

## Review Form 1.7

Journal Name:	<b>Journal of Advances in Medicine and Medical Research</b>
Manuscript Number:	<b>Ms_JAMMR_95295</b>
Title of the Manuscript:	<b>Role of Magnetic Resonance Imaging and Magnetic Resonance Spectroscopy in Evaluation of Different Types of Dementia</b>
Type of the Article	<b>Original Research Article</b>

### **General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljammr.com/index.php/JAMMR/editorial-policy> )

## Review Form 1.7

### PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p><b>Compulsory</b> REVISION comments</p> <p>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</p> <p>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</p> <p>3. <b>Is the abstract of the article comprehensive?</b></p> <p>4. <b>Are subsections and structure of the manuscript appropriate?</b></p> <p>5. <b>Do you think the manuscript is scientifically correct?</b></p> <p>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b> <b>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</b></p>	<p>This manuscript provides a limited set of data comparing MRI and MRS for dementia patients in a clinical setting, using 1.5T MRI. This is adequately reflected in the title. The abstract can be improved, and contains incomplete sentences, incomplete information. One example is the use of "these criteria", which aren't specified, the other is the last sentence of the Results summary being incomplete.</p> <p>It confirms insights from previous studies, available in several review papers which are unfortunately not referenced, such as <a href="#">Magnetic Resonance Spectroscopy in Common Dementias - ScienceDirect</a>, <a href="#">Frontiers   Proton Magnetic Resonance Spectroscopy in Common Dementias—Current Status and Perspectives (frontiersin.org)</a>, <a href="#">MR spectroscopy in Alzheimer's disease (iospress.com)</a>, <a href="#">Whole-brain patterns of 1H-magnetic resonance spectroscopy imaging in Alzheimer's disease and dementia with Lewy bodies   Translational Psychiatry (nature.com)</a>, <a href="#">Various MRS Application Tools for Alzheimer Disease and Mild Cognitive Impairment   American Journal of Neuroradiology (ajnr.org)</a>, and others.</p> <p>The statistical methods used could be improved to report sensitivity and specificity or AUC, even in view of the small data set. This would be important to substantiate the claim that MRS is beneficial over volumetric MRI.</p> <p>It would be important to understand whether the clinic is now adopting MRS in diagnosing and in support of treatment decisions.</p>	
<p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>	<p>The manuscript contains several glitches, typos, and inaccuracies. These should be corrected prior to publication.</p> <p>Please also consider the suggested rewrite of the introduction on MRS, as follows: Magnetic Resonance Spectroscopy (MRS) is a noninvasive method, available on most 1.5T and 3T MRI systems, for measuring the chemical compositions of tissues (in vivo) and identifying the functional processes of various organs <sup>(9)</sup>.</p> <p>Proton (1H) MRS is a very useful tool for evaluating the various types of dementia by assessing the metabolites, such as N-Acetyl aspartate (NAA), creatine (Cr), Choline (Cho), Lactate (Lac), and lipids (Lip) at the nuclear level of the brain cells. For instance, NAA is diminished in the cortical, semioval, and temporal lobes with ageing, and these methods may be useful in diagnosing neurodegenerative diseases <sup>(10)</sup>. Note that Ref 10 does not relate to 1H MRS and seems incorrect.</p>	
<p><b>Optional/General</b> comments</p>	<p>Information on informed consent or data privacy is missing</p>	

### PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes. Kindly please write down the ethical issues here in details)</i></p>	

### Reviewer Details:

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