

AUTHORS RESPONSE TO REVIEWER COMMENTS

General/Formatting comments from Reviewer/Editors have been addressed. Specific/Content comments have been listed in **bold text (CE.X)**, with below responses labelled in non-bold text (RE.X).

General Comments

“Author Highlights” section has now been added at the end of the main text.

Original pictures have now been provided in the PowerPoint document, including all editable charts (originally made in Excel). Note that “Figure 1” and “Figure 2” are intended to demonstrate screenshots of the CSA measurements performed using ImageJ (hence the measurement lines are not editable). Their subsequent labelling were added on PowerPoint, and are hence editable.

PMID and DOI numbers have since been added to the “Reference” list.

Uniform presentation has now been be used for figure legends.

Grammatical errors have since been reviewed and corrected.

Specific Comments

CE.1: The relatively low value obtained from CT is not well addressed. Author mentioned the reasons are not clear but present. Please check the literature for some better explanation here.

RE.1: The lower CSA values obtained with the CT-based method are likely a reflection of the ability to rotate the 3D bony reconstructions, and hence replicate an ideal true AP view of Suter-Henninger A1 quality. This eliminates any measurement inaccuracy due to scapular version and flexion/extension that may be obtained from an intended true AP radiograph, as outlined in Suter et al (2015). We have updated our manuscript to reflect this. Note that with a significant portion having glenohumeral osteoarthritis (associated with CSA < 30°), so the lower CSA mean of our study is also to be expected.

CE.2: Since there are only 20 samples, it is hard to classify the difference in different age or gender groups. However, I still suggest to add this information and statistical analysis if sample size is allowed.

RE.2: We have since added the following to the “Results” section.

“Additionally, there was no statistically significant differences in measured CSA

values between age groups (≤ 55 years and > 55 years; $p=0.550$) and gender groups (male/female; $p=0.698$). ”