Reviewer’s report

Title: Persistence survey of Toxic Shock Syndrome toxin-1 producing Staphylococcus aureus and serum antibodies to this superantigen in five groups of menstruating women

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Reviewer: Jan Willem Cohen Tervaert

Reviewer’s report:

The revised manuscript by Parsonnet et al. is an excellent example of an improved manuscript after revision. I have still a few comments:

1. In table 3, there are 2 group 4’s. In the text, it is stated that only 17 patients from group 4 became SA-positive. Could it be that the second group 4 is actually group 5? In that case, why not 61 subjects instead of 58?

2. The legends of both figure 1 and figure 2 are lacking. On the Y-axis it is stated “number of visits”. What is this???

3. On page 10, it is stated that the threshold OD was determined previously by testing sera from patients with TSS caused by TSST-1. How many patients were used form determining this threshold?

4. In the definition, it is stated that “0-24% is classified as transient”. From table 3 it can be seen that 70.7% of non-carriers are now transient carriers. This is very confusing…… since actually all these subjects remained non-carrier (i.e., SA cultures negative).

Specific comments to previously raised questions:
Thank you for adequately answering my questions; however, there are still three issues that need to be improved.

A: comment 4: superantigens interact with T-cells. The specific V beta repertoire expansion signature is not something new…. Therefore, I suggest that at least one sentence should be added in the discussion.

B: comment 11: I have no doubt that all procedures were performed correctly, but for publications, it is needed to describe what the intra- and inter-observer variation was.

C: comment 12: it is especially for laboratory tests extremely important to assess inter- and intra-observer variations. Without this a laboratory test should not be published…..

Level of interest: An article of importance in its field

Quality of written English: Acceptable
**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.