Reviewer's report

Title: Diagnostic value of Diffusion-Weighted MR imaging in thyroid disease: application in differentiating benign from malignant disease

Version: 4 Date: 6 May 2013

Reviewer: Frederik De Keyzer

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Minor Essential Revisions:
*/ Page 10, second paragraph: “In this study, we used a STIR fat suppressed SE EPI (Spin-Echo Echo Planar Imaging) sequence to improve the quality of images and to reduce the inaccuracy due to susceptibilities effects”. ‘susceptibilities’ should be ‘susceptibility’. Also, STIR limits artifact generation due to a more robust fat suppression, and induces a slight T1-weighting-based background suppression, but this doesn’t really reduces ‘inaccuracy’, only fat suppression artifacts. Please rephrase.

*/ Page 12, last paragraph: “Abdel’s study included a variety of cervical lymphnodes whereas our study focused on the thyroid. Tissue heterrogeneity might have accounted for the differences in sensitivity.” ‘lymphnodes’ should be ‘lymph nodes’, ‘heterrogeneity’ should be ‘heterogeneity’. Also, I assume you mean ‘lesion heterogeneity’ rather than ‘tissue heterogeneity’?

*/ Page 15, second paragraph: “Although FNAB is commonly used to screen for malignancy, a unique aproach in this study is that we used histological results from thyroidectomy as the standard reference for distinguishing benign and malignant lesions”. ‘Aproach’ should be ‘approach’.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests