

Review Form 1.7

Journal Name:	Asian Journal of Medicine and Health
Manuscript Number:	Ms_AJMAH_102673
Title of the Manuscript:	Selected Hematological markers and C-reactive Protein, not AGTR1 SNP, are associated with Essential hypertension in Tharaka Nithi County, Kenya
Type of the Article	Original Research Article

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.journalajmah.com/index.php/AJMAH/editorial-policy>)

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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)									
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>NO (no objectives – the statistical method needs to be revised – discussion is missing limitations) NO. The method is not for a case-control study.</p> <p>NO. They are not in chronological order. References 14 – 34 are missing.</p> <p>Detailed Comments: This is (according to the authors) a case control study, examining the association of different biomarkers and genetics with primary hypertension. I would like to thank the authors for their efforts in conducting this study. However, there are several issues with the manuscript: 1- The most important issue with the manuscript is that you call it (Case Control Study). First of all, with 28% prevalence of hypertension in the population, case control studies are not the ideal design, they are more suitable for rare outcomes, and outbreaks. Second: The measure of association that must be reported in a case control study is odds ratio (OR) and nothing else. Third: The sample size calculation you presented is based on an absolute percent difference between 2 groups, this is suitable for a cohort study (and by the way, using the parameters you presented: alpha = 0.05, beta = 0.2, difference = 5%, prevalence in control = 28%) the sample size required would be: 2384 (1192 in each group). 2- To calculate the sample size for a case control study, you need to define an OR to be detected as significant, and probability of a subject in the control being exposed to the risk factor. 3- There is no need for the details of cited studies in the introduction. (The study utilized a sample size of 4433 participants with national geographic coverage and thus provided a clear picture of hypertension status in Kenya) 4- The way to calculate OR for a case control study is: <table border="0" style="margin-left: 20px;"> <tr> <td></td> <td style="text-align: center;">Case</td> <td style="text-align: center;">Control</td> </tr> <tr> <td>Exposed</td> <td style="text-align: center;">A = 2</td> <td style="text-align: center;">B = 1</td> </tr> <tr> <td>Un-Exposed</td> <td style="text-align: center;">C = 104</td> <td style="text-align: center;">D = 105</td> </tr> </table> $OR = (A * D) / (B * C) = (2 * 105) / (1 * 104) = 210/104 = 2.019231$ (95% CI = .1033201 120.2319), $p = 0.6$ 5- Please define clearly what is HYPERTENSION in the study? How do you define it? (Please provide a reference). 6- In your manuscript, you said that you couldn't match 60 participants. What was the matching method? Did you simply try to match two subjects based on sex and age? There are statistical matching methods. </p>		Case	Control	Exposed	A = 2	B = 1	Un-Exposed	C = 104	D = 105	
	Case	Control									
Exposed	A = 2	B = 1									
Un-Exposed	C = 104	D = 105									

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	<p>7- Table 1: When presenting continuous variables, you need to present both a measure of central tendency (mean or median) and a measure of dispersion (standard deviation or interquartile range).</p> <p>8- In the discussion you wrote: (Multiple genetic, hematological and biochemical changes may underlie EH.]. The association between the A1166C SNP in AGTR1 and high blood pressure has not been substantially interrogated in Kenya (and East Africa in general) with most investigations having been conducted North (Egypt, Tunisia) and West African (Nigeria, Burkina Faso) populations.). This is redundant from introduction. While the sentence (The purpose of the study was therefore to determine whether the AGTR1 (rs5186) mutation, C-reactive protein (CRP) and selected hematological biomarkers may be associated with the onset of EH in Tharaka Nithi County, Kenya.) is more suitable for the aim of the study.</p> <p>9- The method is missing objectives. Please clearly define at least one primary objective, and a few other secondary ones.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>No, it needs proofreading. Other comments:</p> <p>1- You don't need to abbreviate medical terms appearing in the study only one time. On the contrary, when you abbreviate a term after mentioning it for the first time, you don't have to repeat the full name, you only write the abbreviation.</p> <p>2- In the introduction you insert reference number 13 then 35. This is not in chronological order. I couldn't find references 14 to 34, where are they cited in the manuscript?</p> <p>3- Alpha (type I error rate) can't be 0.5, I think this is a typo, it should be 0.05 (5%).</p> <p>4- The discussion is missing a limitations section.</p>	
<p>Optional/General comments</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:

<p>Name:</p>	<p>Waleed Aletreby</p>
<p>Department, University & Country</p>	<p>Saudi Arabia</p>