Reviewer’s report

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

Version: 2 Date: 24 March 2009

Reviewer: Johannes Huelsenbeck

Reviewer's report:

The article "Long term survival following the detection of circulating tumour cells in head and neck squamous cell carcinoma" by Winter et al. describes a method to detect circulating head and neck cancer cells using immunomagnetic enrichment. The authors show convincingly that their method is able to detect very small numbers of model cells in blood samples. In samples obtained from patients suffering from advanced stages of the disease, the authors detect circulating tumour cells in most cases. However, there is no correlation between circulating tumour cells and survival of the patients. Overall, the manuscript is well written and interesting to read. There are, however, a few points to be addressed.

Major Compulsory Revisions
None

Minor Essential Revisions
1. The data shown in Fig. 2 represent experiments obtained using 40 cycles of amplification. In the analysis of the patient samples, 50 cycles were used. The authors should perform experiments with 50 cycles for establishing the method to make sure no false amplification occurs with the higher number of cycles, at least with the negative controls.

2. On page 11, the authors state that Elf3 was expressed at lower level than the other gene products. Their method, however, is qualitative, thus no quantitative statements can be made. Include quantitative data or delete.

3. On page 14, the authors begin a rather long and hard to read description of the detection of circulating cells prior to and after surgery. This part should be shortened or deleted, all necessary information can be obtained from Table 5. Important points could be highlighted here

4. The quality of the agarose gels shown in figure 2 is low. Please improve, e.g. bands should not be cut off.

5. For the results presented in Table 4 and Table 5, the authors should include at least one representative agarose gel as figure.

Discretionary Revisions
6. In table 3, numbers don't seem to match. Please include first digits after the decimal point for each value. Furthermore, please give standard deviations for all values.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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.