

4 Altman DG. Practical Statistics for Medical Research. Chapman and Hall: London, 1991.

AD Blann and GYH Lip

Haemostasis, Thrombosis and Vascular Biology Unit, University Department of Medicine, City Hospital, Birmingham, UK E-mail: a.blann@bham.ac.uk

Eye (2009) **23**, 494–495; doi:10.1038/eye.2008.71; published online 21 March 2008

Sir,

Reply to Drs Blann and Lip

We would like to thank Drs Blann and Lip for their interest in our paper.1 We believe that the association of atherosclerosis and age-related macular degeneration (AMD) is a complex one,² it is likely that they share a common mechanism but local factor might dictate the final disease process. It is possible that they share similar risk factors. The suggestion of a cross-sectional analysis of the two groups, one with AMD but without atherosclerosis and one with atherosclerosis but no AMD, suffers selection bias and it is not practically possible to say who are without atherosclerosis, at least in an eye clinic. In our study design, we included consecutive patients and normal controls, using a medical questionnaire to correct, for potential alternations in MMP levels. As the method of acquisition is identical, it reduces bias and also allowed us to study the interaction of atherosclerosis and AMD.

The rest of the concern of Drs Blann and Lip was on our statistical analysis. The mere reason that there are so many different statistical tests is that no one can really agree on the best test to be used in different circumstances. Although I do agree with their comments, the threefold increase of MMP-9 levels in AMD patients will be significant, no matter how you want to analyse the data.

As for the specific comment, the statistical analysis of the clinical data was summarised in Table 1 in the published paper. This is a pilot study as the number of patients was small, as we have mentioned in the original paper, and we need a larger study (which is underway) to confirm our findings and the current data set has allowed us to perform more accurate study size calculation.

References

- 1 Chau KY, Sivaprasad S, Patel N, Donaldson TA, Luthert PJ, Chong NV. Plasma levels of matrix metalloproteinase-2 and -9 (MMP-2 and MMP-9) in age-related macular degeneration. *Eye* 2007; 21(12): 1511–1515. e-pub ahead of print 16 February 2007.
- 2 Sivaprasad S, Bailey TA, Chong V. Bruch's membrane and the vascular intima: is there a common basis for age-related changes and disease? Clin Experiment Ophthalmol 2005; 33(5): 518–523.

NV Chong

King's College Hospital, London, UK E-mail: victor@eretina.org

Eye (2009) **23**, 495; doi:10.1038/eye.2008.69; published online 14 March 2008