Reviewer's report

Title: A coding polymorphism in Matrix Metalloproteinase 9 reduces risk of scarring sequelae of ocular Chlamydia trachomatis infection

Version: 1 Date: 3 April 2006

Reviewer: Peng Tee Khaw

Reviewer's report:

Please number your comments and divide them into

- Major Compulsory Revisions

The author must respond to these before a decision on publication can be reached. For example, additional necessary experiments or controls, statistical mistakes, errors in interpretation.

- Minor Essential Revisions

The author can be trusted to make these. For example, missing labels on figures, the wrong use of a term, spelling mistakes.

The reference abbreviations need to be consistent e.g. reference 15 should be Br J Ophthalmol. Reference 1 also needs checking

- Discretionary Revisions

These are recommendations for improvement which the author can choose to ignore. For example clarifications, data that would be useful but not essential.

The authors have rightly introduced the literature on the possible role of MMPs in the Chlamydia infection

The authors need to mention that MMPs have been shown to be important in ocular fibroblast mediated collagen contraction (Daniels et al Invest Ophthalmol Vis Sci 2003 ; 44 :1104-1110)(Sheridan et al Am J Pathol 2001; 159: 1555-66) which underlies the dramatic change in tissue leading to lid contraction and scarring of the cornea due to the lashes turning in. This is also important for other fibroblasts and this may be relevant for scarring elsewhere, for example genital infection (Scott KA et al FEBS Lett 1998; 441:137-140) It is also important to mention that inhibiting MMP function may have a dramatic effect on cell mediated collagen contraction in vivo (Scott et al 1998, Daniels et al Invest Ophthalmol Vis Sci 2003) and in vivo in conjunctival scarring (Wong et al Invest Ophthalmol Vis Sci 2003, 2005) which emphasises the potential importance of their finding and also possible treatment avenues.
Please note that both the comments entered here and answers to the questions below constitute the report, bearing your name, that will be forwarded to the authors and published on the site if the article is accepted.

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes

**Declaration of competing interests:**

'I declare that I have no competing interests'