



Interatrial Block and Risk of Ischemic Stroke – Reply –

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Author's Reply

We have read the letter from Prof. Martínez-Sellés *et al.*¹⁾, and we are grateful for their comments regarding our study²⁾ and for bringing forward two relevant issues for discussion.

The first issue pertains to the necessity of differentiating advanced from partial interatrial block (IAB) in our study population. Based on its degree, IAB is classified into partial (P-wave duration ≥ 120 ms) or advanced IAB (P-wave duration ≥ 120 ms with biphasic $[\pm]$ morphology in inferior leads)³⁾. In our study, IAB was analyzed in a global manner, and no distinction was made regarding the degree of this condition. We agree that it would have been better to differentiate advanced from partial IAB in our study population, as this may have provided data regarding the relative prognostic performance of the CHADS₂ and CHA₂DS₂-VASc scores for predicting the risk of ischemic stroke or transient ischemic attacks (TIA) in patients with different degrees of IAB without known atrial fibrillation (AF). However, although the prevalence of partial IAB has been described as an underappreciated clinical “pandemic”⁴⁾, the prevalence of advanced IAB is very low in the general population (0.5%)⁵⁾. Further, because the association of advanced IAB with AF is higher than that with partial IAB⁶⁾, more patients with advanced IAB may have known AF at baseline. Thus, more patients with advanced IAB were excluded from our study population because our study aimed to address issues in populations without known AF at baseline. Therefore, future studies with larger sample sizes are needed to assess the relative predictive value of the CHADS₂ and CHA₂DS₂-VASc scores for ischemic stroke or TIA in advanced and partial IAB patients without known AF at base-

line.

The second issue pointed out by Prof. Martínez-Sellés *et al.* pertains to the measurement of P-wave duration. To the best of our knowledge, there is no consensus on how to measure P-wave duration. In our study, it was measured in each of the 12 electrocardiogram (ECG) leads to identify the maximum P-wave duration in any lead. This method has been described and validated in previous studies⁷⁻⁹⁾. Additionally, the definition of IAB is based only on the maximum P-wave duration in any of the 12 ECG leads, which was also adopted in a previous study conducted by Caldwell *et al.*⁹⁾. Prof. Martínez-Sellés *et al.* innovatively used a program called GeoGebra to interpret ECG on the computer. By doing so, the error of measurement with this application was very low. We are very interested in their innovative method and plan to attempt ECG interpretation with this application in our future research.

Conflicts of Interest

The authors have no conflict of interest.

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