Reviewer’s report

Title: Gene profiling of the erythro- and megakaryoblastic leukaemias induced by the Graffi murine leukaemia retrovirus

Version: 1 Date: 17 September 2009

Reviewer number: 1

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It was a pleasure to review this manuscript because the experiments were designed rationally and the results were straight to understand.

According to the guidance for reviewers, I would give YES to eight points out of nine.

A point to improve (Discretionary Revisions) is:

#2 Are the methods appropriate and well described?

Description of leukemia occurrence in virus-infected mice is poor. Information about the incidence of leukemia of each lineage and their latent period would be helpful to evaluate the experimental models. Comparisons of integration sites between erythro- and megakaryoblastic leukemias could provide more insights on the pathogenesis. Also the number of integration sites might be helpful to distinguish the abnormalities of proliferation from the differentiation arrest to consider multi-step leukemogenesis. These biological aspects would consolidate the present data.

Minor Essential Revision;

1:Page 6 RMPI should be RPMI
2:Approval of animal experiments and viral manipulation is missing. It should be stated in the manuscript.

The results in this manuscript will be helpful for further studies to elucidate the pathogenesis and treatment of erythro- or megakaryoblastic leukemias. I consider it is worthwhile publishing this manuscript in BMC Genomics.

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.