Author’s response to reviews

Title: Myocardial tissue characterisation using echocardiographic deformation imaging

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Author’s response to reviews:

Reviewer #1 comments

“My comments have been addressed satisfactorily.”

Review #2 comments

“This is a very interesting and well written review. Authors highlight carefully the limitations of STE, its potentialities and flaws. It is interesting how they try to draw a research agenda for future developments. This is a major issue: why the scientific community was so passive in accepting a technology that after many years remains poorly useful in clinical practice?

Response to reviewers

We would like to thank the reviewers for these comments. Reviewer #2 highlights an important point – why has deformation imaging not become part of routine clinical practice? The major barrier to implementation related to the additional measurement time for strain, over and above those of the standard measurements performed as part of a echocardiographic study. This barrier was reduced once strain measures could be performed “on cart”, and we believe that this barrier is almost entirely removed now that most vendors provide a semi- or fully-automated solution that provides both ejection fraction and strain measures with minimal operator input. While these are important implementation points, they are outside the scope of this review, focused on tissue characterisation, and we therefore have not addressed this directly in the text and have not made changes compared to the previous revision.