Reviewer's report

Title: An integrated analysis of genes and pathways exhibiting metabolic differences between estrogen receptor positive breast cancer cells

Version: 2 Date: 10 April 2007
Reviewer: Chin-Yo Lin

Reviewer's report:

General
The authors did attempt to respond to the issues raised by the reviewers, but the responses and changes to the manuscript fell short of providing a convincing rationale for the study aim and design, experimental validation by methods other than the original SAGE results of genes and pathways, and any testable correlation with cell or clinical behavior. As it is, the paper shows that the two cell lines examined differ from each other in the expression of a number of genes under serum and estrogen starvation. This in itself is neither surprising nor novel, given differences in the genetic backgrounds of the cell lines and experimental conditions. Differences between cell lines and between clinical samples have been observed repeatedly, especially in microarray experiments. What is not clear is the significance of the observed differences and whether they provide believable and significant insights into cancer biology. Without additional data or experimental results, the authors really do not provide any advances in methodology or in our understanding of cancer biology.

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

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

Discretionary Revisions (which the author can choose to ignore)

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: No, the manuscript does not need to be seen by a statistician.