Reviewer’s report

Title: Early prediction of therapy response in patients with acute myeloid leukaemia by nucleosomal DNA fragments

Version: 2 Date: 19 February 2006

Reviewer: Nejat Dalay

Reviewer’s report:

General
Some few changes have been made to the manuscript but these are clearly not elaborated. The main change is the integration of the “area under the curve” in the evaluation of the responders vs. non-responders.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The initial serum DNA values in the patients with remission is considerably higher than those without response. This leads to the differences between the “areas under the curves”. Why are higher levels of nucleosomal fragments present in the patients who are going to respond before therapy? This issue has not been addressed at all and needs further discussion.

As I have indicated earlier the blast numbers and other relevant data should be given. Then the assumption “that the higher circulating DNA levels are the result of effective blast reduction” would make sense.

The response to the reviewer’s comments (Point 10) should be added to the discussion as possible explanations to account for the discrepancy between solid tumors and AML.

In Figure 2 a value of 150 (AUC) has been indicated. How did the authors find this value?

In view of the small number of patients the appropriate methods and results should also be evaluated by an expert statistician.

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

The new version of figure 1 is now better and more visible. However, the legends to the figures are not indicated. Only the first two lines in the legend for Figure 1 refer to Figure 1. The rest is the legend for the (new) Figure 2.

The authors have added some requested information into the results section (Page 8, lines 7-9). Then the last two lines at the end the page can be omitted.

I could not locate the p-values (p=0.259)(page 9, line 2) and (p=0.059)(page 9, line 23) in Table 2.

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: Yes

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