Reviewer's report

Title: Clone-specific Expression, Transcriptional Regulation, and Action of Interleukin-6 in Human Colon Carcinoma Cells

Version: 1 Date: 30 October 2007

Reviewer: Claudio Belluco

Reviewer's report:

General
In the present manuscript Brozek et al. report their data from an elegant study aimed to evaluate the regulability of IL-6 activity in human colon carcinoma cells. To this end, the Authors tested the effect of IL-6 modulators in cultures of three human colon carcinoma cell clones showing markers typical of different grade of differentiation. Results showed that, in undifferentiated tumor cells, IL-6 level was significantly higher than in differentiated tumor cells, and effectively stimulated by IL-6 modulators. This study represents a valuable validation and an in depth investigation of the previous work from the same group (European Journal of Cancer 41 (2005) 2347–2354).

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
Authors conclude formulating the hypothesis that release of IL-6 the cytokine from undifferentiated tumor cells could accelerate progression towards malignancy by paracrine action on more differentiated tumor cells. In my opinion, while the results of the present study could explain the molecular mechanism for a more aggressive behaviour of undifferentiated tumors, the design of the study does not allow for any conclusions related to cancer cells interactions. The conclusions need therefore to be revised, and Figure 5 should be omitted.

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

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 whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.