Reviewer's report

Title: Serum diagnosis of diffuse large B-cell lymphomas and further identification of response to therapy using SELDI-TOF-MS and Tree Analysis Patterning

Version: 4 Date: 30 July 2007

Reviewer: Antonia Vlahou

Reviewer's report:

General
This is a revised version of the manuscript by Zhang et al reporting serum SELDI-TOF-MS profiles from DLBCL patients. Although one of the main criticisms remains (lack of peak identification), the authors have addressed some of the issues previously raised (such as discussion of the reproducibility problems, better description of their methods).

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
There are still syntax errors and occasionally the language is hard to follow. It is therefore recommended that the authors seek the advice of a colleague proficient in the English language and revise the language accordingly prior to the publication of the manuscript. In the abstract, it should be made clear that the classification rates reported refer to the test/blinded set.(for example: the authors may write that “the proteomic patters achieved a sensitivity of 94% and a specificity of 94% detecting DCBL in test set of 85 samples....”). A couple of points that will facilitate understanding of the results particularly those dealing with the difference between the "discriminator peaks" and the peaks selected during the decision tree analysis include: Were the discriminator peaks detected from the whole set of samples or just from the learning set of samples? Were any combinations of the discriminator peaks tested for sample classification efficiency? A couple of comments on these issues would be helpful for the better understanding of the manuscript.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have
responded to the major compulsory revisions

**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:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests'