

REVIEWER'S REPORT

Manuscript No.: JNHM-159

Title: Evaluation of Serum STING Levels as a Potential Discriminatory Biomarker for Neisseria gonorrhoeae Infection

Recommendation:

- Accept as it is
 ✓ Accept after minor revision.....
 Accept after major revision
 Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity		✓		
Significance	✓			

Reviewer Name: Dr S. K. Nath

Detailed Reviewer's Report

Strength of the study:

- The topic is novel and clinically relevant
- The study includes a clearly defined patient and control group
- Laboratory confirmation of gonorrhea was performed using NAAT
- Serum STING was measured using a commercial ELISA kit
- Infection sites were separately evaluated
- ROC analysis provides useful diagnostic information
- Ethical approval and informed consent are reported

Weakness of the study:

- The sample size is relatively small for biomarker validation
- Purposive sampling may introduce selection bias
- Healthy controls alone are insufficient to establish diagnostic specificity
- Other sexually transmitted and inflammatory diseases were not included
- The study does not provide a clear sample size calculation
- Some statistical methods require better explanation
- The manuscript contains considerable grammar and language problems

Reviewer's Comments:

The manuscript presents an interesting and potentially useful investigation of serum STING as a biomarker for Neisseria gonorrhoeae infection. The major strength is the comparison between confirmed gonorrhea cases and healthy controls, along with ROC analysis showing promising discriminatory performance. The ethical section states that approval was obtained from the relevant Scientific and Ethics Committee and that written informed consent was collected from all participants. However, the study has important limitations. The sample size is modest and participants were selected using purposive sampling, which may affect generalizability. More importantly, comparison with only healthy controls does not establish whether STING is specific for gonorrhea, since other sexually transmitted infections and inflammatory conditions may also increase STING levels. The manuscript also contains frequent grammatical errors, awkward sentences, inconsistent terminology and several unclear statements. The statistical analysis and reporting of the ROC methodology should be described more clearly. Overall, the study is promising but requires substantial methodological and language revision.

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An exact title search did not identify an obvious previously published paper with the same title. The manuscript appears to present original work based on the information provided. However, this is not a formal plagiarism assessment. A standard similarity check should be completed before publication, and the authors should confirm that the data and findings have not been published previously.