Author’s response to reviews

Title: A semi-automated measuring system of brain diffusion and perfusion magnetic resonance imaging abnormalities in patients with multiple sclerosis based on the integration of coregistration and tissue segmentation procedures

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To Editor of BMC Medical Imaging

Dear Editor

Enclosed please find of a copy of our paper entitled “A semi-automated measuring system of brain diffusion and perfusion magnetic resonance imaging abnormalities in patients with multiple sclerosis based on the integration of coregistration and tissue segmentation procedures” which we would like re-submit again in its revised form for publication in BMC Medical Imaging. The point-by-point response addressing the requested editorial revision are enclosed below:

1) Please provide the full name and affiliation of the ethics committee that approved this study.

   OK, done.

2) Please specify whether the consent obtained was written or verbal.

   OK, done.

3) On submitting your revision, please change the article type from ‘technical advance’ to ‘software article’ and format your manuscript as required by the instructions to authors for
this article type
(http://www.biomedcentral.com/bmcmedimaging/authors/instructions/software). Please also
pay particular attention to the data availability requirements.

Honestly, after the initial submission and two rounds of review (about four months of total time),
this unexpected editorial requirement was surprising for us since the presentation of a software
that represents a significant advance over previously published software was beyond the scope of
our study. Conversely, here we describe a semi-automated measuring system in which a series of
already published external algorithms, performing coregistration and tissue segmentation
procedures, are integrated to obtain precise measurements of DWI and PWI values in focal
lesions, in NAGM and in NAWM from patients with MS. In fact, the three Reviewers who
evaluated this manuscript did not require the validation of DPP Suite by direct comparison with
available related software and its availability for testing. These two criteria are clearly indicated
as mandatory to submit an article to “Software” category in the Instruction for Authors available
in the above-mentioned BMC Medical Imaging website. Therefore, in our opinion, the approach
of the Reviewers undoubtedly demonstrates that they considered our paper as a “Technical
advance” rather than a “Software” article. In addition, to make our DPP Suite freely available
without restrictions, several complex steps are needed. Among these, we have to consider
licensing issues of the external software (VMware, Scientific Linux, FSL, SPM, Matlab, Jim 6),
to prepare a Linux virtual machine for public release and manuals for installation and use, to
update source code for open source release (e.g. comments language check and reordering for
improved readability) or to compile source code and to make a test run for closed source
release, to generate distribution tools (e.g. website, repository loading) and to prepare a test data
set for public release. All these operations should be performed in the context of a DPP Suite
composed of about 30,000 code lines and, require a long time to be completed. Finally, we
believe that the presence of terms such as Suite and Graphical user Interface (GUI), commonly
used in “Software” articles, may have misled by the Editorial staff. Thus, based on these
observations, we take the liberty to ask to the Editors to maintain our manuscript in “Technical
advance” article category.

4) Please include a brief description of the purpose of the study in the background section of the
abstract as per our instructions to authors

OK, done.

We hope that all changes made on the original submission will meet the requirements. These
modifications are marked in blue throughout the manuscript. We hope that the current version of
our manuscript can be considered acceptable. We believe that this amended form is further
improved, and we hope it will be considered for publication.

With best wishes