Reviewer’s report

Title: Comparison of haematological parameters determined by the Sysmex KX-21N automated haematology analyzer and the manual counts

Version: 1 Date: 1 August 2009

Reviewer: Shion Imoto

Reviewer’s report:

- Major Compulsory Revisions

1. The main problem of manual count is the variation among operators. The authors should mention whether manual count were done by a single operator or two or more operators. If done by two or more operators, variation of data among the operators should be shown. If done by single operator, reproducibility of data should be shown.

2. As for hemoglobin and hematocrit, reliability of automated hematology analyzer seems to have been established. Good correlation between manual and automated analysis simply indicates the technical reliability of manual examination. Data of MCHC seems unnecessary.

3. Reliability of automated hematology analyzer seems to have been established for WBC count and platelet count except rare cases such as platelet or leukocyte aggregation and existence of giant platelets. Figure 1-D shows several deviated cases. The authors should describe the reason.

4. Manual count is important for morphological examination. In Fig 2-B-D, data of leukocyte analysis by manual count poorly correlated with those by automated analyzer. The authors should explain reasons of the difference between the manual and automated examination.

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

Quality of written English: Not suitable for publication unless extensively edited

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.