Reviewer's report

Title: Gene expression relationship between prostate cancer cells of Gleason 3, 4 and normal epithelial cells as revealed by cell type-specific transcriptomes

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Reviewer: Zhiwei Wang

Reviewer's report:

The authors determine the transcriptome of CD26+ prostate cancer cells of Gleason 3+3 and Gleason 4+4 tumor specimens. The transcriptomes were compared to each other to identify differentially expressed genes, as well as to those of the normal cell types. They found that the cancer transcriptomes differed substantially from those of prostate cancer cell lines. They concluded that genes with increased expression in cancer are potential biomarkers for cancer detection, and those differentially expressed between G3 and G4 are potential biomarkers for disease stratification given that G4 cancer is associated with poor outcomes.

The Results and Discussion sections are clearly described. The rationale of the study was very strong, and data were generated. In conclusion, the manuscript is well-written and provides interesting mechanistic.

However the manuscript needs improvement, and some minor concerns need to be addressed. The manuscript is recommended for publication after minor revision.

It is better to re-organize the figure order. Fig-7 should be Fig-2 because the authors discussed the fig-7 after Fig-1 (page 8).

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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'