



Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	2015_IJTDH_18410
Title of the Manuscript:	Usefulness of Various Biomarkers for the Differentiation of Bacterial from Viral Meningitis
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.

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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)
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SDI Review Form 1.6

Compulsory REVISION comments	Correct the term “insult” in the abstract, this is not an appropriate word use and the authors should switch it. “Differentiation between septic and aseptic meningitis <u>can be puzzling</u>, What about it is puzzling due to overlap of physical presentation? please elaborate in text. In methods, what co-existing morbidities for patients were excluded? please elaborate If this study was looking at meningitis, why was blood samples evaluated not just CSF for the STREM-1? The authors need to elaborate upon the level of strem-1 that was corresponding with poor outcome in the discussion and how this poor determinate overcomes its usefulness overall as a biomarker. As the authors state that high strem-1 levels correlate to bacterial meningitis and low correlate to viral origin they then state that Six (27.1) of 25 patients with septic meningitis showed low strem-1 levels and as such died. Does this mean they were treated as viral meningitis patients and later on determined that it was bacterial cause? The authors need to elaborate. Explain the serum cutoff levels poor outcome.. Serum sTREM-1 level (107.5 ng/ml vs 41.415.5 ng/ml, Z=2.7; P<0.001)	We correct it as condition We correct it as may be difficult Co-existing morbidities as other diseases that cause irritation of the meninges (meningism) as intracranial haemorrhage, malignancy or other causes of impaired consciousness, head trauma and head surgery Blood sample is easier, non invasive than CSF sample From the septic group (no=26) who diagnosed as bacterial meningitis by laboratory tests, six patients from them have low base line sTREM-1 level (10/-7.5ng/ml) at admission and were died so we may consider it as prognostic marker
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		The level of sTERM-1 which mention to poor outcome was (10/-7.5ng/ml) not (107.5ng/ml), because of the small number of these patients (six patients) the cutoff level cannot be made easily
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<u>Minor</u> REVISION comments	Minor language revisions throughout text for example “Noticebaly” last paragraph page 4 and “defence” page 2.	Noticebaly we deleted it Defence the correct is defined
<u>Optional/General</u> comments	Interesting research topic. A question I have is upon the costs of these running these serum biomarkers compared to culture and empirical treatment, which is more economical? Because the serum Strem-1 level is the predictor of bacterial meningitis what happens when a patient presents with low level on admission, will they be treated as viral meningitis (withhold antibiotics and given supportive treatment only?) does this correlate to the 6 patients that died in the case? Please explain.	It's a research work to study easy and non invasive markers for differentiation between bacterial and viral meningitis