Reviewer’s report

Title: Treatment outcomes in deep sternal wound infection after cardiac surgery; Vacuum- assisted closure versus conventional treatment

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Reviewer: Semih Ass. Prof. Buz

Reviewer’s report:

I have read with interest the paper by Deniz et al. The authors compared two treatment options for deep sternal wound infection after cardiac surgery with early and long-term results. Although the study is not randomized, congratulations for successful analysis and results.

However there are a few points I would like to highlight.

Major Compulsory Revisions

1. The authors emphasize about treatment of deep wound infection. The choice of patients was based on the guidelines of mediastinitis of the US Centre for Disease Control and prevention. Found from patients treated conventionally (see methods; conventional treatment), i think, that the patients were presented with mediastinitis. If this assumption is correct, the formulation should be corrected in manuscript.

Minor Essential Revisions

1. The important novelties of this study is the examination of long term survival after V-A.C. therapy and conventional treatment. A comparison with other studies regarding long term results after V.A.C. therapy and conventional treatment should be better discussed.

2. The authors reported treatment failure in both groups. What is meant with it? Treatment failure have to be more specified.

3. Some baseline characteristics of patients (age, gender, EuroSCORE) are statistically different between groups in favor to conventional therapy. Therefore VAC therapy present a better results. This fact is missed in discussion.

4. The Figure 1 (K-M curve) should be formatted and corrected regarding x-y coordinate. The patients at risk are needed for all K-M curves.

Discretionary Revisions

1. The total time of follow-up should be given in abstract and in text of manuscript.

2. In abstract section, the mean age and the gender of the patients for better understanding of the groups can be indicated. Also, the 90-day mortality and
long-term survival (at least 5 years survival) should be specified as a percentage for both groups.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Needs some language corrections before being published

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