Author Response: Is Impaired Emmetropisation Related to Foveal Hypoplasia or Is It Specific to Albinism?

We agree that further investigation with a larger sample size is warranted to provide more robust conclusions in relation to the impact of severe foveal hypoplasia on refractive development. In our article, we acknowledge that “it is not possible within the limits of current data to fully separate the contributions to refractive outcome of the various structural and functional anomalies in albinism.”1 However, these novel data provide a starting point for further discussion, and provide an interesting parallel to animal work in this area.

Further, data from a retrospective study2 (n = 147) provides evidence that refractive errors are higher from infancy in individuals with albinism in comparison to those with idiopathic infantile nystagmus. These data suggest that the additional structural anomalies of albinism impair emmetropisation more than the nystagmus alone. From the data available it may be difficult to determine whether higher refractive errors seen in albinism are due to the additional structural effects of albinism or due to more severe nystagmus or foveal hypoplasia, which may in turn be a result of the albinism.

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References

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