Reviewer's report

Title: Circulating levels of cell adhesion molecule L1 as a prognostic marker in gastrointestinal stromal tumor patients

Version: 1 Date: 16 November 2010

Reviewer: Maria Debiec-Rychter

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Major Compulsory Revision comments:

1) Many pathological criteria based on tumor site, size, cell type, degree of necrosis and mitotic rate have been proposed for predicting the outcome of patients with GISTs. A consensus was found by the National Institute of Health (NIH) in 2001 to estimate the relative risk of GISTs based on tumor size and mitotic count and in 2006, the Armed Forces Institute of Pathology (AFIP) proposed a similar system also taking into account tumor location. In the present study, the authors did not take under account any of the mentioned above consensus. They correlated the recurrence-free survival merely with the mitotic and tumor size as separate factors. Maybe not surprisingly, they did not find any correlation. Instead, the relative "risk of recurrence" should be calculated according to AFIP system, and correlated with the outcome of the disease. The authors should prove that evaluation of the soluble L1 serum concentration outperform the currently used histopathologic criteria for the assessment of the risk of recurrence, since only then the present work brings a new value in prediction of recurrence in patients with GISTs.

2) According to previous authors' report, the neuronal cell adhesion molecule L1 (CD171) is expressed in 74% of primary GISTs by immunohistochemistry. The analysis of expression of CD171 by immunohistochemistry should be performed on primary GIST specimens from patients included in present study, and correlated with the results of soluble L1 concentration immunoassay. This is essential for validation of novel immunoassay that was developed by authors for the present study.

3) There is no information about the time-point of the blood sampling for this study. Was is done before surgery, after surgery or all along the patients' follow-up?

4) It is not clear in what kind of setting imatinib was given to patients in this study. Was it in adjuvant setting? If it was used for the treatment of recurrent tumor, how does it relate to the present study?

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