cation is a more efficient treatment modality that allows a remarkable improvement in visual acuity in eyes with myopic subfoveal choroidal neovascularization.

However, long-term follow-up of a larger number of patients is not available at this time. Therefore, it is unclear if short-term benefits from these treatment modalities in myopic patients will persist. During a long-term follow-up, progressive enlargement of the choroidal neovascularization and the atrophic halo around the neovascular membrane can lead to a secondary decrease in visual acuity after limited macular translocation.[1] There are also unanswered questions regarding photodynamic therapy in practice, such as the frequency of required re-treatment and long-term results. Randomized studies with longer follow-up will be necessary to evaluate the efficacy of these treatment modalities.

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REFERENCE

1. Fujikado T, Ohji M, Kusaka S, et al. Visual function after foveal translocation with 360-degree retinotomy and simultaneous torsional muscle surgery in patients with myopic neovascular maculopathy. Am J Ophthalmol 2001;131:101–110.

Travoprost Compared With Latanoprost and Timolol in Patients With Open-angle Glaucoma or Ocular Hypertension

EDITOR:

I WISH TO COMMEND NETLAND AND COLLEAGUES ON their exceedingly important study (Am J Ophthalmol 132: 472–484, 2001). To my knowledge, this represents the first peer-reviewed publication assessing the efficacy and side effects of travoprost (TP), a medication which has been commercially available to treat glaucoma since March 2001, 7 months before the publication. Without these types of publications, it is very difficult for physicians to determine the usefulness of new drugs in clinical practice, especially when other drugs in the same class are available.

This well-designed, large, multicenter, randomized, double-masked, clinical trial clearly demonstrates that travoprost 0.004% (the commercially available concentration) is as, but not more, effective than latanoprost (LP), as determined by the failure to demonstrate a significant difference in intraocular pressure (IOP) at any of the 15 diurnal time points assessed after the 2-week visit during the 1 year of treatment. Despite this indisputable demonstration of equivalence of efficacy, the authors either resort to a series of post hoc subgroup analyses, or they emphasize data evaluation only at specific time points, in an attempt to demonstrate greater efficacy of TP. One such analysis involves the subgroup of black patients, in whom the authors claim superiority of TP compared with LP in several statements written in the abstract, results, and discussion sections of the article. However, the results clearly do not support such statements. The IOP differences in the TP vs LP group in black patients during treatment result from preexisting differences in baseline IOPs, some of which are statistically significant, as depicted in Table 3 of the publication. If the results were expressed as a change in IOP from baseline measurements, no significant difference in efficacy of the drugs in black patients exists. If 100 data sets each were analyzed using five different methods, statistical significance at the 5% level is expected to be demonstrated 25 times by chance alone.

Tables 5 and 6 in the publication depict a higher frequency of the following adverse events occurring in the TP 0.004% compared with the LP group: hyperemia, visual acuity decrease, pain, discomfort, foreign body sensation, cataract, dry eye, and eyelash changes. Despite these differences, many of which appear to be significant, no mention of any differences can be found within the text of the publication. Figure 6 depicts greater hyperemia in the TP 0.004% group compared with the LP group at each visit during the 12-month study. However, the significance of these differences is not stated, and the other multiple time points (all times other than 8:00 AM) at which hyperemia was assessed are absent from the publication. This important information requires further clarification to enable clinicians to better manage their patients.

The analysis of data used in this publication is not atypical. Often, the reader must carefully evaluate the results of studies to determine the true relative efficacy and safety of products.[1]

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REFERENCE

1. Camras CB, Minckler D. Does that drug work? Pitfalls in studies on the efficacy and safety of glaucoma medications. Am J Ophthalmol 2000;129:87–89.

AUTHOR REPLY

WE ARE GRATEFUL TO DR. CAMRAS FOR HIS COMMENTS about our article. We are also grateful that the *American Journal of Ophthalmology* included the lengthy tables in this publication, which we hope provide clinicians the information they need to evaluate the new drug travoprost.