Author's response to reviews

Title: Growth and metastasis of B16-F10 melanoma cells is not critically dependent on host CD73 expression in mice

Authors:

Sandra Burghoff (sandra.burghoff@hotmail.com)
Xuan Gong (xuan.gong@hotmail.de)
Claudia Viethen (claudia.viethen@uni-duesseldorf.de)
Christoph Jacoby (christoph.jacoby@uni-duesseldorf.de)
Ulrich Flögel (floegel@uni-duesseldorf.de)
Sabine Bongardt (sabine.bongardt@uni-duesseldorf.de)
Anne Schorr (schorr.anne@googlemail.com)
Andreas Hippe (ahippe@gmail.com)
Bernhard Homey (bernhard.homey@uni-duesseldorf.de)
Jürgen Schrader (schrader@uni-duesseldorf.de)

Version: 5
Date: 29 October 2014

Author's response to reviews: see over
Editor

The final statement of the authors in Conclusions is that tumor CD73 expression is the main determinant of whether CD73 creates an immunosuppressive tumor environment. However, there is clear evidence in the literature from two groups that host CD73 expression is important for controlling tumor growth. The relative importance of host vs. tumor CD73 may be different for different tumors. We can accept the results as presented but the authors should make a minor correction in their discussion on this point. They should not generalize and make this sweeping conclusion based on one experimental model where tumor CD73 expression is not a variable. If they are not willing to tone down this statement, we cannot recommend publication. The conclusions should not go far beyond what is shown in the manuscript.

Dear editor,

We agree that the final sentence of our conclusions went beyond of what is shown in the manuscript. We have made the appropriate changes. The last sentence of our conclusion on page 17 – in accordance with the comment of Dr. Thompson - now reads:

Whether overexpression of ecto-nucleotidases (CD39, CD73) on tumor cells plays a more profound role in adenosine-triggered tumor immune escape cannot be decided on the results obtained in this study. It is also possible that the relative contribution of tumor versus host CD73 may be different for different tumors.
Reviewer: Linda Thompson

Dear reviewer,

Thank you again for critical reading of our revised manuscript. Please find below a detailed response to each of your comments.

Major point:

In my opinion, the final sentence to the manuscript in the Conclusions section is too strong given the data in the paper. I believe the results the authors obtained with the B16-F10 melanoma model and I don't think their results are so different than what has been published previously. However, I don't think it is possible to conclude that tumor CD73 expression will be the most important factor in determining whether CD73 creates an immunosuppressive tumor environment. There is clear data in the literature from two groups showing the importance of host CD73 (hematopoietic and non-hematopoietic cells). My guess is that the relative contribution of tumor vs. host CD73 may be different for different tumors.

We agree that our conclusion was too speculative and not backed up by data obtained in our study. Our intention was to draw the attention to the expression of ecto-nucleotidases on tumor cells themselves as an interesting approach for further research. We have toned down this statement which now reads (page 17):

Whether overexpression of ecto-nucleotidases (CD39, CD73) on tumor cells plays a more profound role in adenosine-triggered tumor immune escape cannot be decided on the results obtained in this study. It is also possible that the relative contribution of tumor versus host CD73 may be different for different tumors.

Minor point:

In Figure 7B, days is given as "zeit."

Thank you for pointing out this mistake. Correction has been made.
Reviewer: Jose M. Estrela

Dear reviewer,

Thank you for review of our revised manuscript.