

# Osteoarthritis and Cartilage



Letter to the Editor

## Response to Letter to the Editor: 'Use of preoperative comorbidity scores to predict mortality after total arthroplasty'



Dear editors,

Thank you for the opportunity to reply to Xue *et al.*'s letter regarding our recent manuscript. We appreciate Xue *et al.*'s interest in our study and agree that a series of pre, intra, and post-operative factors are associated with a higher risk of mortality after joint replacement surgery. We do not dispute the importance of these factors and their impact on death. Our study did not intend to identify factors associated with mortality after surgery but instead evaluated and compared the ability of three widely used co-morbidity measures to predict mortality.<sup>1</sup> We examined the Charlson, Elixhauser, and RxRisk-V co-morbidity measures, which use pre-operative patients' information, and compared their death predictive ability, so we could provide advice on which of these three existing measures performed better in a patient population where no consensus regarding this question existed.

We would like to clarify that we did not suggest co-morbidity measures provide exact mortality predictions. We understand the limitations of prognostic models and only compare our models and offer interpretation of our findings regarding their overall performance. Our review of these measures aimed to provide information on their performance in predicting death so that the best measure could be chosen for studies of joint replacement patients.

### Authors' contributions

Drafting response letter: MCSI.

### Final review and approval

MCSI, NLP, EER, SEG.

### Conflict of interest

None of the authors have any conflict of interest.

### Acknowledgements

None.

### Reference

1. Inacio MC, Pratt NL, Roughead EE, Graves SE. Evaluation of three co-morbidity measures to predict mortality in patients undergoing total joint arthroplasty. *Osteoarthritis Cartilage* 2016;24(10): 1718–26, <http://dx.doi.org/10.1016/j.joca.2016.05.006>.

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