Reviewer's report

Title: Customized pachymetric guided epithelial debridement for corneal collagen cross linking

Version: 2 Date: 9 February 2009

Reviewer: Farhad Hafezi

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I very much regret but I still see no major improvement in the manuscript. The author's answers to my comments do not devalidate my criticisms to the concept: leaving the epithelium intact over the thinnest part of the cornea might lead to unpredictable results. Even when using the standard protocol with a full abrasio, we see an arrest of keratoconus progression (maximal K.readings) in 60%, and a decrease of maximal K.readings in 40% of all cases. This might be due to local differences in the crosslinking behaviour. These local differences will be even stronger if some areas of the cornea will be de-epithelialized and others not. Furthermore, the amount of haze will be different over epithelialized and de-epithelialized areas.

Last but not least: the epithelium is an efficient UVA blocker. Leaving the epithelium intact over the thinnest area means that this area will not be crosslinked. And this is in contrary to the response to my concerns that was given by the authors.

Furthermore, the authors still give answers that are incorrect (i.e. BSS has the same osmolarity as the corneal stroma, as stated in one of their answers).

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests