

ANSWERING REVIEWERS



January 20th, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 7303-review.doc).

Title: Clinical Decision Support Systems for brain tumor characterization using advanced MRI techniques.

Author: Evangelia Tsolaki, Evanthia Kousi, Patricia Svolos, Efthychia Kapsalaki, Kyriaki Theodorou, Constastine Kappas, Ioannis Tsougos.

Name of Journal: *World Journal of Radiology*

ESPS Manuscript NO: 7307-Review

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

Reviewer 1

1. The introduction part is too long. Consider shortening it in some part.

The manuscript has been restructured based on your comment. Please refer to the revised manuscript.

2. It is important to refer to the methodology the literature review was made. e.g. What kind of articles were included?

Thank you for the comment. You are absolutely right as we did not refer to the methodology in a more analytical way. Indeed this point should be further clarified. Please refer to the revised manuscript Literature Review Section.

3. As most of the article deals with brain tumors, this should be clearly stated even in the article title.

The title has been changed accordingly.

4. The authors should also refer to their personal experience and possible studies performed in their institution/department.

Thank you for your comment. Our personal experience has been added to the manuscript. Please refer to the Future perspectives section, last two paragraphs.

5. "Hence these kind of systems should be specifically designed in such a way that a user, with minimum knowledge of pattern recognition analysis, will be able...": The authors should define who will be the user? The radiologist? The clinician? The radiographer? The medical physicist?

Thank you for the comment. This is a very interesting remark. It is true that this is a multiparametric approach in which the involvement of several scientists such as radiologists, medical physicists as

well as neurologists neurosurgeons etc. is essential. Hence some people use the term *neuroscientist* to include all the aforementioned. This was included in the manuscript with emphasis on the main scientific groups that actually use these kind of systems i.e. radiologists and medical physicists. Corrections have been made based on your comment. Please refer to Future Perspectives Section.

6. A more detailed discussion should be done on the pros and cons of the applications of these techniques.

Thank you for your remark! As reported to the Introduction section the aim of this paper is to provide initially an overview and an extensive description of the already developed CDSSs for brain tumor differentiation and afterwards to conclude with the future objectives concerning the limitations that the existed CDSSs present. Due to the relatively limited period of actual clinical application of these systems we think it would be premature to limit this evaluation on pros and cons. Consequently, our interest was focused on the additional contribution of the existed CDSSs for brain tumor differentiation in clinical routine while the future perspectives were guided by the limitations or the challenges that they will meet in the future.

Reviewer 2

Interesting review Comment #1: The Introduction is too long. Shorten by 50% Comment #2: Try to shorten the entire manuscript by 20%.

The manuscript has been restructured based on your comment. Please refer to the revised manuscript.

Reviewer 3

The main question however remains unanswered regarding the efficacy of the additional MRI information regarding any improvements in clinical outcome or cost savings in the clinical management of these patients.

Thank you for your comment! You are right. This is a main concern regarding the applicability of such systems in the clinical routine. Indeed this point should have been further clarified. Please refer to the revised manuscript Future Perspectives Section.

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

Sincerely yours,

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