

## Author's Reply

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We express our sincere thanks to Dr. Bernardo and Dr. Rosa for their interest in our study and their letter on our work.<sup>[1]</sup> Bernardo and Rosa noted the significance of central corneal thickness (CCT) in virgin eyes and after photorefractive keratectomy (PRK), as evaluated by Pentacam HR (Scheimpflug imaging) and Orbscan II (scanning slit topography). They concluded that the difference between Pentacam and Orbscan in measuring corneal thickness is related to differences in the devices, rather than corneal changes induced by hyperopic PRK.

We refer Bernardo and Rosa to the Methods and Results of our study, where we compared various corneal topographic and tomographic parameters measured by Orbscan II and Pentacam HR to determine the agreement between these two devices in analysis of hyperopic patients who have had hyperopic PRK.<sup>[1]</sup> Notably, CCT was just one of the parameters measured in our study. We mentioned in the Methods section of our article that all included patients had normal virgin corneas before hyperopic PRK. After considering the articles published on normal corneas,<sup>[2-6]</sup> we decided not to focus on the agreement between devices in virgin eyes. In addition, a large body of literature has described the agreement between devices after PRK, so this was not a limitation of the present study. For example, Faramarzi et al studied the accuracy of CCT measurements using ultrasound (US) pachymetry, scanning-slit topography, and dual Scheimpflug imaging after PRK. They did not report measurements obtained before PRK.<sup>[7]</sup> Ho et al compared corneal pachymetry assessment by four measurement methods in eyes that underwent laser *in situ* keratomileusis.

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They also did not report agreement between devices for measurements before PRK.<sup>[8]</sup>

Interestingly, the findings of our study in eyes that underwent hyperopic PRK differ from those in virgin corneas. Rosa et al stated that their findings suggest measurements obtained by Orbscan II are thinner than those obtained by Pentacam.<sup>[6]</sup> In contrast, our study revealed that the CCT values obtained by Pentacam HR are thinner than those measured by Orbscan II. Further, our study results showed reasonable agreement between measurements obtained by Pentacam HR and Orbscan II for CCT in hyperopic eyes that underwent PRK. In addition, the 95% limits of agreement between ultrasound pachymetry and Pentacam HR was better than that between ultrasound pachymetry and Orbscan II.<sup>[1]</sup> These results contrast with the findings of Rosa and associates. Dissimilarity between the results of the study conducted by Rosa et al<sup>[6]</sup> and those of the present study<sup>[1]</sup> may be related to hyperopic PRK. Notably, PRK is the most important factor to be considered in our study. In the Methods section of the article, we stated that, central cornea becomes steep after hyperopic PRK which is due to a larger optical zone, larger peripheral transition zone, and ablation of mid-peripheral corneal tissue.<sup>[9]</sup> In brief, we should not consider the cornea after hyperopic PRK to be similar to virgin cornea.

We commend Bernardo and Rosa for their important letter and hope that we have convincingly responded to their comments.

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Nil.

#### Conflicts of Interest

There are no conflicts of interest.

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