Reviewer's report

**Title:** Peripheral PDLIM5 expression in bipolar disorder and the effect of olanzapine administration

**Version:** 1  **Date:** 17 August 2012

**Reviewer:** Tadafumi Kato

**Reviewer's report:**

The authors studied the gene expression levels of PDLIM5 in peripheral leukocytes of patients with bipolar mania. They examined the effect of olanzapine treatment on the PDLIM5 expression. They found that the expression level was not altered by olanzapine treatment. The basal PDLIM5 level was lower in manic patients compared with controls. This was not affected by SNPs of PDLIM5. These results suggest possible significance of PDLIM5 as a biomarker of bipolar disorder, but this may not be a good marker for olanzapine response.

The study is well thought out and the paper is well written. Only minor changes are needed before publication.

**Minor Essential Revisions**

P7, the last paragraph

The authors wrote that there is negative correlation, but this was not significant. This is confusing. They can simply write there is no statistically significant correlation. They also wrote that there is a trend of association with family history. It should be clarified in which direction, they are associated.

P8, the last paragraph

The authors emphasized that the direction of change of PDLIM5 is contrary to that in schizophrenia. This is somewhat confusing. They can start with discussing fact that the direction of changes is the same as that in lymphoblastoid cells of bipolar disorder.

Table 3

RQ should be spelled out.

Fig 2

Symbols # and + in the figure give impression that there are significant differences. The authors can simply describe the p-values in the legend.

**Level of interest:** An article of importance in its field

**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.