Reviewer's report

Title: Infection Probability Score, APACHE II and KARNOFSKY scoring systems as predictors of bloodstream infection onset in hematology-oncology patients

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Reviewer: Haridimos Markogiannakis

Reviewer's report:

I have some comments about this paper:

1) “Abstract”: please give the full term of the abbreviation “BSI”.
2) The “Introduction” section needs shortening. Some parts of this section may be transferred in the “Discussion”.
3) In both the “Abstract” and the “Results” sections, it is stated that patients with BSIs were mainly males. In contrast, though, in Table 2 it is shown that 82.3% of these patients were females. Please clarify.
4) The authors have performed a very good statistical analysis. In order to improve it, and also to indicate if IPS is an independent predictor of BSIs, it would be very useful to conduct a multivariate analysis.
5) The “Discussion” section is too short. More importantly, it needs a great revision. In its current form, the authors only address the issue of microorganisms causing BSIs. Apart from the first two sentences, nothing is mentioned about the actual topic of this paper: prediction of BSIs in hematology/oncology patients and the potential role of IPS, APACHE II and KARNOFSKY scores. The authors should focus on this topic, evaluating their results and presenting/analyzing the existing literature. Regarding their results, APACHE II and KARNOFSKY scores are not useful for BSI prediction; furthermore, although IPS showed better results, its sensitivity, specificity, AUC and PPV values are not very satisfactory.
6) “References” section:
   a) Reduce the total number of references to less than 30.
   b) References numbers “6” and “7” are not cited in the text.

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.