Reviewer's report

Title: Automated analysis of digital confocal scanning laser ophthalmoscopy fundus autofluorescence images of geographic atrophy in advanced age-related macular degeneration

Version: 2 Date: 29 December 2004

Reviewer: Eberhart Zrenner

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Geographic atrophy (GA) of the retinal pigment epithelium is one form of advanced age-related macular disease (AMD) that is responsible for 20% of the legal blindness from AMD. It will become increasingly prevalent as the population ages. Until recently, little attention has been focused on this relatively common disorder. There is an obvious need for better diagnostic tools and for automated analysis techniques for both natural history studies of GA and evaluation of treatment effects for future interventions.

Deckert et al. describe a new automated computer-assisted method for detection and quantification of GA in fundus autofluorescence images. They show that this very recently developed tool is equally accurate compared to two former methods and that this tool has the potential to speed up the automated measurement process of GA lesions. Such an improvement may turn out to be important in future natural history and intervention studies.

Minor essential revision
Abstract: The authors refer to two previously published methods. They should briefly describe/introduce these methods.
Abstract, Results: The authors should give reasons why the method C â€œis not inferior to two formerly used proceduresâ€. Actually, this statement should appear in the Conclusions, rather than in the Results section of the abstract.
Discussion (page 7): The third paragraph â€œThe study presented is a pilot studyâ€ should rather appear in the Introduction.