## Authors' response

## Dear Sir,

We appreciate the interest in and comments of the author concerning our article.<sup>[1]</sup> As we addressed in our study, choroid has a very large vascular network and choroidal circulation has one of the highest rates of blood flow in humans.<sup>[1]</sup> However, an important physiological role for the high choroidal blood flow is to help temperature regulation of the retina.<sup>[2,3]</sup> Increased body temperature during exercise may lead to vasodilation and increase in choroidal blood flow.<sup>[4]</sup> On the other hand, the previous study showed that decreased retinal temperature led to a significant decrease in choroidal blood flow.<sup>[5]</sup> Our findings confirm the outcomes of that study. We found that choroidal thickness (CT) values increased significantly at 5 min following dynamic exercise and returned to baseline values at 15 min following the exercise. Core body temperature rises during exercise and returns to baseline values following the exercise.<sup>[6]</sup> In conclusion, high choroidal blood flow protects photoreceptors, retina pigment epithelium, and vitreous from heat stress.<sup>[7]</sup> It must be remembered that the measurements of CT with enhanced depth imaging optical coherence tomography (EDI-OCT) technology provide only an indirect index of the consequence of blood flow regulation in a vascular bed, yet cannot measure blood flow, volume, or velocity there. We, therefore, suggest that the EDI-OCT may be used to evaluate the issue of blood flow regulation. Furthermore, it has been reported that the body temperature of older persons is lower than that of younger people

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and that their tolerance of thermal changes is more limited.<sup>[8]</sup> So that, studies are required to evaluation the changes in CT during egzersize in older and young peoples.

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**Conflicts of interest** 

There are no conflicts of interest.

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