Reviewer's report

Title: GLUT1 gene is a potential hypoxic and prognostic marker in colorectal cancer patients

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Reviewer: Cornelis Sier

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The manuscript contains data that are in principle interesting, i.e. the GLUT1 peripheral blood data from 100 patients. The other data serve either as introduction (lactate) or as illustration (immunohistochemistry and cell lines). All data together indicate that GLUT1 is enhanced in colorectal cancer, but are not enough to conclude anything about GLUT1 being a prognostic marker, as suggested in the title and discussion. However, my main critic on the paper is that the presentation makes an inaccurate impression. In my previous report I mentioned some of the most essential examples:

· The data that were indicated in the legend of table 5 were not present.
· The most interesting peripheral blood data were not discussed at all.
· The description of the peripheral blood preparation is missing. This is essential because you only want to isolate mRNA from circulating tumor cells, not white blood cells.
· The calculation of the percentage over-expression is unclear. There are obvious mistakes in the calculations.
· My remark about the medians reflected to the following standard error: Either means ±SE should be given, as also stated in the M&M, or medians plus range.

Most of the remarks above are not properly taken care of in the revision. From the answers to my co-reviewers I understand that Dr. Dominguez missed a group of stage IV patients in this study. Without these patients the conclusion that GLUT1 could have any biomarker possibilities is rather opportune. Furthermore, because the authors did not discuss their peripheral blood data we could not raise any questions how the authors interpret that cells that are a certain time in the circulation and therefore probably adapted to the oxygen-state in the peripheral blood could still reflect the oxygen-state in the (section of) the tumor where they derived from.

In conclusion, these data deserve publication but in my opinion the manuscript, also in its present form, is not ready enough.