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Journal Name:	Cardiology and Angiology: An International Journal
Manuscript Number:	Ms_CA_49554
Title of the Manuscript:	High sensitivity troponin: do lower values predict better prognosis in acute myocardial infarction with ST-segment elevation? High sensitivity troponin in myocardial infarction
Type of the 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:

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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)
Compulsory REVISION comments	<ol style="list-style-type: none"> There should be a slight change in how the manuscript is presented and the title should also be changed slightly. It appears that the author's main finding is that re-occurring AMI's may result in a patient displaying lower cTn levels due to previous cardio myocyte damage, hence, the manuscript should reflect this and written in a manner to highlight reasons why cTn levels vary (some diseases have been mentioned; aortic dissection, cardioverter, pulmonary embolism, renal failure and sepsis are examples of clinical situations) and what is the clinical significance of these variations, i.e. do they affect the cut-off threshold? If not, maybe it isn't a major aspect that clinicians should be worried about, but this is up to the authors to deduce. Troponin variations is a major challenge facing clinicians and this should be a more prominent feature of the manuscript, particularly considering your findings. Several errors: Abbreviations (hs-Tnl should be hs-cTnl), pg/mL and ng/mL are used when it should actually be ng/L when referring to hs-cTn concentrations. Line 60: ultrasensitive test is referred to as hsT-T, which is incorrect and must be changed. Line 73 "this study aimed to verify which risk factors contribute to increase hs- Tnl in patients with Miocardial Infarcion with ST segment elevation and analyze if and which prognostic impacts it may have." However in the conclusion, the authors confirm that "High-sensitivity troponin I levels were lower in patients with previous myocardial infarction", thus, the study scope should be slightly altered to include the aim of evaluating troponin levels in patients that had previous AMI's and assess how this compared to patients without previous history of cardiovascular disease. Values in Table 1, do not seem to correlate to other values. It appears they might be increased by one order of magnitude, thus this graph should be re-visited. 	
Minor REVISION comments	<ol style="list-style-type: none"> Spelling must be improved. Also the grammar is quite poor and some sentences should be re-written. Lack of references/poor referencing, for instance; ultra-sensitive cTn assays are mentioned, with a 2007 assay referenced but no citation is provided (Line 45). Also the authors mention (line59) "Unlike cTnl, which lacks a further increase to be detected by laboratory tests, <u>Ultrasensitive Troponin Test (hsT-T) means that tiny variations in levels of these markers of myocardial necrosis can be detected...</u>", however this reference does not discuss ultra-sensitive assays or this concept. An additional reference is required that refers to ultra-sensitive cTn assays. Line 128-131: The cardio myocyte necrosis following an AMI is not referenced. Overall the discussion needs more references to validate the statements made. The tables and graph are small, hence they should be in the text to assist the reader. Line 44, line 82, line 146 dosing and dosed should be replaced with either "levels" or "measurements", etc. 	

Comment [BR1]: It is unclear what you are attempting to state in this sentence

Comment [BR2]: This is high-sensitivity cTn tests, not ultra. Also, I'd advise that you revise your definition of ultra-sensitive. Although there is no clinical definition, established researchers have proposed a definition.



SDI Review Form 1.6

	<p>6. Line 48: Higher levels should be replaced with reduced concentrations. As the test becomes more sensitivity, lower concentrations of cTn can be detected.</p> <p>7. Line 56: "conventional T troponin (cTn)", it is unclear what troponin subunit you are referring to here.</p> <p>8. Line 59: This needs to be re-written as it is unclear what is being stated.</p> <p>9. Line 79-83: Again, a slight lack of clarity. Are the authors reviewing medical reports? Are they evaluating them? It would help if this could be clarified.</p>	
<p>Optional/Generalcomments</p>	<p>1. The concept of the study is interesting and could be quite valuable, however, more detail should be included and presented with an improved structure, why is this significant, can this knowledge add value to clinician decision making, do you propose a way to compensate for this variation and is it consistent enough to potentially consider in acute care settings?</p> <p>2. Line 137-141 is nice and should be built upon, how do the authors results impact the knowledge that patients with re-occurring MI's have a worse prognosis but they might possibly display lower cTn levels and thus may not be considered at risk. Again, this could be a suitable place to discuss whether the cut-off threshold should be re-evaluated for these patients.</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>	

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