Reviewer's report

Title: Platelet-derived growth factor receptor-beta, carrying the activating mutation D849N, accelerates the establishment of B16 melanoma

Version: 1 Date: 14 August 2007

Reviewer: Nina Nupponen

Reviewer's report:

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The manuscript by Suzuki et al. describes a series of experiments in which the activated PDGFR-# (carrying D849N alteration) increased the total vessel area, and the average vessel surface in the host animal. The senior authors have a strong publication history with PDGFRs protein, but a few deficiencies were found in this manuscript.

First, the lack of protein expression data and figures (Western) of cells carrying the PDGF-BB (e.g. difference between native and transfected cells).

Second, is the PDGFR-# more phosphorylated by PDGFR-BB in the cells? It is not speculated, no figures are included and thus quite unclear.

Third, the number of tumors (for instance n= 6; the effect of PDGF-BB expression for the B16 tumors in wild and mutant mouse) is limited for reliable statistical analysis.

Last, the authors speculate: “Together, these examples suggest potential benefits of targeting PDGFR# in the treatment of tumors”. Data that measures the efficacy of tyrosine kinase inhibitors (such as imatinib or other molecules targeted against PDGFR# in their experimental cells) could bring up more value to the manuscript.

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: Needs some language corrections before being published

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.