Reviewer's report

**Title:** Microbiological Analysis of Office-based three-port Microincision Vitrectomy Surgery

**Version:** 1  **Date:** 4 November 2013

**Reviewer:** Philip J Polkinghorne

**Reviewer's report:**

No major compulsory revisions.

Minor essential revisions.

The authors need to correct

p3 ... a first conjunctival specimen..... should be .....the first conjunctival ...

p4 the authors might clarify their assertion hypotony was avoided in spite of removal of 0.5ml. Were these eyes myopic?, did the authors apply digital pressure to maintain the IOP? Or was the reduction in IOP not clinically relevant?

p5. Could the authors check cautery not diathermy was used if there was a wound leak?

p5. It would be difficult to mask the order of the samples if the first sample was collected in a 1.0ml syringe and the second sample in a 10.0 ml syringe. I am not sure if it is necessary to assert the samples were masked in any event!!

p6. ?? average follow-up time since vitrectomy, should it not be mean follow up??

p6 ? ...."None of the patient swore" think that is a typo!!

p6. As these patients were from a pool of wet AMD, did none use topical antibiotics prior to sampling; I suspect some of the patients did have topical antibiotics in the past ??? associated with their intra vitreous therapy, so might be best to say patients had not used topical antibiotics in the previous x weeks.

p6 The authors should reserve the term species for different bacterium and strains for a single bacterium. thus 6/18 patients had 2 strains [ these should be listed] and 11/18 patients had 1 species identified...... Similarly Table 2 "strains" should be replaced with "species"

p6 The sentence beginning "From the 37 undiluted midvitreous samples collected....." is poorly constructed; perhaps a better sentence might be" Only 1 of the 37 undiluted midvitreous samples was culture positive, equating to a contamination rate of 2.7%. The bacteria isolated was Propionibacterium sp. This patient’s conjunctiva also.......None of the 37 diluted midvitreous samples were culture positive......

p7

The use of office-based vitrectomy has continued to evolve since its inception in
the early 1980s.

I think the authors need to clarify the reference (5) to the office based vitrectomy and risk of endophthalmitis. In the study quoted a single port was used, unlike the current study. Also the authors may choose to elaborate on the idea of continual irrigation with povidone-iodine contributing to the lower rates of culture positive, see Shimada et al 2013.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I have no vested interest in this technology or a competing company producing such a device. I do not hold stock in any ophthalmic company. I hold no patents in ophthalmic devices. I declare I have no competing interest.