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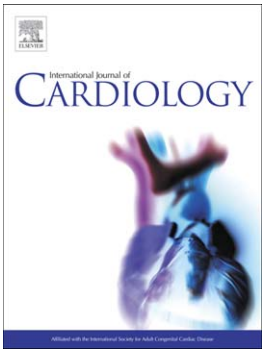
DOI:
10.1016/j.ijcard.2016.03.107

Document Version
Peer reviewed version

Citation for published version (Harvard):
Kotecha, D 2016, 'Letter: Conflicting and unresolved issue of the prognostic value of atrial fibrillation for chronic heart failure patients— Response', *International Journal of Cardiology*.
https://doi.org/10.1016/j.ijcard.2016.03.107



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PII: S0167-5273(16)30529-0
DOI: doi: 10.1016/j.ijcard.2016.03.107
Reference: IJCA 22236

To appear in: *International Journal of Cardiology*

Received date: 11 February 2016
Accepted date: 19 March 2016

Please cite this article as: Kotecha Dipak, Letter: Conflicting and unresolved issue of the prognostic value of atrial fibrillation for chronic heart failure patients — Response, *International Journal of Cardiology* (2016), doi: 10.1016/j.ijcard.2016.03.107

Letter: Conflicting and unresolved issue of the prognostic value of atrial fibrillation for chronic heart failure patients – response

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We would like to thank Bosseau and Donal for their interest in our paper, and agree with them about the increasing clinical importance of patients with concomitant atrial fibrillation (AF) and heart failure, regardless of ejection fraction (1). Indeed, our analysis confirms poor prognosis in patients suffering from AF and heart failure with preserved ejection fraction (HFpEF) *and* heart failure with reduced ejection fraction (HFrEF). Although we identified higher crude rates of all-cause mortality with AF-HFrEF, incident stroke and heart failure admissions were similar to AF-HFpEF (2).

Clearly these are different patient groups, as we confirmed in our article. Patients with AF-HFpEF were older, with more women and non-ischaemic cardiomyopathy, and this should be taken into account when considering outcomes in each group. We also discussed the issues around adjusted mortality rates, particularly in light of these marked differences in characteristics. As Bosseau and Donal note, if individual patient data were available and pooled for all studies, it is likely this would have reinforced the higher mortality in AF-HFrEF. Unfortunately, cause of death was not consistently reported in the contributing studies.

The point regarding study type is well-taken and further registry data are welcomed.

However, we did perform a sensitivity analysis which showed that the excess mortality in AF-HFrEF compared to AF-HFpEF was also seen in cohort studies (risk ratio 1.21, 95% CI 1.14-1.27), and this result was consistent across all subgroups (see Figure). We believe that our findings are compatible with clinical experience and do not lessen the importance of HFpEF in AF. In contrast, they highlight different treatment priorities compared to patients with concomitant HFrEF. The impact of AF in heart failure patients (and vice-versa) has already been made clear from numerous published reports (3-8). Our aim was rather to clearly define the differences in HFrEF and HFpEF in these patients, ensure better reporting in future studies and focus the mind of clinicians on the considerable impact that AF and heart failure have on quality of life and patient wellbeing (9,10).

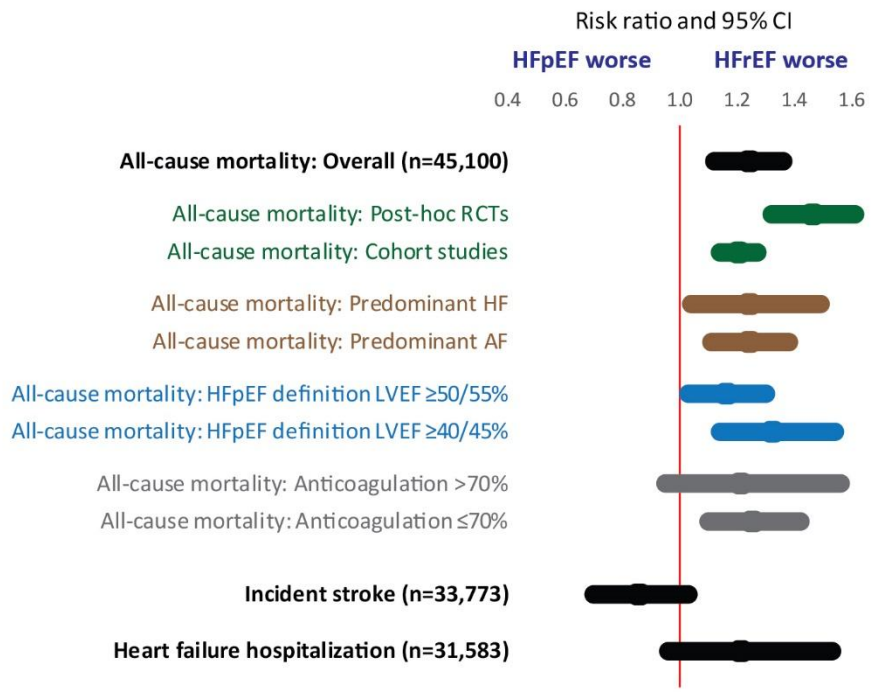

Figure: Summary of meta-analysis results; adapted from Kotecha *et al*. (2)

The author reports no relationships that could be construed as a conflict of interest.

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