

Review report

BSMMUJ-17.2-70255

Autologous serum eye drops for treatment of dry eye syndrome
Shaheen SSI *et al.* (Email: drskshaheen@yahoo.com)

REVIEW COMMENTS		AUTHOR RESPONSE	
		[Note: Please write the responses to each point here mentioning line number(s). You must change the manuscript as per your response.]	
A. Mechanical review			
Date sent to author: 17-Dec-23		Date replied by author: 27-Jan-24	
1.	Combine 'Aim' with 'Background'	Combined as advised (line 69-73).	
2.	Merge 'Recommendation' with 'Results'	Merged as advised.	
3.	Ensure consistency in the date format for references. Some references have day-month-year, while others only have the year. Reference 12 does not appear to follow the Vancouver style. Please use uniform journal reference style.	Revised the date format of all references in Vancouver style. Revised reference no. 12.	
B. Technical review			
Reviewer's name: B			
ORCID: -			
Date assigned: 13-Apr-24			
Date submitted: 28-May-24			
Do you have any conflict of interest with the author/s? No			
Do you wish to be disclosed to the author? No			
Comments sent to author (Date: 27-May-24)		Date replied by author: 4-Jun-24	
1.	How would you rate the originality and depth of the manuscript?	2	Revised the manuscript substantially.
2.	Is the manuscript written in a scholarly manner?	6	-
3.	Does the manuscript have the potential to make a valuable contribution to the world of knowledge?	5	-
4.	Does the manuscript meet ethical standards?	7	-
5.	No innovation, replication of other studies abroad. No scientific explanation in favor of better outcome.		The study lacks innovative elements and primarily replicates existing research. The results do not provide new scientific explanations for the observed outcomes, but they do validate the effectiveness of ASED in a new demographic. Future studies could focus on understanding the molecular mechanisms underlying the enhanced efficacy of ASED and exploring potential enhancements to the preparation and administration protocols. Line number -36-93. However, we revised our manuscript substantially to reflect the issues suggested by reviewer.
Reviewer's Recommendation: REVISIONS REQUIRED			
Reviewer's name: Umme Habiba			
ORCID: 0009-0000-1361-9310			
Date assigned: 22-May-24			
Date submitted: 25-May-24			
Do you have any conflict of interest with the author/s? No			
Do you wish to be disclosed to the author? Yes			
Comments sent to author (Date: 27-May-24)		Date replied by author: 4-Jun-24	

REVIEW COMMENTS			AUTHOR RESPONSE
			[Note: Please write the responses to each point here mentioning line number(s). You must change the manuscript as per your response.]
1.	How would you rate the originality and depth of the manuscript? 9	9	-
2.	Is the manuscript written in a scholarly manner? 9	9	-
3.	Does the manuscript have the potential to make a valuable contribution to the world of knowledge? 9	9	-
4.	Does the manuscript meet ethical standards? 10	10	-
5.	<p>Overview of the manuscripts</p> <p>The manuscript titled "Comparative Analysis of Clinical and Biochemical Benefits: Autologous Serum Eye Drops vs. Commercial Eye Drops for Dry Eye Syndrome Treatment" demonstrates comparing the clinical and biochemical benefits of autologous serum eye drops (ASED) with commercial eye drops for treating Dry Eye Syndrome (DES) which is already diagnosed by ophthalmologists. It is conducted at BSMMU and Sheikh Hasina National Institute of Burn & Plastic Surgery and the study involves 40 patients diagnosed with DES which is divided randomly into two groups: one group receiving ASED and the other commercial eye drops. The study evaluated various parameters for a six-month period. The study found significant improvements in complaint scores, fluorescein scores, and tear break-up time in the ASED group compared to the commercial eye drops group. Finally, it is stated that ASED should be used in patients with more severe conditions.</p>		-
6.	<p>Major Points</p> <p>a. In the method section, a tool is mentioned to be used to measure the clinical and biochemical parameters as well as patient-reported outcomes. The parameters are not well mentioned in the method.</p> <p>b. The current limitations could be revised. It is valid that the inconvenience of repeated blood draws a great inconvenience to the patients. A more comprehensive limitations part can be added concentrating on any inconveniences covering the follow-up period, or potential microbial contamination, etc. for a better understanding of the study's constraints.</p> <p>c. The conclusion seems too specific and short. It could further elaborate and suggest future scopes of research.</p> <p>d. Please revisit the references, since some gaps are present, such as, not using proper journal abbreviations, ensure a space before "doi", and correct any minor formatting issues, such as punctuation.</p>		<p>Actually, tool means the parameters which are clinical and laboratory. The clinical parameter visual acuity and laboratory parameter is Fluorescein score (line numbers 49 and 50).</p> <p>Utilization of autologous serum is that the repeated blood draws required for its preparation can pose an inconvenience to patients undergoing prolonged treatment. However, their implementation remains limited due to concerns about microbial growth during Storage (line numbers 90 – 91).</p> <p>ASED is generally reserved for severe cases or patients who have not responded to less costly treatments, owing to their elevated cost and restricted accessibility. Further research is needed to innovate and enhance the therapeutic protocols for ASED to maximize patient outcomes (line numbers 93 – 94).</p> <p>We revised as advised.</p>
7.	<p>Minor Points</p> <p>a. The manuscript contains several grammatical errors and typographical mistakes that need to be revised. Those mistakes can be found in the attachment word file.</p>		Grammatical errors and typographical mistake revised

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<p>b. The study utilizes a random design which mitigates the possibilities of bias and ensures the reliability of the results. Moreover, it divides sample size into two equally proportioned groups, indicating a balanced distribution. However, inclusion criteria are not elaborated which could be beneficial for the study method.</p> <p>c. Some abbreviations like OSDI, TBUT are not provided accordingly.</p>	<p>Patients with ASED were included in this study. As we selected the ASED patients total 40 patients and then divided them into two group according to treatment option.</p> <p>This Ocular Surface Disease Index (OSDI), tear break up time.</p>
Reviewer's Recommendation: Revisions required	
Reviewer's name: F	
ORCID: -	
Date assigned: 27-May-24	
Date submitted: 27-May-24	
Do you have any conflict of interest with the author/s?	
No	
Do you wish to be disclosed to the author?	
Yes	
Comments sent to author (Date: 27-May-24)	Date replied by author: 4-Jun-24
1. How would you rate the originality and depth of the manuscript?	3 We revised our manuscript as possible to reflect its originality and depth.
2. Is the manuscript written in a scholarly manner?	2 We improved the writing.
3. Does the manuscript have the potential to make a valuable contribution to the world of knowledge?	3 We revised and reflected the contribution in the world of knowledge.
4. Does the manuscript meet ethical standards?	4 Described the ethical section separately.
5. a. The efficacy of the ASED and Eye drop is measured only on 2 variables. It doesn't quantify to draw a conclusion on the basis of this result.	We acknowledge that measuring efficacy based on only two variables may limit the comprehensiveness of our conclusions. So, we focused on the key variables of fluorescein score and visual acuity due to the constraints of our initial research scope and resources. These variables were chosen because they are critical indicators of DES severity and patient response to treatment and are widely used in similar studies.
b. There should be baseline data of the sample regarding outcome variables, then collection of data at an interval. Data is not presented here.	Preoperative data is actually the base line data. 4 weeks interval was there and data presented in table.
c. The outcome variables are not mentioned clearly anywhere.	We appreciate the reviewer's feedback regarding the clarity of outcome variables. In the revised manuscript, we have provided a detailed list of the clinical and biochemical parameters that were assessed throughout the study. Line number -49-50,145
d. Very poor write up.	We tried to improve it in the revised version.
Reviewer's Recommendation: Revisions required	
Executive editor's name: M Mostafa Zaman	
ORCID: 0000-0002-1736-1342	
Comments sent to author (Date: 27-May-24)	Date replied by author: 4-Jun-24

REVIEW COMMENTS		AUTHOR RESPONSE
		[Note: Please write the responses to each point here mentioning line number(s). You must change the manuscript as per your response.]
1.	MAJOR Revision to convert the manuscript to a Research Letter (750 words, no abstract, one table, 3 highlights, 10 references, (see the Author Instruction)	We revised the manuscript in a research letter with 750 words, no abstract, one table, 3 highlights, 6 references (line numbers 1 – 93).
2.	Data analysis section missing	Statistical analyses were performed using SPSS by Chi-square test and independent t test with P<0.05 considered statistically significant (line numbers 52 – 53).
Executive editor's decision: Revision required		

C. Editorial decision

Final editorial decision: **Accepted on 15-Jun-24**

Editorial clarification	
Executive editor's name: M Mostafa Zaman	
ORCID: 0000-0002-1736-1342	
1. Comments sent to author (Date: 5-Jul-24)	Date replied by author: 5-Jul-24
The table's structure is broken. Kindly pay attention to your statistical analysis. The chi-square test for the categorical variables is OK, but you also have quantitative variables (Fluorescein score).	According to the comment I tried to make revision.
2. Comments sent to author (Date: 5-Jul-24)	Date replied by author: 9-Jul-24
First, The second reviewer's score for Point 1 (originality and depth) is very low (2 out of 10). You have to respond to this by stating major revisions.	We explained to reflect the originality and depth in our revised version.
Second, the reviewer's comment, "No innovation, replication of other studies abroad, no scientific explanation in favour of a better outcome," must be responded to. This is a very strong negative comment. We cannot accept the manuscript without a satisfactory response and necessary revisions.	We revised our manuscript according to reviewer's comment and add the response.
I do not see any revision of the statistical aspect despite my comments on it.	We have addressed the statistical aspect as advised.
3. Comments sent to author (Date: 11-Jul-24)	Date replied by author: 12-Jul-24
Kindly respond to all points raised by the reviewers and editor with sufficient description to make the contents publishable as a Review Report. Changes are to be highlighted referring to specific line numbers.	Thanks for your valuable feedback. We try to do as we can. Please find the revised point-by-point response file.