Title: Assessment of the impact of the scanner-related factors on brain morphometry analysis with Brainvisa

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Author's response to reviews: see over
Dear editorial board of BioMed Central,

Thank you very much for accepting the revised version of our manuscript for publication in BMC Medical Imaging subject to revisions.

We have amended the manuscript according to the reviewers’ suggestions. The explanation of what we have changed is given point by point in the following pages.

The manuscript has also been reformatted to comply with the requirements of BMC medicine journal.

We thank you in advance for your kind consideration.

Sincerely yours,

Mahsa Shokouhi on behalf of the authors
Reviewer: Frithjof Kruggel

The manuscript has improved substantially from the revision. It should be noted that the re-analysis led to much different results (see Table 5), and consequently, to different conclusions. It is suggested to change the values in Table 3 & 4 to ml, which would make them easier to understand.

The units in tables 3 & 4 are now changed.
Reviewer: Mark DiFrancesco

1. Page 7: Please add a reference for the MP-RAGE protocol.

A reference is now added.

2. Page 17: the discussion here about the interpretation of scanner inconsistencies gets a bit confusing. You propose two ways that scanners can be inconsistent between visits, then you say that only the second way is important. This is followed by stating that the second way applies for GSI at 1.5T and the first way applies for the GM/WM volumes at 3T. Please clarify.

The text has been amended to clarify the point (see pages 16 and 17).