Reviewer’s report

Title: Probing Intravascular And Interstitial Compartments of Remodeled Myocardium in Heart Failure Patients With Preserved and Reduced Ejection Fraction: A CMR Study

Version: 0 Date: 06 Sep 2018

Reviewer: Steffen Ringgaard

Reviewer's report:

The manuscript describes the assessment of inter-vascular volume and intra-cellular volume in the myocardium of patients with heart failure with preserved ejection-fraction (HFpEF) by using both a normal and an intravascular contrast agent. The results from these patients are compared to healthy controls and post-myocardial infarction patients.

The study is set-up and performed in a proper and sound way, and the description in the manuscript is easy to read and to comprehend. The applied MR methods are state-of-the-art, and sufficiently described.

The main limitation of the study is the low number of patients, which is due to the discontinued availability of the Gadofosveset contrast medium, as explained in the limitation section. However, the authors are still able to show some statistically significant results. However, I am not able to fully assess the statistics, and therefore, additional review by a statistician is recommended. This is in particular because the number of HFpEF is so low.

In conclusion, the manuscript is interesting and the assessment of both inter-vascular and intra-cellular volumes by using two different contrast agents is novel. However, the value of the method for use by other sites is of course reduced, if the Gadofosveset is off the market.

Minor comments:

* P14, spelling error in "partecipate"

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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