Reviewer's report

Title: Thromboembolic event rate in paroxysmal versus persistent atrial fibrillation: Data from the GISSI-AF trial

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Reviewer: Tatjana Potpara

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The manuscript entitled ‘Thromboembolic event rate in paroxysmal versus persistent atrial fibrillation: data from the GISSI-AF trial’ is a post-hoc analysis of GISSI-AF patients with paroxysmal and persistent AF. Dr Disertori et al. investigated the incidence of thromboembolic events, major bleedings, mortality and hospitalizations, and antithrombotic treatment at baseline and during follow-up in paroxysmal versus persistent AF. In addition, the incidence of thromboembolic events in patients with and without AF recurrences was assessed. The Authors concluded there were no significant differences in the rates of outcome events between the two clinical types of AF.

The paper is well-written, reads well and the main messages are easy to follow. The main strength of the study lies in its multicenter, prospective design with a careful, independent endpoint evaluation. However, there is no true novelty in the presented results, which do not really contribute to the existing body of evidence that individual thromboembolic risk is not dependent upon the clinical type of AF (e.g. paroxysmal, persistent or permanent).

Indeed, the GISSI-AF cohort included middle-aged, relatively healthy AF patients (hypertension was the most prevalent comorbidity), and the observed differences in the baseline characteristics and treatment between paroxysmal and persistent AF patients are well-known and quite commonly seen in everyday clinical practice. The low rates of thromboembolism and other outcome events are not surprising, given the relatively short follow-up and baseline patients’ risk profile.

There is a concern about the accuracy of identification of AF recurrences in the present study, given that many asymptomatic AF episodes could easily be missed by a weekly activation of a transtelephonic monitoring device in the absence of AF symptoms (this should be clearly stated in the Limitations). As the Authors rightly pointed out, this was a post-hoc analysis of a trial which aimed to assess an objective different from the evaluation of thromboembolic events.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a
statistician.

**Declaration of competing interests:**

I declare that I have no competing interests