Reviewer’s report

Title: Effect of Region of Interest on ADC and Interobserver Variability in Thyroid Nodules

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Reviewer: Caiyun Shi

Reviewer's report:

The manuscript discusses the effect of the region of interest (ROI) on tumor's apparent diffusion coefficient (ADC) and interobserver variability in thyroid nodules. I have a few comments regarding the manuscript:

1) For thyroid nodules, whether cancerous or non-cancerous, the average ADC of B400 is more dispersed in small solid sample groups. This is inconsistent with Fridman's test conclusion, which concludes that no matter which ROI technique is used, ADC in non-cancerous nodules is no significantly different, but in cancerous nodules is significantly different.

2) According to the conclusion, ROI is the most significant difference among ADC observers obtained by small solid sampling technology, there is no further analysis on whether ROI contains blood vessel and tumor boundary, whether there are too many solid cells, how to influence ADC value, and lack of a theoretical deduction.

3) The algorithm of calculating ADC can be described roughly.

4) There are much data in this paper. It is better to use chart classification to describe the relationship between ROI, ADC, carcinomatous tumors, b value and so on, which is easier to understand.

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.

Not relevant to this manuscript

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

Needs some language corrections before being published

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