

Letter by Amat-Santos et al Regarding Article, “Atrial Fibrillation Is Associated With Increased Mortality in Patients Undergoing Transcatheter Aortic Valve Replacement: Insights From the Placement of Aortic Transcatheter Valve (PARTNER) Trial”

To the Editor:

We read with great interest the article from Biviano et al.¹ We think that their findings are of utmost importance for the prognostic assessment of patients following transcatheter aortic valve replacement. In this study, the rate of new-onset atrial fibrillation (AF) as reported in the ECG performed at discharge was 6%. This rate is low in comparison with previously reported research,^{2,3} especially if we consider the high rate of transapical approach in this population, which has been previously related to higher incidence of the arrhythmia.^{2,3} Still, the impact from these results cannot be underestimated, given the clear relationship with 30-month and 1-year mortality. Nevertheless, it is worth noting that the lack of differences in the rate of stroke/transient ischemic attack between groups may suggest the presence of confounding or underexplained factors. Although information concerning anticoagulant therapies was not reported by the authors, as they pointed out in the limitations paragraph, their use can probably help to understand the conclusions. First, the lack of inclusion in the sinus rhythm (SR)/AF group of short AF episodes that may have occurred during the hospitalization implicates their inclusion in the SR/SR group. This is a major issue because anticoagulation in short episodes is initiated less often.² Second, although the lack of use of anticoagulation in the SR/SR group may have increased the rate of stroke, its more extended use in SR/AF group could have potentially lead to higher rate of bleeding events, with an associated increased mortality rate. Finally, patients in the SR/AF group received more often new pacemaker, what may have lead to better monitoring of AF episodes and higher use of anticoagulation, increasing bleeding risk.

In conclusion, anticoagulation is a main actor following transcatheter aortic valve replacement procedures to understand their

outcomes. In the present study, a paradoxical effect of anticoagulation can probably explain the lack of differences in stroke rate (underprescribed in patients with short AF episodes) and also the higher mortality in patients with AF after discharge through an increased rate of bleeding events.

Disclosures

None.

Ignacio J. Amat-Santos, MD, PhD

Javier Castrodeza, MD

Javier Tobar, MD

Instituto de Ciencias del Corazón (ICICOR)

Hospital Clínico Universitario de Valladolid

Valladolid, Spain

References

1. Biviano AB, Nazif T, Dizon J, Garan H, Fleitman J, Hassan D, Kapadia S, Babaliaros V, Xu K, Parvataneni R, Rodes-Cabau J, Szeto WY, Fearon WF, Dvir D, Dewey T, Williams M, Mack MJ, Webb JG, Miller DC, Smith CR, Leon MB, Kodali S. Atrial fibrillation is associated with increased mortality in patients undergoing transcatheter aortic valve replacement: insights from the Placement of Aortic Transcatheter Valve (PARTNER) trial. *Circ Cardiovasc Interv.* 2016;9:e002766. doi: 10.1161/CIRCINTERVENTIONS.115.002766.
2. Amat-Santos IJ, Rodés-Cabau J, Urena M, DeLarochelière R, Doyle D, Bagur R, Villeneuve J, Côté M, Nombela-Franco L, Philippon F, Pibarot P, Dumont E. Incidence, predictive factors, and prognostic value of new-onset atrial fibrillation following transcatheter aortic valve implantation. *J Am Coll Cardiol.* 2012;59:178–188. doi: 10.1016/j.jacc.2011.09.061.
3. Tanawuttiwat T, O'Neill BP, Cohen MG, Chinthakanan O, Heldman AW, Martinez CA, Alfonso CE, Mitrani RD, Macon CJ, Carrillo RG, Williams DB, O'Neill WW, Myerburg RJ. New-onset atrial fibrillation after aortic valve replacement: comparison of transfemoral, transapical, transaortic, and surgical approaches. *J Am Coll Cardiol.* 2014;63:1510–1519. doi: 10.1016/j.jacc.2013.11.046.

Letter by Amat-Santos et al Regarding Article, "Atrial Fibrillation Is Associated With Increased Mortality in Patients Undergoing Transcatheter Aortic Valve Replacement: Insights From the Placement of Aortic Transcatheter Valve (PARTNER) Trial"

Ignacio J. Amat-Santos, Javier Castrodeza and Javier Tobar

Circ Cardiovasc Interv. 2016;9:

doi: 10.1161/CIRCINTERVENTIONS.116.003692

Circulation: Cardiovascular Interventions is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231

Copyright © 2016 American Heart Association, Inc. All rights reserved.

Print ISSN: 1941-7640. Online ISSN: 1941-7632

The online version of this article, along with updated information and services, is located on the World Wide Web at:

<http://circinterventions.ahajournals.org/content/9/5/e003692>

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in *Circulation: Cardiovascular Interventions* can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the [Permissions and Rights Question and Answer](#) document.

Reprints: Information about reprints can be found online at:
<http://www.lww.com/reprints>

Subscriptions: Information about subscribing to *Circulation: Cardiovascular Interventions* is online at:
<http://circinterventions.ahajournals.org/subscriptions/>