thickness. The constitution of ischaemic/non-ischaemic CRVO patients between the ITA group and the IBe group was also not significantly different. Hence, our results were still reliable but we interpreted our results with caution. We also mentioned in our paper that large prospective, randomized clinical trials are necessary to compare the long-term efficacy and safety of ITA *vs* bevacizumab for patients with macular oedema associated with CRVO.

2. We are curious about the choice of dosage of the TA.

Answer: We reviewed many articles about ITA used in different diseases such as diabetic macular oedema,[2,3] Vogt–Koyanagi–Harada syndrome,[4] branch retinal vein occlusion,[5] diabetic papillopathy,[6] and CRVO.[7–9] We found that most authors have adopted 4 mg TA for the therapeutic dosage. Hence we quoted their results and chose 4 mg TA as the dosage used.

3. The authors used a full auto tonometer to measure the IOP instead of the Goldmann applanation tonometer, which is the golden standard in IOP measurement.

Answer: In our outpatient department, the IOP measurement is routinely performed with a full auto tonometer by a well-trained and experienced technician. Hence the IOP data are reliable. If the ocular condition does not match the IOP measured by a full auto tonometer, we will double-check the IOP with a Goldmann applanation tonometer.

4. In the patient who had a mature cataract during follow-up, the authors did not describe the appearance of the cataract, nor did they state how fast the cataract developed.

Answer: The lens became completely opaque 4 months after the second ITA in the patient who had mature cataract during follow-up. Hence, this adverse event must be taken into consideration as being related to intravitreal injection of TA.

Conflict of interest

The authors declare no conflict of interest.

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Sir,

Retinal laser photocoagulation, anaesthesia, and pain responses

We welcome the findings by Richardson and Waterman.[1] Their work relates to pre-2006 laser techniques, and has several limitations in study design and results' interpretation. We do not believe that there is a case any longer to support routine use of sub-tenons anaesthesia. We would like to clarify our clinical experience in using contemporary laser photocoagulation methods to treat patients at the Manchester Royal Eye Hospital (MREH).

Recent pathological work has demonstrated full-thickness retinal injury using conventional 100 ms laser photocoagulation that may contribute to pain associated with treatment of proliferative diabetic retinopathy (PDR).[2] Since November 2006, we have treated patients routinely using medium-pulse Pascal 10–20 ms laser photocoagulation under topical anaesthesia (oxybuprocaine hydrochloride 0.5% or tetracaine hydrochloride 1% as per the MREH protocol), and associated painful complications are not problematic.[3]

Among ophthalmologists, it is widely recognised that sub-tenons anaesthesia may be associated with subconjunctival haemorrhage that may compromise retinal laser application, or create an open conjunctival wound with a potential infection risk.[4] The authors found that 9% of the respondents used primary sub-tenons anaesthesia; however, this figure seems inconsistent and unrealistic with modern laser practice.[1] We have conducted a randomised clinical trial that compared a 20-ms Pascal panretinal photocoagulation (PRP) with the conventional 100-ms PRP

without sub-tenons anaesthesia, and no associated painful complications occurred.[5]

The authors included data regarding the 'strength of burns per session'. Further clarification regarding these data would be welcomed from the authors. We presume that 'strength' is in reference to visible burn intensity that is related to laser power, whereby a significantly higher fluence (power × time/area) is required for the 100-ms PRP compared with the lower-fluence 20-ms PRP. The ETDRS recommended the standard burn intensity (grey-white) as the threshold for PRP laser.

The authors allude to the risks of secondary macular oedema in anaesthetised eyes; this statement is misleading. The risks of post-PRP macular oedema are associated with high-energy and long-pulse laser, underlying macular ischaemia, young type 1 diabetic PDR patients, and weekly multi-session PRP.[5]

We consider routine periocular anaesthesia for PRP to be an unnecessary extra step for most patients, with additional risks, discomfort, and extra financial cost. Pascal retinal laser may incur significant cost savings for NHS departments, as the treatment times, number of treatment sessions, and total required outpatient clinic sessions are significantly reduced. In the era of Pascal photocoagulation, multi-spot, short-pulse PRP may improve the comfort of the patient's laser journey, and increase the compliance with laser treatment over the long term.

Conflict of interest
PES has received financial support from OptiMedica Corporation.

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Sir,

Pain relief during panretinal photocoagulation for diabetic retinopathy

We read with great interest the article 'Pain relief during panretinal photocoagulation for diabetic retinopathy: a national survey' by Richardson and Waterman.[1] We have some comments to share with the authors.

First, this is a study assessing the pain during panretinal photocoagulation (PRP) from the doctors' perspective. It may not be objective and convincing enough for us to draw a conclusion regarding whether PRP is painful and whether use of analgesics is effective in reducing pain based on the data of the present study. In fact, the authors might have added a question in their questionnaire regarding how the doctors knew their patients were in pain during the procedure. Did they actually ask the patients or only judged from the patients' incompliance? We notice that some patients could not cooperate during the procedure not because they felt painful. They in fact only felt 'sore' in the eye that was under PRP, or felt the scattered light to be 'too shining' for the contralateral eye. Moreover, different doctors might have different levels of understanding of the likelihood of pain in question 7 described in this study. It would be more objective to assess the pain by asking the patients to fill in the pain-rating scales.

Second, the authors may need to attach the questionnaire in the article, as it is important for us to know how it was designed and what questions exactly were asked. Besides, according to what was described in the article, it seems that there were some missing data, such as the age and gender of those patients who often felt pain during the procedure. In our own clinical practice, we have noticed that young female patients were more sensitive to the pain caused by the laser burns and were less compliant during PRP.

Conflict of interest
The author declares no conflict of interest.

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Sir,

Reply to Stanga and Muqit, and YiJun Hu

We welcome the fact that our paper has stimulated debate on pain relief in laser therapy and that we have