Reviewers report

Title: Long term survival following the detection of circulating tumour cells in head and neck squamous cell carcinoma

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Reviewer: Frank Pajonk

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Winter et al, described a technique for detecting markers of head and neck cancer in circulating tumor cells in the peripheral blood. The authors used an immunomagnetic enrichment method with subsequent PCR detection of four markers (ELF3, CK19, EGFR, EphB4). Further, in order to investigate their clinical application blood from 16 patients before and after surgery was screened for the presence of these markers. The manuscript is written sloppy and the references don't seem to match the current version.

As is, this paper is not even a negative study. There is just no correlation between CTCs and outcome. The authors are encouraged to recruit a decent number of patients based on a proper power calculation.

Major points:

- The author described a “Background”, but the paper seems to lack of an “Introduction” section. Also, it is redundant and too verbose
- The paper is not well written and not coherent considering all its parts
- “Peripheral blood samples were collected from normal individuals....” Please, specify what kinds of controls were taken (number of controls, age, sex…). Indicate if controls were previously tested for any disease/cancer marker (in order to be “controls”)
- CTC are most likely contaminating skin cells. Please provide evidence that CTCs are indeed viable tumor cells.
- In the “Method” section four cell lines are mentioned, but results are given just for some of them. Please, specify in the section number and type of cell lines used in each experiment. Overall, this part seems to be blown up to compensate for the lack of positive results on patients samples
- Please, check the references. References are reported in the “References section”, but are not present in the body of the paper
- “Statistic” part: please, indicate which are the “continuous variables”. Also, indicate which variable have been taken in consideration in the Cox model.
- a log-rank test is described in the Methods Section but nowhere in the results