Reviewer's report

**Title:** Establishment of the mild, moderate and severe dry eye models using three methods in rabbits

**Version:** 1  **Date:** 17 June 2013

**Reviewer:** wei chen

**Reviewer's report:**

This study aimed to establish mild, moderate, and severe dry eye models on rabbits by three methods, however it is not qualified for the lack of innovativeness and practicability. The methods (removing the lacrimal gland, Harderian gland, and nictitating membrane/burning with 50% trichloroacetic acid) this study used have already been reported, and they are used to establish severe dry eye models. And the pathogenesis of the dry eye induced by these methods does not accord with that of the major types of human dry eye disease, so these rabbit models are not good choices for current dry eye research. And I also doubt that the method of removing the lacrimal gland, Harderian gland, and nictitating membrane only produces mild dry eye in rabbits.

Generally, this manuscript needs the help of someone proficient in English to make it better understood. There are several typos and grammatical errors that need correction.

In the Abstract, the authors failed to describe the induced dry eye of the three eye groups with clarity. Besides, specific p values are needed rather than general “p<0.05” (also in the manuscript).

In the Results, the author should identify the eyes in comparison rather than “group A, group B and group C”, because the left eyes are experimental eyes while the right eyes are control eyes. Figure 3 is not sound enough for it fails to present the differences of the induced dry eye models among groups.

In the Discussion, information in the first paragraph seems to be redundant, and there are too many words repeating those in the Results, which should be avoided as possible.

In addition, it is not a good choice for the authors to choose rabbit to establish dry eye model, because the monoclonal antibodies against rabbit are very limited, which is a disadvantage for further research on dry eye inflammatory factors and cytokines.

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

**Quality of written English:** Needs some language corrections before being published
**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

NO