

PEER-REVIEW REPORT

Name of journal: *World Journal of Cardiology*

Manuscript NO: 92218

Title: Left bundle branch pacing set to outshine biventricular pacing for cardiac resynchronization therapy?

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 07724860

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Norway

Author's Country/Territory: India

Manuscript submission date: 2024-01-19

Reviewer chosen by: AI Technique

Reviewer accepted review: 2024-01-19 09:05

Reviewer performed review: 2024-01-19 10:02

Review time: 1 Hour

Scientific quality	☐ Grade A: Excellent ☐ Grade B: Very good ☒ Grade C: Good ☐ Grade D: Fair ☐ Grade E: Do not publish
Novelty of this manuscript	☐ Grade A: Excellent ☐ Grade B: Good ☒ Grade C: Fair ☐ Grade D: No novelty
Creativity or innovation of this manuscript	☐ Grade A: Excellent ☐ Grade B: Good ☒ Grade C: Fair ☐ Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	☐ Grade A: Excellent ☐ Grade B: Good ☐ Grade C: Fair ☒ Grade D: No scientific significance
Language quality	☒ Grade A: Priority publishing ☐ Grade B: Minor language polishing ☐ Grade C: A great deal of language polishing ☐ Grade D: Rejection
Conclusion	☐ Accept (High priority) ☐ Accept (General priority) ☐ Minor revision ☒ Major revision ☐ Rejection
Re-review	☐ Yes ☒ No
Peer-reviewer statements	Peer-Review: ☐ Anonymous ☒ Onymous
	Conflicts-of-Interest: ☐ Yes ☒ No

SPECIFIC COMMENTS TO AUTHORS

Well-written manuscript considering a hot topic in the field. Conduction System Pacing is a new modality that is promising and is only becoming more and more popular. I think the manuscript should have a clearer message/suggestion to society on what is needed to improve the shortcomings and not only ask for more RCTs. Here are my comments that I believe could improve the manuscript. 1) I think it is important that clarify that CRT was introduced as a treatment for dyssynchronous heart failure, which around 25% of those cases are pacing-induced (upgrades from dual-chamber to CRT). 2) Non-physiological activation is a limitation for all types of pacing and not only for CRT. I think it is important to say and specify that one of the main reasons for the high non-response rate in CRT is the limited pacing sites constrained by the CS branches and CSP will also be good for patients indicated for de novo CRT (not upgrades). 3) The biggest reason for the high non-response in CRT is that there is no objective measure that could indicate the effectiveness of the therapy acutely due to the remodeling involved. This limitation will exist for CSP also. Therefore, I think it is important to mention that there is a great need for a way to accurately determine/predict the response and enable



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: office@baishideng.com
https://www.wjgnet.com

optimization. 4) When talking about optimization, it is important to mention HOT-CRT and LOT-CRT as there have been conducted some important studies on that. 5) CSP for CRT is more complex than CSP for no-myopathic issues. For patients with LBBB, the pacing site must be placed distal to the block, and one should be cautious that whatever condition caused the block does not cause another block later. For non-LBBB patients, identifying where to pace for the best results is also difficult, which is why HOT-CRT and LOT-CRT may be the best option. 6) It is important to mention the difference between direct LBB pacing and LBB area pacing, including what is expected/needed from the industry in terms of devices to improve CSP. 7) I think the reader would benefit from an illustrative figure describing the various pacing strategies mentioned above.