5. Al-Khatib SM, Thomas L, Wallentin L, et al. Outcomes of apixaban vs. warfarin by type and duration of atrial fibrillation: results from the ARISTOTLE trial. *Eur Heart J.* 2013;34:2464–2471.
6. Steinberg BA, Hellkamp AS, Lokhnygina Y, et al. Higher risk of death and stroke in patients with persistent vs. paroxysmal atrial fibrillation: results from the ROCKET-AF Trial. *Eur Heart J.* 2015;36:288–296.
7. Link MS, Giugliano RP, Ruff CT, et al. Stroke and mortality risk in patients with various patterns of atrial fibrillation: results from the ENGAGE AF-TIMI 48 trial. *Circ Arrhythm Electrophysiol.* 2016;10:e004267.
8. Hart RG, Sharma M, Mundl H, et al. Rivaroxaban for stroke prevention after embolic stroke of undetermined source. *N Engl J Med.* 2018;378:2191–2201.
9. Diener HC, Sacco RL, Easton JD, et al. Dabigatran for prevention of stroke after embolic stroke of undetermined source. *N Engl J Med.* 2019;380:1906–1917.

Nonpermanent atrial fibrillation in the new European Society of Cardiology guidelines. Response

La fibrilación auricular no permanente en la nueva guía de la Sociedad Europea de Cardiología. Respuesta

To the Editor,

We are grateful for the critical analysis by Vázquez Ruiz de Castroviejo et al., which raises the important question of thromboembolic risk stratification in patients with atrial fibrillation (AF). Analysis of arrhythmia burden is probably one of the most important factors of those which, in recent years, have entered clinical practice. The new AF guidelines also cover this concept, highlighting its relevance.[1,2]

However, we must also consider the limitations inherent to this approach. Firstly, the incidence of thromboembolic events in paroxysmal forms is significant, which is an argument for starting anticoagulant therapy independently of whether it shows a greater benefit in other forms of the disease. No study to date has demonstrated that a thromboembolic risk-prevention strategy guided by AF classification pattern improves the risk profile, therapeutic benefit or safety of anticoagulant therapy. Recent cautious attempts observed no benefit from anticoagulant treatment guided by individual patients' arrhythmia burden at any time.[3] Nonetheless, each patient's arrhythmia burden is directly related to their cardiovascular and thromboembolic risk profile. Therefore, any attempt to differentiate the therapeutic benefits of anticoagulant treatment should involve a combined analysis of the arrhythmia burden and the profile of cardiovascular risk factors. Their independence has not been demonstrated in prospective studies, and AF holds increasing weight as a marker of risk, in conflict or accordance with its nature as a primary causative factor.[1]

We disagree about the supposed lack of advances in anticoagulant treatment; these have been substantial in terms of the consolidation of direct-acting anticoagulants as a preferred treatment,[1] but we agree with Vázquez Ruiz de Castroviejo et al. that the arrhythmia burden will, in the near future, become a key factor in embolic risk stratification. Although the available evidence at present does not allow its translation to management, it certainly ensures this this important area of clinical research remains active.

FUNDING

No funding received.

AUTHORS' CONTRIBUTIONS

D. Calvo and E. Arbelo contributed equally to the writing and review of this manuscript. Both have approved the final version and accept responsibility for the content.

CONFLICTS OF INTEREST

No conflicts of interest.

David Calvo[a,b,*] and Elena Arbelo[a,b]

[a]*Grupo de Trabajo de la SEC para la guía ESC 2020 sobre el diagnóstico y tratamiento de la fibrilación auricular*
[b]*Comité de Guías de la Sociedad Española de Cardiología*

[*] Corresponding author:
E-mail address: dcalvo307@secardiologia.es (D. Calvo).

Available online 12 November 2021

https://doi.org/10.1016/j.rec.2021.10.004

SEE RELATED CONTENT:
http://doi.org/10.1016/j.rec.2021.07.004

REFERENCES

1. Hindricks G, Potpara T, Dagres N, et al.2020 ESC Guidelines for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association of Cardio-Thoracic Surgery (EACTS). *Eur Heart J.* 2021;42:373–498.
2. Grupo de Trabajo de la SEC para la guía ESC 2020 sobre el diagnóstico y tratamiento de la fibrilación auricular, Revisores expertos para la guía ESC 2020 sobre el diagnóstico y tratamiento de la fibrilación auricular y Comité de Guías de la SEC. Comentarios a la guía ESC/EACTS 2020 sobre el diagnóstico y tratamiento de la fibrilación auricular. *Rev Esp Cardiol.* 2021;74:378-8310.
3. Martin DT, Bersohn MM, Waldo AL, et al. Randomized trial of atrial arrhythmia monitoring to guide anticoagulation in patients with implanted defibrillator and cardiac resynchronization devices. *Eur Heart J.* 2015;36:1660–1668.