Reviewer’s report

Title: Cardiac Function Assessed by Myocardial Deformation in Adult Polycystic Kidney Disease Patients

Version: 1 Date: 13 Jun 2019

Reviewer: PETER JANSSENS

Reviewer's report:

Most of the remarks of the reviewers have been addressed. However, an important confusion arises:

Results p9: "There was a lower GLS in the ADPKD patients (mean: -17.8 ± 2.5%, 95%CI [-18.3(-7.4)]) compared to the healthy controls (mean: -22.0 ± 2.2%, 95%CI [-23.0(-21.0)])" -> I understood that "lower" GLS means more negative GLS. The abstract and results now state the ADPKD patients have lower GLS whereas I interpret the numbers as a higher GLS compared to controls. Please clarify

Also, I wondered whether the association of worse GLS with Hb concentration could be explained by the fact that Hb levels as such influence the echographic measurements and GLS values. The authors now suggest an increased EPO concentration and Hb in ADPKD with advanced disease stages. This would mean that there is an inverse association between eGFR and Hb in the studied ADPKD and this is probably not the case. Although individuals with polycystic kidney disease might produce more EPO and might require lower ESA doses, advanced CKD in general leads to anemia that is then only partially corrected by ESA
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