approval. Dronedarone was also given a recommendation as an antiarrhythmic agent for patients with AF on the basis of consistent although modest antiarrhythmic effects. The alphabetically-arranged positioning of dronedarone in ESC guideline flowcharts does not imply that it is superior to other antiarrhythmics within the same category.

Anguita et al.<sup>1</sup> also argue that the ESC guideline picks out hypertension with LV hypertrophy as a distinct pathology to be considered when choosing an antiarrhythmic agent. This was entirely in line with previous and current guidelines except for the Canadian guidelines which chose a range of left ventricular ejection fractions to guide antiarrhythmic drug choice.

Post approval pharmacovigilance data suggested that dronedarone may be associated with hepatotoxicity. One trial found an increase in all-cause mortality, stroke rate and cardiovascular hospitalizations, particularly for heart failure, associated with dronedarone treatment in permanent AF. The ESC has kept in close touch with developments and would re-consider its AF guidelines with a focussed update as soon as feasible.

The full text of this article is available only as supplementary material.

#### CONFLICT OF INTEREST

Both authors were members of the Task Force for the 2010 ESC guidelines on atrial fibrillation, and Prof. Camm acted as Chair of the Task Force.

Prof. Lip has served as a consultant for Bayer, Astellas, Merck, AstraZeneca, Sanofi, BMS/Pfizer, Biotronik, Portola and Boehringer Ingelheim and has been on the speakers bureau for Bayer, BMS/Pfizer, Boehringer Ingelheim, and Sanofi Aventis.

Prof. Camm has served as a consultant and has been on the speakers bureau for various pharmaceutical companies, and was a member of the steering committee for the PALLAS trial.

#### SUPPLEMENTARY MATERIAL



Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.rec. 2011.12.008.

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doi:10.1016/j.rec.2011.12.008

Comments on the Spanish Society of Cardiology Critical Review of the ESC 2010 Clinical Practice Guidelines on Atrial Fibrillation. Response

Comentarios al análisis crítico de la Sociedad Española de Cardiología de la guía de práctica clínica de fibrilación auricular 2010 de la ESC. Respuesta

To the Editor.

We have read with great interest the comments given by professors Lip and Camm regarding our recent critical review of the 2010 atrial fibrillation (AF) guidelines from the ESC, and we would like to thank them for their contributions to our article, which may clarify certain aspects of this subject that were left unresolved, in our opinion, by the guidelines. First of all, we would like to say that we do not refute that female sex, arterial hypertension, heart failure, and vascular disease can all increase the risk of embolism in patients with AF, but it is not clear whether this is the case only in certain situations or as a general rule. As the authors themselves and the guidelines of the ESC recognize, heart failure in the absence of left ventricular systolic dysfunction, controlled hypertension with no ventri-

cular hypertrophy, a diagnosis of angina (with no other evidence of vascular disease), and female sex with no other risk factors for embolism and age <65 years may not constitute significant risk. In fact, in their letter Lip and Camm state that female sex as a lone risk factor, and therefore a CHA2DS2-VASc score of 1, may not require anticoagulant therapy. However, although the text of the ESC guidelines contains this same idea, the tables of recommendations (Tables 8 and 9) include anticoagulation for a score of 1 as a general rule, without specifying any details. We believe that this might confuse doctors reading the guidelines and we assume that it will be clarified in the updated version of the ESC guidelines on AF coming out in 2012. We can agree "in general terms" that the CHA<sub>2</sub>DS<sub>2</sub>-VASc scale can identify additional subgroups not covered by the CHADS<sub>2</sub> scale and better categorizes patients with a low (0) and high (2 or more) embolic risk score. However, in addition to the fact that not all studies agree that a CHA2DS2-VASc score of 1 reflects a greater risk of embolism,<sup>2</sup> the greatest caution against applying this standard is the total lack of evidence that anticoagulation therapy in patients with a  $CHADS_2 \le 2$  and a low  $CHA_2DS_2$ -VASc (1-2) score provides a significant net clinical benefit if we assess the hypothetical decrease in embolic events versus the possible increase in hemorrhagic events. Furthermore, this analysis does not address the economic cost-benefit, especially if the new oral anticoagulants are prescribed.

With regard to the recommendations on dronedarone, although the guidelines do not explicitly recommend its use in patients with permanent AF, this is considered reasonable therapy for long-term control of heart rate (IIA, evidence level B), which could lead to confusion. The publication of the PALLAS study<sup>3</sup> and the recent recommendations from medications agencies, compiled in our article, have resolved these questions and clarified, at least for the time being, the role of dronedarone in AF by confirming that the importance given by the guidelines to this drug was hasty and unprecedented in the history of ESC guidelines.

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# Ajmaline Test and ESC 2010 Clinical Practice Guidelines on Atrial Fibrillation

# Test de ajmalina y guía de práctica clínica sobre fibrilación auricular 2010 de la ESC

## To the Editor,

We read with great interest the editorial in your journal entitled "New Evidence, New Controversies: a Critical Review of the European Society of Cardiology 2010 Clinical Practice Guidelines on Atrial Fibrillation." In this editorial, controversial aspects of the 2010 guidelines are discussed. <sup>2,3</sup> Of note, obviously, are the new embolic and hemorrhagic risk scales and criteria, with their corresponding therapeutic recommendations and reflections on strategies for rhythm and frequency control. However, no mention was made of the ajmaline or flecainide challenge test as a means of detecting Brugada syndrome (BS) either in the document itself or in the editorial comment.

The association between BS and atrial fibrillation (AF) is well known and represents an added problem in the management of patients with AF.<sup>4</sup> In our hospital, AF was the first clinical manifestation in 35 of 613 patients with BS (in press). Of these, 11 cases were detected after starting treatment with group IC antiarrhythmic drugs and 2 patients arrived at the hospital with an acute arrhythmic event. The first survived sudden death 1 month after starting propafenone. The second case was a 22-year-old woman who came to the emergency room for a fibrillation episode and atrial flutter. In accordance with the guidelines, treatment was initiated with flecainide. Minutes after administration, the patient experienced a type 1 electrocardiographic pattern indicative of BS and subsequent degeneration into ventricular fibrillation.<sup>5</sup>

These are not isolated cases, but rather have been reported numerous times in the literature. Pappone et al.<sup>6</sup> analyzed the presence of latent BS after administration of type IC drugs to 356 individuals attended in the emergency room with new-onset AF and found 11 cases of BS. Three of these had ventricular tachycardia/ventricular fibrillation during follow-up. Junttila et al.<sup>7</sup> reviewed cases in which the typical Brugada pattern was observed

in the electrocardiogram after a range of trigger events (fever, propofol, etc.). Of the 9 patients in whom BS was detected after administration of sodium-channel blockers, 1 experienced sudden cardiac death and another ventricular tachycardia.

We therefore believe that this challenge test is of prime importance and should be taken into account in young patients with "isolated" AF and in those with a history of syncope and/or a family history of sudden death despite having normal baseline electrocardiogram because, as is well known, electrocardiograms can undergo changes over time. Although it is true that BS appears in only a small percentage of all patients with AF, it is essential to identify these patients because they are managed differently, given the contraindication of certain drugs, including sodium-channel blockers widely used to treat AF.

We therefore propose a special mention in the current guidelines to enable subsequent application in daily clinical practice and to avoid fatalities.

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