Reviewer's report

Title: Displayed correlation between gene expression profiles and submicroscopic alterations in response to cetuximab, gefitinib and EGF in human colon cancer cell lines

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Reviewer: Ashwin Dihal

Reviewer's report:

The manuscript entitled “Displayed correlation between gene expression profiles and submicroscopic alterations in response to cetuximab, gefitinib and EGF in human colon cancer cell lines” by Solmi et al. is now revised and needs some modifications, as described below.

Major Compulsory Revisions:
In the micro array data analysis, no false discovery rate was estimated. This could result in false positives. How did the authors exclude this possibility?

Minor Essential Revisions:
1. Cell-cycle analysis, p.11: the authors state: “it is remarkable that there are 2-fold differences for HT-29 and 3-fold differences for Caco-2 when cetuximab plus EGF treatment is compared to gefitinib plus EGF”, without mentioning the concentrations. The authors probably mean the 10nM Gb and Cx treatments. Please specify this in the text.
2. “In summary, Caco-2 cells displayed reduced immunostaining for EGFR with respect to HT-29 cells”. Do the authors mean “……when compared to HT-29 cells”?
3. DNA microarray data analysis, p.14:
Mention whether ubiquitine-mediated proteolysis and mTOR signaling are up- or downregulated.
4. Figure 1:
In the figure, describe what the Y-axis represents.
5. Table 1:
Significances as described in the text can be visualized with the * signs in the table, for reader’s convenience.
6. Table on the last page:
Mention whether the pathways are up- or downregulated.
Per pathway, mention the significance.
Level of interest: An article whose findings are important to those with closely related research interests

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