Reviewer's report

**Title:** Tono-Pen XL tonometry during application of a suction ring in rabbits

**Version:** 1  **Date:** 18 February 2008

**Reviewer:** Edgar M Espana

**Reviewer's report:**

Major revisions:
None.

Minor revisions:
I find this report well planned and executed. My only concern is the limited amount of researchers that might be interested in the data. I guess authors had their reasons to do it.

In background, I would change that "tonopen measures IOP accurately in rabbit eyes (reference 5)". This IOVS article states that "Tonopen showed the least error in estimation of true pressure". Please change to the real author statement. They concluded that Tonopen underestimate IOP and has a lot of variability.

Please clarify in page 6, line 2:
At each pressure level the suction vacuum was adjusted from 350 mmHg to 650 mmHg in steps of 50. It is not clear to me what you mean with that.

Fig.4 is difficult to read, the resolution needs to be improved for the final text..

Please speculate more in discussion about: measurements are unreliable during the application of the suction ring. What you mean with altered corneal geometry and stress. Could it be also scleral rigidity?? size compared to the human eye? lens size compared to the human eye??

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

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**
'I declare that I have no competing interests'