Reviewer’s report

Title: Personalized medicine in psoriasis: developing a genomic classifier to predict response to Alefacept

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Reviewer: Francesca Mascia

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The authors propose a genomic classifier to predict the response of psoriatic patients to Alefacept before starting the treatment. The list of genes identified with a new analysis performed on previously published data will allow physicians to classify patients as responders to the drug just by looking at their blood RNA profile of a subset of genes.

I have a few minor essential revisions to suggest:

In the background paragraph (page 3) the authors misspelled the company that owns Alefacept, (Astellas Pharma instead of Astellis) and the whole sentence that describe the drug efficacy needs to be rewritten.

Page 3, after reference 5, I suggest the authors omit the word ``somewhat`` and be more specific.

It is common practice to verify the major findings of microarray data by Real Time PCR. The authors state that they do not have sufficient material from their trial to verify these data. This additional material would add strength to the manuscript. I suggest they try to obtain new samples (or old ones from previous trials) in order to further test their genomic classifier. If this request is not fulfilled this does not preclude the authors right to publish in BMC Dermatology.

Page 6, given the audience of this journal and the relatively new application of the centroid method, I would add more explanations about the treatment of the data and the generation of Figure 2. The journal does not assign space limits to the text so any detail that can help the comprehension for a broader audience is welcome.

Level of interest: An article of importance in its field

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

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests