Reviewer's report

Title: Transcriptional Changes Associated with Resistance to Inhibitors of Epidermal Growth Factor Receptor Revealed Using Metaanalysis

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Reviewer: Chi Song

Reviewer's report:

In this manuscript, the authors conducted a meta-analysis to compare the gene expression profiles of the EGFR inhibitor sensitive and resistant cell lines. Software RankProd was used to do the meta-analysis, and DAVID is used to do the gene ontology analysis. The authors performed the analysis by comparing all the sensitive and resistant cell lines and by comparing sensitive and resistance cell lines for each specific type of inhibitors.

Major:

1. The authors performed their analysis on each type of inhibitors. However, because for different inhibitor types, the cell lines used are also different, is it possible that the specific ontology terms observed for each type of inhibitors is actually related to the cell line?

2. The method section is not clear enough. Especially, the authors should present how they normalized the non-Affymetrix datasets, and describe a little more about how the microarrays from multiple studies are treated in the RankProd software.

Minor:

The legends of the tables should be clearer.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests