

# Investigating the Effectiveness of Electroacupuncture for Diabetic Peripheral Neuropathy and Exploring the Feasibility of Infrared Thermography as an Efficacy Assessment Tool: Study Protocol for a Randomized Controlled Trial [Response to Letter]

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## Dear editor

We would like to express our sincere gratitude to the Editor-in-Chief for providing us with the opportunity to respond to the letter from Agusalim et al concerning our study. It is an honor to have our research thoroughly reviewed by fellow scholars, and we greatly appreciate the interest and thoughtful comments from Agusalim et al. In this response, we will address their comments systematically, presenting a detailed point-by-point reply in the areas they highlighted.

In their letter, Agusalim et al point out that one of the limitations of our study was the absence of a sham electroacupuncture (EA) group, which may have introduced a placebo effect and potentially influenced the trial outcomes. We acknowledge that the lack of a sham EA group represents a limitation in the original study design. However, previous sham-controlled trials of acupuncture have often encountered complex intervention protocols and methodological challenges, which may have contributed to inconclusive evidence regarding the efficacy of acupuncture in treating diabetic peripheral neuropathy (DPN) and, consequently, limited its broader clinical application.<sup>1,2</sup> And a cross-sectional study concluded that while sham acupuncture has been widely used, a waiting list or no-treatment control can also be considered an appropriate comparison.<sup>3</sup> Therefore, to address this limitation and improve the reliability of our results, we referred to previous research<sup>4,5</sup> and implemented a waiting list group that received 12 sessions of the same EA treatment at the end of the study period. This approach helped maintain participants' expectations of EA efficacy and minimized potential placebo effects. Second, we incorporated objective outcome measures, including nerve conduction velocity (NCV), regions of interest (ROIs), and glycated hemoglobin (HbA1c) levels, to further reduce bias and enhance the validity of our findings. In future studies, with adequate resources and funding, we plan to incorporate a well-designed sham EA group, which will allow for more rigorous control of placebo effects and provide clearer conclusions regarding the efficacy of acupuncture in treating DPN.

Secondly, this study was conducted primarily in three hospitals in Zhejiang Province because it is the first clinical trial to use infrared thermography (IRT) as an outcome measure for EA in treating DPN. Since environmental factors across regions may influence IRT data, we initiated this pilot study in hospitals within a single region to ensure more reliable results. We anticipate that the findings can be generalized to broader populations and different geographical areas.

Additionally, to minimize the potential for bias in the outcome assessment, as highlighted in the letter, we implemented blinding procedures for both the outcome assessors and the statistical analysts. We are confident that these measures are sufficient to ensure the objectivity and fairness of the study results.<sup>6</sup>

Finally, we sincerely thank you once again for your recognition and valuable suggestions. We look forward to future opportunities to conduct studies in diverse environments and cultural settings, further strengthening the generalizability and robustness of our findings.

## Disclosure

The authors report no conflicts of interest in this communication.

## References

1. Yu B, Li M, Huang H, et al. Acupuncture treatment of diabetic peripheral neuropathy: an overview of systematic reviews. *J Clin Pharm Ther.* 2021;46(3):585–598. doi:10.1111/jcpt.13351
2. Ju ZY, Wang K, Cui HS, et al. Acupuncture for neuropathic pain in adults. *Cochrane Database Syst Rev.* 2017;12(12):CD12057. doi:10.1002/14651858.CD012057.pub2
3. Liu J, Li L, Luo X, et al. Specification of interventions and selection of controls in randomized controlled trials of acupuncture: a cross-sectional survey. *Acupunct Med.* 2022;40(6):524–537. doi:10.1177/09645284221117848
4. Musil F, Pokladnikova J, Pavelek Z, et al. Acupuncture in migraine prophylaxis in Czech patients: an open-label randomized controlled trial. *Neuropsychiatr Dis Treat.* 2018;14:1221–1228. doi:10.2147/NDT.S155119
5. Kwon HJ, Choi JY, Lee MS, et al. Acupuncture for the sequelae of bell's palsy: a randomized controlled trial. *Trials.* 2015;16(246). doi:10.1186/s13063-015-0777-z
6. Karanicolas PJ, Farrokhyar F, Bhandari M. Practical tips for surgical research: blinding: who, what, when, why, how? *Can J Surg.* 2010;53(5):345–348.

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