

Authors' reply

Sir,

We thank the authors for their comments on our article "Effect of lanosterol on human cataract nucleus:"^[1,2]

- In regard to the comment on mechanisms of cataract formation in congenital and acquired cataracts being different, we agree with the authors and have hi-lighted the same issue in the discussion, quoting Hejtmancik and Kantorow.^[3] While it would be appropriate to do this study in the pediatric population, the mechanism of removal of a cataract in the children (lens aspiration) may not allow such a study *in vivo*, and this would be a major limiting factor to perform such a study
- We mirrored our experiment on the one designed by Zhao *et al.* wherein they had immersed the lens for 6 days.^[4] While we agree that adult lenses may need to be exposed to lanosterol for longer/higher concentration and have acknowledged the same in the discussion. However, the absolute absence of difference between the control and lanosterol groups at the end of 6 days makes us wonder if changing the concentration or duration would have made any difference to the results
- It is possible that our methodology of immersing bare nuclei without the capsule may have impacted the study results, and we have indicated the same in the discussion. However, lanosterol acts by reversing the protein aggregation within the lens fibers and in the absence of the capsule, lanosterol would have better access to the lens fibers and should theoretically have been more effective and not less effective.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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References

1. Venkatesh R, Gurav P, Tibrewal S. Effect of lanosterol on human nuclei. *Indian J Ophthalmol* 2016;64:475.
2. Shanmugam PM, Barigali A, Kadaskar J, Borgohain S, Mishra DK, Ramanjulu R, *et al.* Effect of lanosterol on human cataract nucleus. *Indian J Ophthalmol* 2015;63:888-90.
3. Hejtmancik JF, Kantorow M. Molecular genetics of age-related cataract. *Exp Eye Res* 2004;79:3-9.
4. Zhao L, Chen XJ, Zhu J, Xi YB, Yang X, Hu LD, *et al.* Lanosterol reverses protein aggregation in cataracts. *Nature* 2015;523:607-11.

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Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/0301-4738.187691

Cite this article as: Shanmugam PM, Barigali A, Kadaskar J, Borgohain S, Kailash Chandra MD, Rajesh R, *et al.* Authors' reply. *Indian J Ophthalmol* 2016;64:476.