Reviewer’s report

Title: Prognostic significance of urokinase Plasminogen Activator and Plasminogen Activator Inhibitor-1 mRNA expression in advanced breast cancer

Version: 1 Date: 27 April 2006

Reviewer: Dan Tong

Reviewer’s report:

General
There are seldom studies on the lymph node positive and hormone receptor positive breast cancer patients. Therefore the study is quite new. However, the authors did not address the corresponding scientific and clinical significations. As the authors indicated, previous studies has already shown the prognostic values of PAI-1 and uPA. So, what is the reason to carry out such study in hormone receptor positive subgroup? Only providing that mRNA expression also has prognostic value substantially reduced the scientific impacts of the manuscript.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. The scientific and clinical significations of studing node positive and hormone receptor positive breast cancer patients should be addressed.
2. The number of the sample is very small. Considering that the patients were serperated by 1st quartil and the rest (the numbers after cut off were not provided) according to the expression, the results must be interpreted very carefully.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. Statistical analysis: please describe the clinical definition for “detection of distant metastasis”.
2. Statistical analysis: could you please give the statistical reason why the seperation of the group was chosen at 1st quartil and the rest?
3. Microarray and RT-PCR analysis of “": The first 2 sentence belong to materials and methods. Explaination of probe sets 205479_s and 202627_s_at?
4. It will be interesting also to show the differential expression level of uPA and PAI-1 generated by microarray.
5. R=0.53 and 0.54 don’t show a high correlation of microarray data and RT-PCR data, eventhough significant.
6. The number of the samples after seperation by 1st quartil should be provided.

What next?: Reject because too small an advance to publish

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes

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