Letters

COMMENT & RESPONSE

Retinal Imaging Considerations After RLRL Treatment for Myopia

To the Editor Regarding the recent report by Liao and coauthors[1] on changes following repeated low-level red light (RLRL) treatment for myopia, I question the validity of the conclusions drawn. The reported cone densities in control eyes at the most central locations (<0.5-mm eccentricity) deviate from what is established as normal based on histological preparations and in vivo measurements with research-grade adaptive optics scanning laser ophthalmoscopy systems.[1-4] This is important, as the conclusions of the study are dependent, at least in part, on the differences observed at these central eccentricities (**Figure**).

I appreciate the published commentary by Duncan,[5] which raises other important points. Her remarks only briefly touch on issues related to retinal image quality and cone density estimation, however. On reviewing the available imagery in the published article and supplements, it appears that the commercial Robotrak device and software may not offer sufficient accuracy for the reliable quantification of foveal cone densities. Perhaps if Liao and colleagues can provide access to their original imaging material, these evaluations can be confirmed by others.

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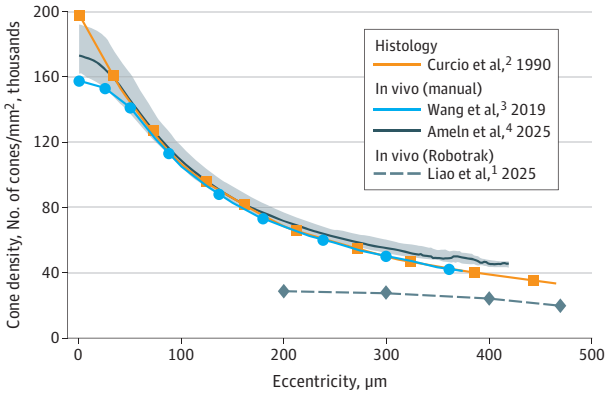
Figure. Cone Density in Control Eyes From Published Sources[1-4]



The data on control eyes by Liao et al[1] appear to differ from earlier results, which more closely resemble each other.[2-4] Shaded area indicates IQR.

Conflict of Interest Disclosures: None reported.

1. Liao X, Yu J, Fan Y, et al. Cone density changes after repeated low-level red light treatment in children with myopia. *JAMA Ophthalmol*. 2025;143(6):480-488. doi:10.1001/jamaophthalmol.2025.0835

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4. Ameln J, Witten JL, Gutnikov A, Lukyanova V, Holz FG, Harmening WM. In vivo cone photoreceptor topography of the human foveola. *Invest Ophthalmol Vis Sci*. 2025;66(11):13. doi:10.1167/iovs.66.11.13

5. Duncan JL. Repeated low-level red light—more than meets the eye? *JAMA Ophthalmol*. 2025;143(6):488-489. doi:10.1001/jamaophthalmol.2025.0957

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