



# Reply to Drs. Nikolaos and Panagiotis Dervenis Re: Combined epiretinal and internal limiting membrane retracting door flaps for large macular holes associated with epiretinal membranes

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## Key messages

- The use of an ILM flap for large and myopic macular holes have allowed greater single surgery success rates, and this technique is increasingly utilized for initial management. The presence of an epiretinal membrane (ERM) may disrupt the underlying ILM when peeled but can be incorporated into a flap. This study shows that large macular holes with concurrent ERM that are managed with an ERM flap have high single-surgery success rate.

We thank Drs. Nikolaos and Panagiotis Dervenis for their letter relating to our article “Combined epiretinal and internal limiting membrane retracting door flaps for large macular holes associated with epiretinal membranes.” The most plausible and widely accepted mechanism for idiopathic epiretinal membranes (ERM) is the proliferation and fibrous metaplasia of hyalocytes originating in the cortical vitreous that remains on the inner retinal surface after posterior vitreous detachment (PVD) [1]. During the progressive posterior hyaloid separation that culminates in a PVD, the antero-posterior traction exerted on the fovea is a primary contributor to macular hole formation [2]. Given the mechanistic overlap between idiopathic ERM and macular hole formation, we are confident that the membranes depicted in our study are ERM. Furthermore, those membranes presented as hyperreflective tissue on the retinal surface, unlike the hyporefective material in epiretinal proliferation. Post-operatively, one can see 2 hyperreflective lines on the retinal surface with a hyporefective space in between. Those 2 lines

represent the ERM peeled then placed on the retinal surface and the underlying internal limiting membrane, with now a cleft in between showing as a hyporefective space (Fig. 1). However, we acknowledge that ERM and epiretinal proliferations may show different contractile properties when incorporated into an ILM flap. The outcome of an inverted ILM flap with embedded epiretinal proliferations for large MH shared by Drs. Nikolaos and Panagiotis Dervenis is encouraging. We agree that research focused on the outcomes of epiretinal proliferation and idiopathic ERM incorporated into scaffolds for MH, with specific attention to the scaffold’s cellular composition, will be important in achieving predictable surgical outcomes.

## Declarations

**Conflict of interest** The authors declare no competing interests.

## References

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