Reviewer’s report

Title: Segmentation of epidermal tissue with histopathological damage in images of haematoxylin and eosin stained human skin

Version: 2 Date: 25 October 2013

Reviewer: Jie Wu

Reviewer’s report:

The paper presents a method for segmenting skin tissue with varying degrees of histopathological damage.

Major revisions:
1. The review of approaches to Segmentation methods is not enough. I suggest the authors should not only just list the major segmentation approaches, also should tell what are the drawbacks for each of them and why they can/cannot solve the problem in this work.
2. In the manuscript, the binary image sampleMask is created by the thresholding value bg-25, why 25 here?
3. It states that “penetration points to exclude the top and bottom 1% of the data”, why the top and bottom 1% of the data is excluded?
4. In method part 4, in equation Gb, where is the 1.4 coming from?
5. There are lots of parameters need to be proved, such as less than 8000 pixels, 3000 pixels, 4000 connected pixels. In Step3, the small objects got removed which are less than 4000 connected pixels, but in Step6, the small objects are defined as less than 8000 pixels? The same thing for the holes.
6. Section 8, user interaction, is there any possibility that this interaction could involve some errors?
7. I did not see any description regarding the novelties of the method used in this paper?
8. Where is the data source? Please acknowledge or cite the source.
9. What is the time efficiency?
10. The authors should provide evidence to prove the superior of the method than the other methods. There is no comparison.
11. During the process of removing those small objects, is there any possibility that some important tissue also got removed?

Minor revision
1. In Statistics part, “specificity” is spelled wrongly.
2. In Conclusions part, the “however” is confusing.
Level of interest: An article whose findings are important to those with closely related research interests

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

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

Declaration of competing interests:

I declare that I have no competing interests