Reviewer's report

Title: Correlation between MMPs and their inhibitors in breast cancer tumor tissue specimens and in cell lines with different metastatic potential

Version: 1 Date: 6 October 2008

Reviewer: George Tzanakakis

Reviewer's report:

This study addresses the expression of matrix metalloproteinases (MMPs), tissue inhibitors of MMPs (TIMPs) and Reversion-inducing cysteine-rich protein with Kazal motifs (RECK) in breast cancer cell lines and breast cancer tissues, in order to establish possible correlations between their expression and breast cancer progress.

The authors argue that even though data on distinct MMPs, TIMPs expression exist, their study offers simultaneous analysis of group MMPs and TIMPs expressions, thus providing parameters for determination of therapy more adequate for each patient.

Major Compulsory Revisions

The study on the whole utilizes sound methodological approaches however, data presentation and interpretation is lacking. This may partly be due to language difficulties, especially evident in the results and discussion sections.

The discussion should be rewritten, to clearly reflect the results obtained from both cell lines and tumor tissue samples.

In view of the fact that no strong correlation was established for none of the examined genes' expression and breast cancer progression the authors should clarify how the determination of these genes expression could provide therapy more adequate for each patient.

Minor essential revisions

Language needs to be improved.

Since the study is heavily based on the statistical analysis, the level of statistical significance should be included in the results section, in addition to Figure legends.

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

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.