Reviewer’s report

Title: Tumor associated macrophages and TGFbeta1 expression are related to histological grade of differentiation and downregulation of TGFbeta receptor 2 in tumor associated stroma is an independent prognostic factor in colon carcinoma: a retrospective study

Version: 2 Date: 15 February 2007

Reviewer: Diego Arango

Reviewer's report:

General
MS: Tumor associated macrophages and TGFbeta1 expression are related to histological grade of differentiation and downregulation of TGFbeta receptor 2 in tumor associated stroma is an independent prognostic factor in colon carcinoma: a retrospective study

1. Is the question posed by the authors new and well defined? yes
2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work? Yes
3. Are the data sound and well controlled? Yes
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes
5. Are the discussion and conclusions well balanced and adequately supported by the data? Needs to be improved
6. Do the title and abstract accurately convey what has been found? The title seems a too long
7. Is the writing acceptable? May need some editing for English.

Reviewer comments:

The manuscript by Bacman et al investigates the role of TGF-β signaling elements both in tumor and stromal cells in the colorectal tumorigenic process. This study contributes to further our understanding of the interactions between tumor cells and stromal cells in colorectal tumors. However, a number of points would need to be clarified/modified:

1.- Results section, TAMs section: The description of the results is very confusing and hard to follow for the reader. The authors describe the results of this section in a much simpler way in the 'Discussion' section: “In the present study we found higher levels of TAMs in less differentiated tumors and tumors with lymph node metastasis. On the other hand there was a trend towards lower rates of distant metastasis and better survival rates in TAM rich tumors”. Adding some percentages, p values, etc, to this should be sufficient. In addition, it would be useful to include a table containing the detailed information for all the comparisons made. This would also apply to the results in the other two sections (TGF-β in the tumor and stromal cells). These tables could be provided as supplementary materials if space is limiting.

2.- Discussion section, first paragraph: the discussion of the results of the number of TAMs in the tumor series and the correlation with other clinicopathological factors is insufficient. It is not clear how the higher TAMs levels would be correlated simultaneously with, for example, presence of lymph node metastasis and absence of distant metastasis. Although the three observations that the authors discuss could explain a possible dual role of TAMs in tumor formation/progression in different tumor types, it is not immediately clear how it could explain an association between high TAM levels and apparently opposing clinicopathological features such as lymph node metastasis and better survival. The authors need to explain this better. A possibility is that the associations with survival and distant metastasis, which are not statistically significant, are in fact not real and may need to be played down.

3.- Page 4, first paragraph and page 6 third paragraph: the term ‘recent study’ is used instead of ‘present study’ causing a great deal of confusion.

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

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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)