Reviewer's report

Title: Visual rehabilitation in moderate keratoconus: combined corneal wavefront-guided transepithelial photorefractive keratectomy and high-fluence accelerated corneal collagen cross-linking after intracorneal ring segment implantation

Version: 0 Date: 09 Oct 2017

Reviewer: Lin Li

Reviewer's report:

The effect of combined corneal wavefront-guided transepithelial photorefractive keratectomy and accelerated corneal collagen cross-linking after intracorneal ring segment (ICRS) implantation in patients with moderate keratoconus was investigated in this study, and the result showed this operation is a safe and effective treatment for moderate keratoconus. Some suggestions are as follows:

1. The title of this paper give only the object of this study, but not give the purpose or contents of the research.

2. In the introduction, the authors list several kinds of combination of ICRS implantations, CXL, and/or PRK for keratoconic patients, and give their hypothesis based on the positive effects of these combinations. Is there any direct introduction about the combination used in this paper in other studies? What's its advantages and disadvantages?

3. In line 88-92, Corvis ST was introduced, the significance of measuring corneal biomechanics may be needed there. How does the effect of ICRS implantation on the measurement of Corvis ST?

4. What's the difference between final logMAR UDVA and UVDA after tPRK and CXL mentioned in the result.

5. Statistical significance of the differences among 1M, 3M, 6M after tPRK and CXL of the parameters provided in table 2-4 can be added to study the effect of different recovery time after operation. And it should to demonstrate the stability of all parameters (visual acuity, HOAs, morphological characteristics, and biomechanical properties) due to the progressive nature of keratoconus.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal