



March 07, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 9163-review.doc).

Title: A Feasibility Study of Computed vs. Measured High b-value (1400 s/mm²) Diffusion-Weighted MR Images of the Prostate Using a Small Field-Of-View Diffusion Imaging Protocol At 3T

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Name of Journal: *World Journal of Radiology*

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The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

General:

A comments section was attached after the discussion

Responses to reviewer 1

1.) A major limitation of this study is that there is no final diagnosis of the prostate lesions in question and therefore useful parameters such as sensitivity and specificity of the imaging techniques cannot be assessed or compared. This has been acknowledged in the limitations section of the manuscript.

The missing histopathologic gold standard is certainly a major limitation of this study. On the other hand, we think that the technique can be used to draw attention to lesions of whatever kind in order to achieve a higher detection rate in a time- and cost-efficient manner. These lesions have to be carefully evaluated using other parameters such as the ADC, DCE parameters and the appearance on high-resolution morphologic T2-weighted images. The purpose of this study was not to find a technique that is capable of differentiation between benign and malignant lesions.

2.) Image quality was subjectively scored by two radiologists. A few more comments:

a) What was the kappa for interobserver agreement between the two raters for each of the variables rated?

Each lesion was evaluated by two experienced radiologists in consensus (see: page 7, chapter 1 (image analysis)):

"Data sets of every patient were analyzed by two radiologists (DH, 3 years of experience in prostate imaging) and (LKB, 6 years of experience in prostate imaging) in co-sensus."

b) Were the raters blinded as to the type of imaging approach they rated? If not then this should be mentioned in the limitations section.

Both observers were blinded to the imaging approach that they rated.

Responses to reviewer 2

Well written paper. Is there a push towards more MRI guided prostate biopsy? Will be interesting to see if this also sees a upstaging of prostate cancer in patients with prior TRUS biopsy.

Indeed, this technique can be used to guide targeted prostate biopsies.

The following sentences were revised in the conclusion paragraph of the abstract and the main manuscript:

"Combination of a high b-value extrapolation and sFOV readout may contribute to increase diagnostic accuracy of DWI without an increase of acquisition time, which may be useful to guide targeted prostate biopsies and to improve quality of mMRI especially under economical aspects in a private practice setting."

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Radiology*.

Sincerely yours,

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