However, we are concerned with biases inherent to their study design and the limitations of using data from questionnaires. Our three major issues include questionnaire validation, lack of povidone-iodine data, and inadequate control group selection.

The use of questionnaires to obtain information about clinical case histories, treatments, outcomes, and complications is subject to inaccuracies. The authors do not state whether the questionnaires used were validated. Without an attempt to validate the questionnaire, one cannot be certain about the accuracy or validity of the data.[2]

Although the authors acknowledge that data regarding povidone-iodine were not collected, the failure to administer povidone-iodine may have been the underlying risk factor for many of the 47 endophthalmitis cases reported. Povidone-iodine is well known to reduce the rate of endophthalmitis after intraocular surgery.[3]

The authors conclude that failure to administer both immediate pre and post-injection antibiotics is a risk factor for endophthalmitis. The data provided in Table 2 reported that only 8.7% ($n=4$) of the eyes in the study group with endophthalmitis did not receive immediate post-injection topical antibiotics *vs* 0% of the control group. The control group used 10 randomly selected sites and was not an appropriate control group. The control cases should have been obtained from the same sites where the study cases were obtained, in order to decrease any unknown biases.

Lyall *et al*'s[1] conclusions are over-reaching regarding the 'protective' effects of administering immediate pre and post-injection antibiotics. The lack of questionnaire validation and povidone-iodine data as well as the presence of an inadequate control group should have been addressed. Furthermore, the study should not have been used to serve as an endorsement for the use of topical antibiotics.

Conflict of interest

The authors declare no conflict of interest.

References

1 Lyall DAM, Tey A, Foot B, Roxburgh STD, Virdi M, Robertson C *et al*. Post-intravitreal anti-VEGF endophthalmitis in the United Kingdom: incidence, features, risk factors, and outcomes. *Eye* 2012; **26**: 1517–1526.
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Sir,

Reply to Bhavsar *et al*

We would like to thank Bhavsar *et al*[1] for their critical reading of our manuscript.[2] They correctly highlight the need for a proper method of developing and validating questionnaires. In the reference they cite, the authors advocate that a questionnaire should be designed as part of a systematic, prospective case ascertainment system.[3] We did exactly this as part of the British Ophthalmological Surveillance Unit (BOSU) framework. Both authors of the citation[3] were also on the BOSU committee that reviewed our study before it commenced and personally critically appraised our questionnaire and overall methodology. The committee was also composed of a statistician and independent specialists in the field. We also piloted our questionnaire on one local case of endophthalmitis and several control cases to ensure its robustness. This method of data collection and reporting has been used in multiple BOSU studies in the literature (PubMed search term: 'British Ophthalmological Surveillance Unit'), with all questions in our questionnaire framed in a similar manner.

We appreciate the work done by Bhavsar and others to advocate not using topical antibiotics during intravitreal injections.[4] Our study, which presents data on 47 cases of post-intravitreal anti-VEGF endophthalmitis (PIAE), is still one of the largest data sets in the literature with the primary aim of studying PIAE.[2] Other studies, with the primary aim of studying the efficacy of anti-VEGF therapy, draw conclusions on the use of topical antibiotics based on statistical analysis of fewer overall injections and incident PIAE cases.[4]

We disagree with the comments regarding our case–control selection. As we performed a prospective, national surveillance study, we selected 10 control centres from across the country to avoid any regional or single centre bias. Individual control cases were selected randomly, again to avoid any bias. This was done in order to obtain control data that was as representative as possible of the national population receiving anti-VEGF therapy at that time. This method has been reported in the literature.[5]

As acknowledged, we discussed the reasoning for not including data on the use of povidone-iodine in our manuscript.[2] It was in fact the BOSU committee who recommended that we did not include this in our questionnaire as part of the strict, independent, peer review process. We agree that povidone-iodine reduces the bacterial flora on the ocular surface, as does modification of many of the other risk factors that we identified in our study. The use of povidone-iodine is regularly used as part of standard practice throughout the United Kingdom. Therefore, to attempt to discredit the valuable risk factor data we report by suggesting that

failure to administer povidone-iodine 'may be' the underling risk factor in many of the cases is unlikely and not a fair comment on the BOSU process.

Conflict of interest

The authors declare no conflict of interest.

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