Reviewer's report

Title: Stimulated monocyte IL-6 secretion predicts survival of patients with head and neck squamous cell carcinoma

Version: 2 Date: 5 July 2007

Reviewer: M. Rita Young

Reviewer's report:

General

The manuscript by Heimdal et al. aims to demonstrate that the level of IL-6 released by monocytes in response to LPS stimulation is predictive of survival of head and neck cancer patients. For the most part, the manuscript is well organized and well written. Below are major concerns needing compulsory revisions relative to the data presentation and the conclusions:

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1 The data showing the levels of IL-6 produced by patients that were alive or dead after 5 years would be more clearly presented as a table or figure. As currently presented in the text, the data are the opposite of what is concluded.

2 Since patients are being separated for survival analyses based on their monocyte production of high versus low levels of IL-6, the range of IL-6 production among patients should be shown. Also needed is the threshold of what constitutes a high or low IL-6 level.

3 Figure 1 shows an increase in IL-6 in monocyte-conditioned medium when the monocytes are cultured in autologous serum, but not when cultured in serum-free medium. The conclusion is that this is due to differences in monocyte response to LPS stimulation. Not shown are the value in the absence of LPS. A very significant issue that the authors have not excluded is the possibility that the increased levels of IL-6 in the cultures of monocytes from cancer patients could be due to increased levels of IL-6 in the autologous serum.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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.