Despite these concerns, this study adds value to the ongoing exploration of biologics in ocular surface disease and reflects a growing interest in patient-specific regenerative therapies. Constructive scrutiny of methodology, particularly outcome reporting and statistical modeling, is essential for translating findings into clinical practice. We appreciate the authors' contributions to this evolving field.

Declarations

Authorship Contributions

Concept: R.M., P.S., R.S., Design: R.M., P.S., R.S., Data Collection or Processing: R.M., P.S., R.S., Analysis or Interpretation: R.M., P.S., R.S., Literature Search: R.M., P.S., R.S., Writing: R.M., P.S., R.S.

Conflict of Interest: No conflict of interest was declared by the authors.

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References

- Sachan S, Dwivedi K, Singh SP, Kumar S, Singh VK. Comparison of 20% autologous platelet-rich plasma versus conventional treatment in moderate to severe dry eye patients. Turk J Ophthalmol. 2025;55:112-119.
- Mishra B, Sudheer P, Agarwal A, Srivastava MVP, Nilima, Vishnu VY. Minimal clinically important difference (MCID) in patient-reported outcome measures for neurological conditions: review of concept and methods. Ann Indian Acad Neurol. 2023;26:334-343.
- Hao R, Zhang M, Zhao L, Liu Y, Sun M, Dong J, Xu Y, Wu F, Wei J, Xin X, Luo Z, Lv S, Li X. Impact of air pollution on the ocular surface and tear cytokine levels: a multicenter prospective cohort study. Front Med (Lausanne). 2022;9:909330.
- Tsou TS. Robust likelihood inference for diagnostic accuracy measures for paired organs. Stat Methods Med Res. 2019;28:3163-3175.
- Kamiya K, Takahashi M, Shoji N. Effect of platelet-rich plasma on corneal epithelial healing after phototherapeutic keratectomy: an intraindividual contralateral randomized study. Biomed Res Int. 2021;2021:5752248.

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Reply

We would like to thank you for the opportunity to respond to the issues raised in the letter and to clarify aspects of our study¹ related to these concerns. We would also like to thank the authors for their interest in our paper and for taking the time to express their observations.

We totally agree that reporting the proportion of patients achieving a minimal clinically important difference (MCID) would have been better than reporting Ocular Surface Disease Index (OSDI) scores. The problem with MCID is that there is no single universally agreed upon MCID for OSDI. I would like to point out that the study provided as a reference is a neurology article. There is no consensus on the method used to measure MCID. Also, a multitude of factors affect MCID, such as disease severity, study methodology, patient population, and treatment context. A key study published in 2010 established the following MCID ranges for OSDI: improvement of 4.5 to

7.3 points for mild to moderate disease and 7.3 to 13 points for severe disease.³ However, we completely agree that once a single universally agreed upon OSDI MCID value is obtained, including it for calculation of symptom improvement will be of paramount importance.

We acknowledge the authors' concern regarding the potential for type I error due to repeated measures and intrapatient correlation in bilateral ocular disease. While regression models are more suitable for prediction analyses, in our study we primarily compared mean values between two groups. To address their concern, we re-analyzed the data with Bonferroni correction applied to control for type I error. The mean, standard deviation, and p-values remain unchanged. We appreciate this suggestion, as it has helped strengthen the statistical rigor of our results.

In this study, outcomes from both eyes were used. The results from this analysis are usually unbiased and the variance of estimate is similar to using all of the data with appropriate accommodation of correlation.⁴ Regarding the use of a paired-eye statistical model and stratified variance analysis, we will try to incorporate these suggestions in our future studies. Also, we totally agree that platelet concentration should have been quantified in the prepared aPRP drops, especially the stored ones. We are very thankful for the suggestion and will definitely implement this approach going forward.

Regarding best corrected visual acuity (BCVA), I would like to clarify that the phrase "improved visual acuity" appears only once in the article, in a sentence citing references 17 and 18.^{5,6} Therefore, it was an observation of other researchers. We clearly stated that the improvement in BCVA in the study group, while potentially relevant, did not reach statistical significance.

The grading system of impression cytology has been referenced as early as 1984⁷ and as recently as 2025.⁸ Therefore, it is a well standardized and referenced grading system. However, I agree that a scoring metric would have been better for objective quantification.

In summary, we are thankful to receive so much interest in our article. We truly acknowledge the appreciation of our study and will try to incorporate the suggestions in our future research.

Declarations

Authorship Contributions

Analysis or Interpretation: S.S., S.P.S., S.K., V.K.S., K.D., Literature Search: S.S., K.D., Writing: S.S., K.D.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

- Sachan S, Dwivedi K, Singh SP, Kumar S, Singh VK. Comparison of 20% autologous platelet-rich plasma versus conventional treatment in moderate to severe dry eye patients. Turk J Ophthalmol. 2025;55:112-119.
- Mishra B, Sudheer P, Agarwal A, Srivastava MVP, Nilima, Vishnu VY. Minimal clinically important difference (MCID) in patient-reported outcome measures for neurological conditions: review of concept and methods. Ann Indian Acad Neurol. 2023;26:334-343.

- Miller KL, Walt JG, Mink DR, Satram-Hoang S, Wilson SE, Perry HD, Asbell PA, Pflugfelder SC. Minimal clinically important difference for the ocular surface disease index. Arch Ophthalmol. 2010;128:94-101.
- Ying GS, Maguire MG, Glynn R, Rosner B. Tutorial on biostatistics: statistical analysis for correlated binary eye data. Ophthalmic Epidemiol. 2018;25:1-12.
- Kaido M, Matsumoto Y, Shigeno Y, Ishida R, Dogru M, Tsubota K. Corneal fluorescein staining correlates with visual function in dry eye patients. Invest Ophthalmol Vis Sci. 2011;52:9516-9522.
- Benítez-Del-Castillo J, Labetoulle M, Baudouin C, Rolando M, Akova YA, Aragona P, Geerling G, Merayo-Lloves J, Messmer EM, Boboridis K. Visual acuity and quality of life in dry eye disease: proceedings of the OCEAN group meeting. Ocul Surf. 2017;15:169-178.
- Nelson JD, Wright JC. Conjunctival goblet cell densities in ocular surface disease. Arch Ophthalmol. 1984;102:1049-1051.
- Pradeep TG, Honniganur DR, Devadas SK. A study of conjunctival impression cytology in patients undergoing allogeneic hematopoietic stem cell transplantation and its relationship with Ocular Graft versus Host Disease. Rom J Ophthalmol. 2025;69:68-73.



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