Reviewer's report

Title: Chemokine mediated distribution of dendritic cell subsets in renal cell carcinoma

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Reviewer: Eyad Elkord

Reviewer's report:

This study investigated the distribution of different immature and mature dendritic cell subsets in renal cell carcinoma tissue, compared to normal kidney tissue. Expression of relevant chemokines and their receptors was also investigated. The data is clearly presented in this manuscript.

Major Compulsory Revisions

It is not clear what data is presented in Figure 2. This figure can be replaced by scatter plots to show the numbers' distribution. The legend should explain the data presented in this figure, e.g. median, SEM..etc.

Each statistical test performed should be indicated next to the P value.

Why MIP-3a is not expressed in lymph nodes in Figure 5A?

The general discussion in pages 13 & 14 is long.

Minor Essential Revisions

The study referred to (reference 16, page 4) was done in only melanoma patients, and not RCC.

Page 4: “Thus, questions have arisen concerning the type and activation state of human DCs that should be used to induce an effective anti-tumour immune response”. This is not absolutely true as it is known that mature DCs are the most potent antigen-presenting cells and they are important to avoid the induction of T regulatory cells.

No need to refer to website of Prism in page 7.

Page 8: Reference is needed for CD11c and Fascin.

Make sure all indicated fluorescences in Figure 3 legend are correct, e.g. CD83+ in E is red not green. Why different cell infiltrations are shown in Figures 3B, C, and D?

Displaying explanatory arrows on immunohistochemistry and immunofluorescence figures can help to show the indicated area/cells.

In page 16, reference 52 describes DC infiltration in RCC as well.
In page 18; change pre-treatment to treatment.
Reference 14 should be updated.
There are some minor errors that should be corrected.

**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