



Contents lists available at ScienceDirect

International Journal of Cardiology

journal homepage: www.elsevier.com/locate/ijcard

Letter to the Editor

Response to the Letter to the Editor

Khagendra Dahal, Nelson Telles Garcia, Paari Dominic *

Louisiana State University Health Science Center, Shreveport, LA 71103, USA



ARTICLE INFO

Article history:

Received 8 October 2018

Accepted 16 October 2018

Conflict of interest disclosures

None declared.

Funding/support

No external funding was available for this research.

References

- [1] N. Telles-Garcia, K. Dahal, C. Kocherla, et al., Non-vitamin K antagonists oral anticoagulants are as safe and effective as warfarin for cardioversion of atrial fibrillation: a systematic review and meta-analysis, *Int. J. Cardiol.* 268 (2018) 143–148.
- [2] Green JPHS (Ed.), *Cochrane Handbook for Systematic Reviews of Interventions*, The Cochrane Collaboration, 2011.
- [3] A. Goette, J.L. Merino, M.D. Ezekowitz, et al., Edoxaban versus enoxaparin-warfarin in patients undergoing cardioversion of atrial fibrillation (ENSURE-AF): a randomised, open-label, phase 3b trial, *Lancet* 388 (2016) 1995–2003.
- [4] M.D. Ezekowitz, C.V. Pollack, J.L. Halperin, R.D. England, N.S. VanPelt, J. Spahr, M. Sudworth, N. Cater, A. Breazna, J. Oldgren, P. Kirchoff, EMANATE Investigators, Apixaban versus heparin/vitamin K antagonist in anticoagulation-naïve patients with atrial fibrillation scheduled for cardioversion: the EMANATE trial, *European Society of Cardiology Meeting*, Barcelona, Spain, 2017.

We would like to thank Dr. Jenabi for raising methodological issues pertaining to conduction and interpretation of our meta-analysis paper [1]. While the Cochrane's Handbook of Systematic Reviews recommends performing a systematic search in 3 databases to ensure inclusion of all studies [2], we included 4 databases and a manual search in our study, thereby minimizing the chance of missing studies or biasing our results.

While we agree with him on the idea of expanding the search with the Boolean operator "OR" in general, our search, which was performed in accordance with Cochrane's strategies, assessed the use of non-vitamin K oral anticoagulants (NOAC) in patients with afib undergoing cardioversion, and therefore we believe that a more focused search strategy was appropriate. In addition, since the number of studies was rather small, the combination of focused search and manual cross-referencing likely covered relevant studies, while avoiding exhaustive non-specific results.

Finally, regarding the statistical power of this analysis, we understand that the individual studies were underpowered to find a difference in safety and efficacy outcomes [3,4]. Therefore, compared to more than tens of thousands of patients in the original landmark studies testing the safety and efficacy of NOAC, the results from this meta-analysis that are based on a few thousand patients, should be interpreted with caution. Despite limitations, our meta-analysis provides important insight into the existing literature and shows that there is no difference in safety and efficacy based on available evidence between NOAC and warfarin in patients undergoing cardioversion for afib.

* Corresponding author at: Division of Cardiovascular Medicine, Louisiana State University Health Science Center, Shreveport, LA, USA.
E-mail address: pdomi2@lsuhsc.edu (P. Dominic).