Reviewer's report

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

**Version:** 1  
**Date:** 24 July 2014

**Reviewer:** Sirpa Jalkanen

**Reviewer's report:**

This is a contradictory report regarding the role of host CD73 in the behavior of B16 melanoma. As the papers in the literature come from several independent laboratories, it would be important to resolve the discrepancies. In addition to B16 melanoma and CD73 knockout mice the earlier reports have used other tumor models and manipulations of adenosine levels/effects and have demonstrated an important role for CD73 (References 13-17).

**Major Compulsory Revisions:**

As discussed in this manuscript, the reasons may be the different knockout line, environmental aspects (microbiota), a different method for measuring the volume. There is also a possibility that the B16 melanoma used in this paper has mutated to a direction that is not evoking CD73 dependent responses in the host. The lack of any changes in tumor infiltrating leukocytes would support this idea. To find out, whether the reason is in the B16 melanoma or in the knockout strain another tumor model should be added.

**Minor Essential Revisions:**

The CD4/CD25 positive cells cannot be called regulatory T cells without FoxP3. The CD4+/CD25+/FoxP3+ cells are just a minor population among CD4/CD25 positive T cells. Likewise, the analyses do not include macrophage subtypes. Thus, using CD11b and c markers possible differences in immunosuppressive macrophages may go unnoticed. This should be mentioned in discussion.

In the methods it is written that ‘cells were intravenously injected (tail vein) into male host animals’ and in the results that ‘in all cases bone marrow from male mice was transplanted into female mice’. Please, correct.

It is said that the subcutaneous injection were done to hindlimb. Footpad? Please, specify. Did the tumors metastasize to the draining lymph?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the
statistics.

**Declaration of competing interests:**

I declare that I have no competing interests