



Reply to: 'Current perspectives on the use of eplerenone for chronic central serous chorioretinopathy'

Andrew Lotery¹ · Sobha Sivaprasad² · Abby O'Connell³ · Barnaby Reeves³

Received: 29 October 2020 / Revised: 4 November 2020 / Accepted: 13 November 2020 / Published online: 4 June 2021
© The Royal College of Ophthalmologists 2020

To the Editor:

We thank Drs Xia and Hua for their interest in our work [1]. The authors cite two retrospective studies with smaller numbers of patients than our prospective randomised trial and no control groups to suggest eplerenone may be of benefit in chronic central serous chorioretinopathy (CSCR) [2, 3]. When seeking funding for, and designing, our double-blind placebo-controlled trial, we also thought eplerenone was a plausible intervention based on previous pilot data. Unfortunately, in we found no evidence that it was of any benefit when we assessed the primary outcome of visual acuity or secondary structural outcomes [4].

They also question whether we could have missed choroidal neovascularisation as we did not screen patients with optical coherence tomography angiography. This technique was not widely available at the time of our study. However, no choroidal neovascularisation was seen in patients with fluorescein or indocyanine green angiography. We excluded patients older than 60 years to reduce the chance of including patients with choroidal neovascularisation. If any of these patients were included, these individuals would have been distributed randomly between the two groups so are very unlikely to have skewed our results.

Unfortunately, the CSCR literature is mostly retrospective. As CSCR can spontaneously resolve false conclusions can easily be drawn if a control group is not included. The strength of our study was that it was a

randomised double-blind placebo-controlled trial and it emphatically showed no evidence of a benefit for eplerenone in treating CSCR. We agree with Xia and Hua that doctors should now focus their efforts on researching alternative therapies. We disagree however that eplerenone should continue to be used based on our study and meta-analysis of previous studies [4]. We strongly recommend that any future potential therapy should be tested in a rigorous randomised controlled trial with an appropriate control group to avoid spurious claims of efficacy.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

References

1. Xia Y & Hua R. Current perspectives on the use of eplerenone for chronic central serous chorioretinopathy. *Eye*. 2020. <https://doi.org/10.1038/s41433-020-01325-9>.
2. Fraenkel D, Suffo S, Langenbucher A, Seitz B, Abdin AD. Eplerenone for treatment of chronic central serous chorioretinopathy. *Eur J Ophthalmol*. 2020. <https://doi.org/10.1177/1120672120952648>.
3. Petkovsek DS, Cherfan DG, Conti FF, Hom GL, Ehlers JP, Babiuch AS, et al. Eplerenone for the treatment of chronic central serous chorioretinopathy: 3-year clinical experience. *Br J Ophthalmol*. 2020;104:182–7.
4. Lotery A, Sivaprasad S, O'Connell A, Harris RA, Culliford L, Ellis L, et al. Eplerenone for chronic central serous chorioretinopathy in patients with active, previously untreated disease for more than 4 months (VICI): a randomised, double-blind, placebo-controlled trial. *Lancet*. 2020;395:294–303.

✉ Andrew Lotery
a.j.lotery@soton.ac.uk

¹ Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, Southampton, UK

² NIHR Moorfields Biomedical Research Centre, Moorfields Eye Hospital NHS Foundation Trust, London, UK

³ Bristol Trials Centre, Clinical Trials and Evaluation Unit, University of Bristol, Bristol Royal Infirmary, Bristol, UK