Peer Review File
Effects of mitomycin C at different exposure time on the morphology of corneal endothelial cells in LASEK surgery

Reviewer: 1
Methodology cleared that duration of MMC application depended on the manifest refraction of the eye. This means that laser ablation depth will be proportional with the time of MMC application which add another variable on the effect on corneal endothelium.
Time of MMC application should be decided randomly regardless of MR and laser ablation time to evaluate the effect of MMC application time only.
Response: It is really true and scientific as you suggested that randomized time setting of MMC application would be better to this trial. But objective conditions and actual clinical techniques have not yet allowed us to meet this, and the reasons are as following. First of all, from the perspective of medical treatment, MMC application time should be proportional to the laser ablation depth. As we all know, MMC has a good effect on reducing haze after LASEK, but the golden standard of it's application time is still not reach an agreement. The increase of activated corneal stroma fibroblasts and irregularly arranged collagen proteins are the main causes of haze, a large number of studies have shown that, the deeper ablation depths is, the more activated corneal stroma fibroblasts and irregularly arranged collagen proteins would have. Therefore, MMC application time should not be insufficient in order to prevent haze. On the other hand, MMC has the ability to inhibit and kill cells through destroying DNA structure, which means overlong time of MMC application will damage normal cornea stroma cells. From these we can see that a reasonable action time of MMC in LASEK is necessary and setting application time according to cornea ablation depth or refraction diopter is reasonable yet. Secondly, from the perspective of ethic, in terms of current techniques and conditions, we are not able to randomize application time of MMC, because our trail is based on a clinical surgical operation treatment, each step of surgery should be strict to guarantee the right to information and therapeutic effect of patients. Random application time of MMC means unreasonable, over-short or over-long, time may be used in patients, which is very likely to cause severe medical accident like insufficient acting time fail to prevent haze or over-long-acting time led to the death of normal cornea cells. Hence, from the above reasons, we are very sorry that the MMC application time in this trail is not able to meet randomized standard. But we guarantee that it is the best and the most reasonable way of time setting based on the practical clinical situation. We sincerely hope that our response can give you a satisfactory answer.

In English, you should remove the word cutting and replace it with ablation.
Response: We are very sorry for our less precise expression with “cutting”, and we have replaced all the word “cutting” with “ablation”.
Special thanks to you for your professional comments.

Reviewer 2
For numeric values, in addition to arhythetical mean + standard deviation, the range should be shown in the manuscript and in the tables.
Response: We are very sorry for our negligence of the range of numeric values, according your comment, we have re-written this part to make sure the complete expression form of numeric
values results in the paper.

Special thanks to you for your professional comments.

We tried our best to improve the manuscript and made some changes. These changes will not influence the content and framework of the paper. We appreciate for your warm work earnestly, and hope that correction will meet with approval. Once again, thank you so much for your comments and suggestions.