Reviewer's report

**Title:** Role of serum S100B and PET-CT in follow-up of patients with cutaneous melanoma B. Peric, I. Zagar, S Novakovic, J. Zgajnar, M. Hocevar Institute of Oncology Ljubljana, Slovenia

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**Reviewer:** Simone Mocellin

**Reviewer's report:**

The article is about an important clinical issue such as the appropriate way of following up patients after potentially radical surgery for skin melanoma. In my opinion the work presents the following major drawbacks: 1) the authors did not adjust their results by potential confounding variables (age, gender, TNM stage and so on) by means of a multivariable model; 2) the authors did not formally compare the predictive performance of S100 with that of PET (e.g., by means of a McNemar test); 3) the authors did not study the functional form of a continuous variable such as S100 and thus the cutoff they used to distinguish between positive and negative cases appears arbitrary; 4) the presentation of the role of S100 in the management of patients with skin melanoma is quite approximate/poor/simplistic as compared to the amount of literature already present on this subject: they should at least acknowledge that a meta-analysis (Mocellin et al, Int J Cancer 2008, 123:2370-6) has been published that supports the role of this biomarker in the management of these patients.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests