

# Small differences in age and cataract surgery percentage have a potentially high effect on the corneal endothelial cell density

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To the Editor,

I read with interest the article entitled “Differences in corneal parameters between normal tension glaucoma and primary open-angle glaucoma” by Lee et al. [1]. The study showed that the baseline characteristics such as age, anti-glaucoma medication, cataract surgery, and post-treatment intraocular pressure (IOP), which may affect endothelial cell density (ECD), were statistically similar in both their normal tension glaucoma (NTG) and primary open-angle glaucoma (POAG) populations, and the mean corneal ECDs in NTG and POAG subjects were 2380 and 2530 cell/mm<sup>2</sup>, respectively. On the basis of these results, the authors reported a significant lower corneal ECD in NTG, compared to POAG subjects with similar baseline characteristics. However, I respectfully disagree. The difference of ECD in the 2 groups can be due to differences in age and pseudophakic/phakic ratio in the groups, though not statistically significant. The mean ages of the NTG and POAG were 67.6 and 61.8, respectively, and the pseudophakic/phakic ratios were 0.2 and 0.1, respectively. ECD

reduction every year was reported as 0.3–1 % and a recent study reported that the mean ECD difference between sixties and seventies age groups was 177 cells/mm<sup>2</sup> [2]. Approximately, 150 cell/cm<sup>2</sup> of ECD difference is presumed to be due to 5.8 years of age difference and twice pseudophakia/phakia ratio not due to NTG.

## Compliance with ethical standards

**Conflict of interest** The author declares that there is no conflict of interests regarding the publication of this article.

## References

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