Reviewer's report

Title: Circulating endothelial cells are an early predictor of tumor response in renal cell carcinoma patients treated with sunitinib

Version: 3 Date: 7 December 2009

Reviewer: Glenn Kroog

Reviewer's report:

1. Major compulsory revisions:
   A) The labels on the figures do not match the description in the text. The figures are labeled 1-7 but the text and figure legends talk about 1-4 with A and B panels. This makes it hard to read the manuscript. It needs to be corrected before I can adequately review the data.

   B) The statistics are not clear. Although most of the figures have p values, there are many data points and it is not clear what each p value refers to. For example, in what is labeled as figure 2, p=0.0003 (x axis 0-400 days; y axis 0-110 CEC/ml). I am not certain whether the p value refers to the peak from baseline. In addition, since many patients have come off study for progression, I don't know if the lower value reflects change over time or selection bias. The authors haven't addressed this either. Therefore, the statistical analysis needs to be made more understandable before the data can be adequately reviewed.

   C) In the Methods section, they say under Patients that "20 responders were defined by RECIST criteria..." However, in table 1, they say only 42% of patients (11 out of 26) had an objective response. These data need to be reconciled. Most likely, 20 refers to responders + stable disease patients.

Level of interest: An article whose findings are important to those with closely related research interests

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'