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April 21, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name:).

Title: Quantitative MRI of the Fetal Brain in utero: Methods and Applications

Authors: Anat Biegon and Chen Hoffmann

Name of Journal: *World Journal of Radiology*

ESPS Manuscript NO: 9349

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

Reviewer 1. Page numbers were added

Reviewer 2. Typos were corrected.

Reviewer 3. We would like to draw the reviewer's attention to the fact that this manuscript was not undertaken to "give an overview on imaging methods in the field of fetal MRI of the brain", but rather address the much younger and narrower field of **quantitative, in vivo** fetal brain MRI. As stated in our abstract...."however the focus of this review is on the even younger field of **quantitative** MRI as applied to non-invasive studies of fetal brain development. The techniques covered under this header include structural MRI imaging **when followed by quantitative (e.g volumetric) analysis**" etc. This is in contradistinction to the much more common use of fetal MRI in clinical diagnostic studies concerned with improving the identification and localization of lesions in individuals referred for diagnosis.

From this viewpoint, the Thomason paper was indeed an omission and citation and text related to this paper have been incorporated into the revised MS. The 2 other citations are not relevant to this work, since the D'elia paper uses ultrasound and the Judas paper summarizes postmortem/histological data.

The authors are quite aware of the large number of reviews covering fetal MRI methodology which appeared in recent years, however, as stated above, this is not the focus of our MS, although we do cite a selection of these reviews for the readers who want to delve further into the technical and clinical aspects. These citations included the Anderson paper (no. 58 in our original MS) as well as a review by Schopf (ref 56) which

is more recent (2012) than the one mentioned by the reviewer (2011). Work from the other research groups mentioned by the reviewer in this context is also cited when relevant. The main thrust of our MS is indeed to guide the reader through recent findings on quantitative aspects of fetal brain development and to point to future direction, as expounded in the last section of the manuscript. .

We have also responded to editorial comments by adding a running title and a core tip and changing the reference citation method to WJR format including PMID and PMC numbers when available.

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

Sincerely yours,



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