

May 8, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 17318-edited_AV.doc).

Name of journal: World Journal of Radiology

ESPS Manuscript NO: 17318

Columns: Editorial

Title: Advances in Diffusion-Weighted MRI of the Prostate

Running Title: Advances in prostate DW-MRI

Authors: Vargas, Hebert Alberto, MD¹; Lawrence, Edward Malnor, MD PhD¹; Mazaheri, Yousef, PhD¹; Sala, Evis, MD PhD¹

Response to reviewer comments:

Reviewer 1

Minor revision is required to explain the valuable acronyms (DWI, IVIM, DKI) used in this manuscript. The terms may be obvious to experts in the field but not to general readers.

→ Thank you for your comment. We added the following information early in the manuscript to introduce the terms and abbreviations discussed later on:

“This review discusses ongoing controversies in DW-MRI acquisition, including the optimal number of b-values to be used for prostate DWI, and summarizes the current literature on the use of advanced DW-MRI techniques. These include intravoxel incoherent motion (IVIM) imaging, which better accounts for the non-mono-exponential behavior of the apparent diffusion coefficient (ADC) as a function of b-value and the influence of perfusion at low b values. Another technique is diffusion kurtosis imaging (DKI). Metrics from DKI reflect excess kurtosis of tissues, representing its deviation from Gaussian diffusion behavior.

Preliminary results suggest that DKI findings may have more value than findings from conventional DW-MRI for the assessment of prostate cancer.”

Reviewer 2

The authors aimed to discuss ongoing controversies in DW-MRI acquisition, including the optimal number of b-values to be used for prostate DWI, and summarizes the current literature on the use of advanced DW-MRI techniques such as intravoxel incoherent motion (IVIM) imaging and diffusion kurtosis imaging (DKI). The review is well written. The file is very interesting. I suggest to delete the reference numbers from the conclusion and insert some tables about the reported studies in order to improve the manuscript comprehension.

→ We concur with the reviewer’s suggestion and have added 2 tables to summarize the studies discussed in the IVIM and DKI sections.