



**SDI Review Form 1.6**

Journal Name:	<a href="#">Journal of Advances in Medicine and Medical Research</a>
Manuscript Number:	<b>Ms_JAMMR_48238</b>
Title of the Manuscript:	<b>ZINC SUPPLEMENTATION AS ADJUNCTIVE THERAPY IN ADULTS WITH TUBERCULOSIS IN CALABAR, NIGERIA: A RANDOMIZED CONTROLLED TRIAL</b>
Type of the Article	<b>ORIGINAL RESEARCH PAPER</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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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**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)
<b>Compulsory</b> REVISION comments	<p>The authors planned to understand the effects of micronutrient supplementation such as zinc in tuberculosis (TB) treatment outcomes. After completion of the 2 months intensive treatment period the Karnofsky performance score a measure of functional impairment was higher in the intervention group than the control. The authors indicate that may be a result of improved nutritional status and haematological parameters in the micronutrient supplementation group such as albumin. The better prognosis observed in the intervention group may be the result of reduction in bacteriological load by the intake of zinc supplements. Serum zinc concentrations were significantly higher in the intervention group and may that may be associated with 40% risk reduction for sputum smear conversion and be involved in the maintenance of the integrity of biological membranes. The results of this study points to the benefits of zinc supplementation in improving the treatment of patients with pulmonary TB. The authors indicate that zinc supplementation as adjunct to TB chemotherapy may enhance the effects of anti-TB drugs with relevance to TB treatment.</p> <p><b>COMMENTS:</b></p> <ol style="list-style-type: none"> <li>1. The micronutrient magnesium has been shown to be involved in the treatment of pulmonary tuberculosis and critical to the initiation of TB therapy.</li> <li>2. In the association of malnutrition and Tuberculosis can magnesium levels be important to TB treatment.</li> <li>3. In micronutrient supplementation with zinc for TB treatment are magnesium levels to be measured for enhancement of the effects of anti-TB drugs.</li> </ol> <p><b>RELEVANT REFERENCES:</b>  <a href="#">Yuthika Agrawal</a>, <a href="#">Vipin Goyal</a>, <a href="#">Abhishek Singh</a>, and <a href="#">Sandhya Lal</a>. Role of Anaemia and Magnesium Levels at the Initiation of Tuberculosis Therapy with Sputum Conversion among Pulmonary Tuberculosis Patients. <a href="#">J Clin Diagn Res</a>. 2017 Jun; 11(6): BC01–BC04.  <a href="#">Mann FM</a><sup>1</sup>, <a href="#">VanderVen BC</a>, <a href="#">Peters RJ</a>. Magnesium depletion triggers production of an immune modulating diterpenoid in Mycobacterium tuberculosis. <a href="#">Mol Microbiol</a>. 2011 Mar;79(6):1594-601.  Biswajit Das, Prasanna Chandra, K.V Thimmaraju. Sumeru Samanta, S.M Raju. Study Of Serum Magnesium Values In Pulmonary Tuberculosis Patients. <a href="#">JARMS</a>. 2012; 4(1): 54-57</p>	<p>Thanks very much for drawing our attention to another perspective in the quest for better understanding of the role of micronutrients particularly minerals (Magnesium) in the elucidation of the relationship with the natural History of TB and TB treatment outcomes. We are also extremely grateful for your provision of relevant references that could help inform our future designs of related studies.</p> <p>We have idea of the role of Magnesium in supporting healthy immune system in addition to other related physiological functions. Zinc and Magnesium share cross-cutting function in this respect and since TB involve mainly cellular immunity, understanding the role of magnesium in TB therapy and overall TB treatment outcome particularly in zinc supplementation may represent a future explorable direction to tow for us.</p> <p>In carrying out scientific research or study, variables of interest are set from the beginning with detailed plans for measuring intended outcomes. Although, unintended outcomes may emerge, they are duly reported as such. It is pertinent therefore, to state that in this study we focused on assessing the role of zinc in TB therapy understanding that not all possible variables within the context of TB – Micronutrient relationship can be measured at the same time. Thus, we are not able to make evidence-based responses to the comments and questions you raised.</p>
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		



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**PART 2:**

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	