Reviewer's report

Title: VEGF is an important mediator of tumor angiogenesis in malignant lesions in a genetically engineered mouse model of lung adenocarcinoma

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Reviewer: Dmitri Simberg

Reviewer's report:

The MS describes the antiangiogenic and anti tumor effect in lung adenocarcinoma by some tyrosine kinase inhibitors. The conclusions are interesting but there are several drawbacks that need to be addressed:

1) there is no statistical treatment and no significance labels in the figures. What was the test? How many mice per group?
2) there is no image showing hyperplasic and malignant lesions (at high magnification. Thus, the statement in the discussion: "Moreover, most of the tumor blood vessels in treated mice lacked smooth muscle cell coverage suggesting a role for VEGF in establishment of a cross talk between smooth muscle cells and endothelial cells" is not supported in any figure.
3) The statement about "Furthermore, AI treated mice had lower number of TAMs compared to the vehicle treated animals suggesting that these cells may play a proangiogenic role in this model" is questionable. Maybe the reason for TAM disappearance is the direct effect on the cells, or due to decreased perfusion? Please address.
4) It is a pity that there is not a more quantitative measure of tumor burden than counting the lesions. It could be done with Luc+ tumors or just by weighing the lung (for late lesions). Since therapeutic effect is the strongest selling point of the paper, there should be a more quantitative method. Or, at least count large number of slices throughout the tissue and how many were counted etc. This information is missing in the Methods or figure legend.
5) Not required but recommended to improve the paper level: show some apoptosis or hypoxia effect.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

No competing interests