## Reply to Comments on Posterior Tibial Nerve Ultrasound Assessment of Peripheral Neuropathy in Adults with Type 2 Diabetes Mellitus

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Dear Editor,

We thank Dr. Mahmood Al-Mendalawi for their comments on our article titled "Posterior Tibial Nerve Ultrasound Assessment of Peripheral Neuropathy in Adults with Type 2 Diabetes Mellitus" which was published<sup>[1]</sup> in the January–March 2024 issue of the Journal of Medical Ultrasound.

In the results section of the article under reference, we stated that: "A mean posterior tibial nerve cross-sectional area (PTN CSA) of 14 mm at 5 cm above the medial malleolus was the optimal threshold for the identification of diabetic peripheral neuropathy (DPN) because it had the highest accuracy of 73.8% (62.7%–83%) to correctly classify participants as having DPN. This cut-off value's sensitivity, specificity, positive predictive value, and negative predictive value were 77.6%, 63.6%, 84.9%, and 51.9%, respectively."[1] The key message was that PTN CSA is a useful additional/complementary tool to the existing armamentarium of investigative methods for managing DPN. The article did not advocate for PTN CSA to supplant other methods; rather, it should supplement or complement them. Maximum benefit would be derived from using the PTN CSA alongside other methods to strengthen diagnostic confidence. It follows that PTN CSA should not be relied upon solely.

The risk of missing or failing to diagnose asymmetrical DPN can be avoided by evaluating the PTNs of both lower limbs in every patient with suspected DPN. As stated in the methods

section, only the left PTNs were assessed in the study for "convenient scanning and ease of participant positioning."

PTN terminal branching pattern anatomical variations would constitute one of the limitations of PTN CSA; however, it does not invalidate its clinical usefulness because these aberrant anatomies are visible on ultrasound, [2,3] allowing for measurement landmarks to be modified accordingly.

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### **Conflicts of interest**

There are no conflicts of interest.

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