

Journal: World Journal of Cardiology

Ref.: Ms. No. 89449

Title: Current knowledge for the risk factors of early permanent pacemaker implantation following transcatheter aortic valve replacement and what is next for the primary prevention?

Editorial Comments

I have reviewed the Peer-Review Report, full text of the manuscript, all of which have met the basic publishing requirements of the **World Journal of Cardiology**, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Please authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.

When revising the manuscript, it is recommended that the author supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply PubMed, or a new tool, the *RCA*, of which data source is PubMed. *RCA* is a unique artificial intelligence system for citation index evaluation of medical science and life science literature. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our *RCA* database for more information at: <https://www.referencecitationanalysis.com/>, or visit PubMed at: <https://pubmed.ncbi.nlm.nih.gov/>.

Dear Editors:

Thank you very much for the opportunity to revise our manuscript. The Table format and references have been updated according to the Journal style as you suggested.

We have revised our paper using point-by-point response to the reviewers' comments and yours as follow. The responses have been highlighted in red.

Reviewer comments

Reviewer 04227304

Thank you for the opportunity to review this editorial. The authors address the recently published paper by Nwaedozie et al. on the outcomes of early PPM placement after TAVR. They highlight risk factors for early PPM for its prevention. The paper is well-written and interesting. It discusses the article and adds important data. The authors note the associations between RBBB and PPM implantation. They also present the possible association between RBBB and AS severity.

1. I recommend adding on the general association between RBBB and future arrhythmias requiring PPM. For example, a large study among consecutive patients that completed 24-hour Holter ECG for variety of indications found RBBB to be an independent predictor for arrhythmia requiring treatment (<https://www.nature.com/articles/s41598-023-39803-1>). I recommend the authors to discuss it and this example.

Response:

Thank you very much for this important comment. We have discussed this point in the revised editorial and cited the reference as you suggested.

2. Did you find any possible explanation for the association between diabetes and early PPM? You only address it as a possible explanation for the higher mortality.

Response:

We have made a statement and cited two references for this point as you suggested.

“Furthermore, those with type 2 diabetes has been found with a 1.56-fold higher risk of PPM implantation as compared to those free of type 2 diabetes,^[11] and those with diabetes after PPM implantation had a greater risk of cardiovascular events.^{[12]”}

3. Finally, I congratulate the authors for their discussion on AF and raising the question on the possible impact of cardioversion prior to TAVR, although I question its utility as I think that AF is probably a marker for sicker conduction system and not the reason for early PPM.

Response:

Thank you very much for this kindly comment. We totally agree with this point as you stated.

Reviewer 03722832

The reviewer's comments to the submission titled "Current knowledge for the risk factors of post-TAVR permanent pacemaker implantation and what is next for the primary prevention?" are as follows

1. Typographical errors are to be improved.

Response:

Thank you very much for this kindly comment. We have corrected the typos and grammar errors throughout as you suggested.

2. The table-1 can be significantly improved with more number of informative columns

Response:

We have added the new column "risk ratio" to enrich the Table 1 as you suggested.

3. The first reference is missing title of the case control study

Response:

We have updated the reference 1 as you suggested.

4. Some the most important references are missing especially arrhythmia.

Response:

We have added some references for arrhythmia such as atrial fibrillation as you suggested.

Round 2

Specific Comments to Authors: The table -1 can be improved significantly with additional information(more columns) about the given references.

Dear Editor, We have added detailed information in our revised Table 1 as you suggested. Best regards. Gen-Min Lin, MD, PhD, FACC, FAHA, FESC