Reply to Comment on: A Prospective, Randomized Trial of Povidone-Iodine 0.6% and Dexamethasone 0.1% Ophthalmic Suspension for Acute Bacterial Conjunctivitis

IN THIS LETTER, WE RESPOND TO COMMENTS PRESENTED BY Drs. Kanclerz and Myers in their correspondence to the Editor regarding our article.[1]

We conducted a randomized, prospective, double-masked, multicenter, phase III study to evaluate the efficacy and safety of a topical ophthalmic suspension combination of povidone-iodine (PVP-I; 0.6%) and dexamethasone (DEX; 0.1%) for infectious and inflammatory components of bacterial conjunctivitis. The primary endpoint was clinical resolution in the study eye, and the key secondary efficacy endpoint was bacterial eradication, both at the day 5 visit. We found that PVP-I/DEX did not demonstrate clinical efficacy compared with placebo in subjects with bacterial conjunctivitis. PVP-I/DEX had a favorable safety profile and was well tolerated.

In our study, treatment was administered 4 times a day for 7 days. Drs. Kanclerz and Myers suggested that more frequent dosing may be necessary, and referred to their recent review, which found that evidence on PVP-I treatment of bacterial conjunctivitis in adults is scarce.[2] We agree that more frequent dosing may be beneficial, but would like to note that patient compliance beyond 4 times daily dosing may be challenging, particularly because current Food and Drug Administration–approved antibiotic dosing is 3 times a day. In response to the comments made by Drs. Kanclerz and Myers regarding the fact that antiseptics act differently from antibiotics, we would like to note that, although we described the compound in our article, the differences were outside the scope of the current research.

Drs. Kanclerz and Myers commented that they did not find studies that reported benefits of applying a combination of PVP-I and a corticosteroid; they queried the rationale for this approach for bacterial conjunctivitis. Our rationale for using DEX was to reduce inflammation associated with the conjunctivitis. The usefulness of adding a steroid is described in the Introduction section of our paper, where we highlight how topical steroids have demonstrated usefulness in reducing the adverse effects of inflammation in the treatment of infections of the anterior segment of the eye.

In their letter to the Editor, Drs. Kanclerz and Myers commented on the concentration of PVP-I that should be applied in bacterial conjunctivitis, with the suggestion that the dose in the current study could have been higher. The concentration-dependent availability of free iodine is well discussed in our paper. The rationale for the 0.6% dose in the current study was based on data from previous studies (referenced in the article), although we acknowledge that with the benefit of hindsight, adjustments in the concentration, dosing schedule, or both might have led to a different result. As noted in our article, previous evidence suggests that PVP-I concentrations >1.25% may decrease tolerability.[3,4] Therefore, the concentration must be balanced against side effects and toxicity.

The final point raised by Drs. Kanclerz and Myers is that strong consideration should be given to substitute a placebo-controlled design with a noninferiority study in subsequent studies. In response, we believe that a placebo-controlled trial would be a more robust study, especially because most bacterial conjunctivitis cases are self-limiting.[5,6]

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CONFLICT OF INTEREST DISCLOSURES: SEE THE ORIGINAL article for any disclosures of the authors.

REFERENCES

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Comment on: Accuracy of Intraocular Lens Formulas in Eyes With Keratoconus

EDITOR:

WE READ WITH GREAT INTEREST THE EXCELLENT ARTICLE by Wang and associates.[1] We recognize that intraocular