

1 - Comparison of 3DE and MRI consistency (ref 13). There should be caution in drawing this conclusion at this stage until 3DE is more widely reported in the scientific literature.

We do agree that some issues need to be addressed before the widespread use of 3D echocardiography can be recommended. However, although only one reference is provided (coming from a multi-centric study), there is a large body of evidence published in the literature, suggesting that, in patients with appropriate image quality, this technique is both accurate and reproducible. Current guidelines clearly state that “In patients with good image quality, 3DE-based EF measurements are accurate and reproducible and should be used when available and feasible.” (J Am Soc Echocardiogr 2015;28:1-39). We also acknowledge that there are no studies using 3D in cirrhosis and so its validity in this specific setting remains speculative.

To address the reviewer’s comment, we have added some new references and the sentence “To the best of our knowledge, there are no studies comparing 3DE with 2DE or CMR in cirrhosis; hence, its validity in this specific setting remains unproven” to the manuscript.

2 - The issue about the breathholding required in MRI is generally true, though the authors should be aware that free breathing cine MRI approaches are being developed and validated and are likely to become clinically available in the near future.

We thank the reviewer for the valuable insight, and we rephrased that section that now reads “The widespread use of this method is limited by availability and cost. Its use in cirrhotic patients may also be hampered by the need of

repeated end-expiratory apneas for image acquisition and tachycardia (decreasing temporal resolution) or irregular heart rates. [Current development of improved free-breathing and short breath-hold sequences may soften some of these problems](#)”

3 - The warning about Gd and impaired renal function is timely, but the location of this comment doesn't really give an indication of what gadolinium would be used for in the cardiac exam. The authors talk about LGE and T1 mapping (which often involves Gd if ECV is to be estimated) and the authors should unify these comments so that the non-MRI specialist can follow them more easily

We moved this section which is now located after the LGE reference. We agree that readability is improved by this change.

4 - Abbreviations. SPECT is fine, but then also using STE and SPE (erroneous) is confusing. Get rid of STE and SPE as abbreviations would be my recommendation.

Abbreviations were reviewed, as asked by the reviewer; STE and SPE were removed.

5 - T1 mapping. This is too brief. You should review the present state of the art in this area a little more thoroughly. T1 mapping without Gd really only has promise to date in amyloidosis whereas T1 mapping and ECV mapping with Gd has potentially greater applicability.

We have reviewed the section regarding T1 mapping to include some more information about the current status of this method.