Reviewer’s report

Title: Rapamycin delays growth of Wnt-1 tumors in spite of suppression of host immunity

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Reviewer: Yin-Yuan Mo

Reviewer’s report:

Rapamycin is a well known immunosuppressive drug which has been previously shown to have anti-tumor activity by inhibiting the mTOR pathway. However, clinical trials reveal only relatively modest responses in 7-30% of cancer patients, possibly due to resistance to rapamycin. Therefore, the authors tried to determine whether adoptive cell therapy may improve outcome in rapamycin-treated recipients in vivo. However, adoptive transfer of T1 cells resistant to rapamycin did not affect Wnt-1 tumor growth. Although it is not clear why this is the case, one of the possibilities is the majority of MMTV-driven Wnt-1 mammary tumors did not express FAS. This is not just a report of negative results. Instead, MMTV-driven Wnt-1 mammary tumor may not be a good model to test their hypothesis. Thus, it is not clear to me what new information this study provides because it is already known that rapamycin induces immunosuppression and inhibits tumor growth in the animal model as they cited in references. This work would be acceptable if they can demonstrate that the Wnt-1 mammary tumor model provides advantage over other mammary tumor model such as ErbB2 breast tumor model; alternatively, if they can overexpress FAS in Wnt-1 cell lines and then perform adoptive transfer.

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: 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