

Dear editor and reviewers

Thank you for your letter and reviewers' comments concerning our manuscript entitled "Selective Laser Trabeculoplasty as Adjunctive Treatment for Open-Angle Glaucoma VS. following incisional glaucoma surgery in Chinese eyes" (ID 80771). Those comments are valuable and very helpful. We have read through comments carefully and have made corrections. Based on the instructions provided in your letter, we uploaded the file of the revised manuscript. The responses to the reviewer's comments are marked in red and presented following.

We would love to thank you for allowing us to resubmit a revised copy of the manuscript and we highly appreciated your time and consideration.

Sincerely,
Jing Zhu.

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors:

1. Need additional ethics numbers? (Line 124)

The author's answer: We have added the ethics numbers [2022]-S-5 in line 124.

2. Are the subject exclusion criteria missing? (Line 131)

The author's answer: We are grateful for the suggestion. As suggested by the reviewer, we have added the exclusion criteria. (Line 133-135)

3. Do all subjects need a comprehensive ophthalmic examination before laser surgery? What are the specific tests? (Line 148)

The author's answer: Detailed ophthalmic examinations were conducted both before and after SLT. (Line 145-147)

4. After laser surgery, "IOP, intraocular pressure writing "is repeated. IOP as the main measurement index, please describe the measurement method and instrument in detail. (Line 149)

The author's answer: We deleted the repeated IOP in the sentence. We have described the measurement method. The IOP was measured by Goldmann applanation in all patients.

5. 72 patients were selected for 77 eyes, and 4 patients were included in both eyes. Is the binocular correlation considered, and the data analysis can be biased? (Line 155)

The author's answer: There are 5 patients had both eyes treated. To avoid the bias related to binocular correlation, we use the following statistical methods. Changes in mean IOP after treatment were analyzed using a paired T-test. Changes in mean number of medications used after treatment were analyzed using Wilcoxon signed rank test and tested using GEE Poisson regression models.

6. The reviewer's comment: Are the corresponding values of the result analysis part consistent with those shown in Table 2? (Line 166)

The author's answer: we apologize for the mistakes of the data in the paragraphs. We already change this part consistent with those shown in Table 2. (Line 167)

7. For "3mo", are the units shown in the article consistent? The SLT "security" is mentioned in the conclusion, Which specific (Line 196) measurement index, can be reflected in this study? (Line 257)

The author's answer: The author's answer: We have changed it into "During the first 3 months of follow-up". (Line 183) There are more details mention about the "efficacy" of SLT. We have deleted the "security" in the conclusion.

Finally, the selection of patients in this paper lacks exclusion criteria, the experimental design referred to the specific steps of SLT treatment such as light spot and energy in previous research methods. As for the result analysis, IOP is the main index, and the introduction of the measurement process and instruments of IOP is lacking.

The author's answer: We have added the measurement process and instruments of IOP in the Method. The IOP was measured by Goldmann applanation in all patients.

This paper cited a large number of literatures and proposed that SLT was safe and effective in the treatment of OAG. The results of this study prove that SLT is an effective method for the treatment of OAG and PGS. In the discussion, there is a lack of data support for the safety and noninvasive treatment of OAG and PGS by SLT.

The author's answer: We mainly discussed the "efficacy" of SLT. We have deleted the "safety and noninvasive treatment" in the conclusion.

PS. At 6th month, two patients in PGS group had been excluded because of the progression of visual field, and they underwent glaucoma surgery again. We did the statistical analysis again as shown in the Table 3 and 4 (n=39).

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Minor revision

Specific Comments to Authors: The authors presented the results of a retrospective study where 77 Chinese glaucomatous eyes with POAG or prior glaucoma surgery underwent SLT. The subject of the article is generally interesting, and the results are well presented. The paper is well written, and easy to follow.

1. In the introduction I would add the word “presumably” I the sentence “does not produce any damage to the microstructure of the TM”.

The author’s answer: We agree with the comment and added the word in the sentence.

2. “Therefore, our aim was to determine the efficacy and safety of SLT as adjunctive treatment in glaucoma patients with OAG and PGS, and the number of medications used up to three years.” Please try to better explain your cohort. Are the patients having OAG also had PGS? It is not clear.

The author’s answer: Definitely, the patients having OAG also had PGS. So, we have made some change in this sentence. We changed it into” Therefore, our aim was to determine the efficacy of SLT as adjunctive treatment in patients with previous incisional glaucoma surgery whose IOP remains or becomes uncontrolled, and the number of medications used up to three years.” (Line 116-118)

3. I suggest to add a table with the type of “prior glaucoma surgery”.

The author’s answer: Table 2 is the type of “prior glaucoma surgery”

4. Please specify if it as a single-center or multi-center study.

The author’s answer: Our study is a single-center study. (Line 122)

5. “If necessary, antibiotic eye drops were given to prevent infection” can you better explain this sentence? Why should we have any infection after SLT? Do you sterilized your Latina lens after every usage?

The author’s answer: Our Latin lens is detoxified, but due to the contact operation, few patients have obvious red eyes and are given antibiotic eye drops. To avoid ambiguity, we deleted the sentence.

6. "Patients underwent eye examination including IOP, visual acuity, intraocular pressure, slit lamp microscope, gonioscopy, visual field, OCT for retinal nerve fiber layer (RNFL) thickness, fundus photography" IOP and intraocular pressure are repeated. As it is the same thing intraocular pressure should be removed.

The author's answer: We deleted the repeated IOP in the sentence.

7. In the results section you say "Before SLT treatment, all eyes were given glaucoma medications (1 to 4 drugs)." Instead in the methods you say "Inclusion criteria: age ≥ 18 y, an increased IOP (> 21 mmHg) without medication" those sentences are in conflict. Please correct them.

The author's answer: We corrected them as the following: Inclusion criteria: age ≥ 18 y, an increased IOP (> 21 mmHg), open atrial angle and scleral process can be seen by gonioscopy, OAG diagnostic criteria are met.

8. In the abstract you say "The mean baseline IOP was 22.73 ± 2.29 mmHg in SLT as adjunctive treatment group", then in the results you say "The mean IOP before treatment was 19.8 ± 3.9 mmHg in OAG and 19.8 ± 3.9 mmHg in PGS". Those sentences are in conflict. Please correct them.

The author's answer: We apologize for the mistakes of the data in the paragraphs. We already changed this part consistent with those shown in Table 2.

9. "At 6th month, two patients withdrew from the group because of the progression of visual field, and they underwent glaucoma surgery again in PGS group." I suggest that those 2 patients should be considered as failure and excluded by the second analysis.

The author's answer: Those two patients in PGS group had been excluded. We did the statistical analysis again as shown in the Table 3 and 4 (n=39).

10. "In summary, SLT is safe, effective, non-invasive, and effective methods for the treatment of OAG and PGS." Based on the nature of this retrospective study and the small number of patients the conclusion should be less strong as a statement.

The author's answer: We agree with the comment and re-wrote the sentence in the revised manuscript as the following: In summary, SLT may be efficacious in eyes with prior incisional glaucoma surgery. And it provides an effective treatment option to lower IOP to avoid or postpone subsequent incisional glaucoma procedures.

11. The language need a major revision.

The author's answer: We apologize for the language problems in the original manuscript. The language presentation was assistance form a native English speaker with appropriate research background.