Selective laser trabeculoplasty for glaucoma in sub-Saharan Africa

Author's reply

We would like to thank Michael Fu for his correspondence on our Article.[1] Fu suggests that the study could be further strengthened by reporting the duration of timolol eye drop application and the use of other eye drops before enrolment as possible confounders. As we describe in our study, timolol eye drops are the most affordable and accessible medical treatment option in the region but their long-term application is often hampered, which was also reflected in our study.[1-3] Before enrolment, of 382 eyes included in the trial, 208 had previously received timolol, 17 eyes had received other glaucoma eye drops only, nine eyes had received eye drops that were not related to glaucoma, we did not know whether 18 eyes had received any eye drops, and 130 eyes had received no previous eye drops. 36 eyes had received a combination of two or three glaucoma treatments. Concerning the duration of treatment, more than half of the participants who remembered the date of their diagnosis (98 [52%] of 187) had been diagnosed with glaucoma within the 3 months preceding the eligibility examination and often presented with empty eye drop bottles. The remaining participants usually reported interruptions in their previous treatment with eye drops. Given the relatively low frequency of other treatments, we decided to report a binary variable of previous timolol eye drops (table 1 of the Article) as the most reliable and relevant parameter concerning a specific previous glaucoma treatment.[1] We agree that differences in previous treatment types and durations might potentially influence the outcome. However, as these data rely on patient recall, they can be less reliable and we assume that these unknown factors were balanced between the two study groups, which is reasonable given that participants were randomly allocated.

Fu further comments that a follow-up period of more than 1 year is desirable to determine the long-term effect. We agree with this point, and have discussed the importance of this in the Article. We are currently conducting a long-term follow-up of the trial participants. Our primary outcome measure was intraocular pressure, which allowed for a rapid success-failure algorithm to compare individual treatment options and quickly provide additional treatment as necessary. It has the trade-off of increasing treatment group size differences over time to compare other outcomes. 1 year of follow-up allowed us to provide high-quality evidence on the intraocular pressure-lowering potential and initial safety, acceptance, and costs of the interventions.

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1 Philippin H, Matayan E, Knoll KM, et al. Selective laser trabeculoplasty versus 0·5% timolol eye drops for the treatment of glaucoma in Tanzania: a randomised controlled trial. *Lancet Glob Health* 2021; **9:** e1589–99.

2 Zhao PY, Rahmathullah R, Stagg BC, et al. A worldwide price comparison of glaucoma medications, laser trabeculoplasty, and trabeculectomy surgery. *JAMA Ophthalmol* 2018; **136:** 1271–79.

3 Murdoch IE, Smith AF, Baker H, Shilio B, Dhalla K. The cost and quality of life impact of glaucoma in Tanzania: an observational study. *PLoS One* 2020; **15:** e0232796.