Reviewer’s report

Title: E-cadherin gene re-expression in chronic lymphocytic leukemia cells by HDAC inhibitors.

Version: 3 Date: 17 January 2013

Reviewer: A.K K Munirajan

Reviewer’s report:

It was good to see the significant improvements in the manuscript. In their revised manuscript, the authors have addressed the questions raised and have re-organized and re-written sections of the manuscript. However, the manuscript may benefit from some additional controls.

In the materials and methods section, the authors could indicate how many normal donors were chosen for the study.

One important concern in the manuscript is that the induction of E-cadherin transcripts as shown in Figure 2B is not concordant with the protein expression data of Figure 3B. The authors may explain this in the discussion section.

In the results section under the subheading “Effect of HDACi on E-cadherin exon 11 splicing the authors mention “In two CLL specimens #7, #8 a decrease in the total aberrant transcript was observed while there is an induction in wild type transcript (CLL#2, #5, #10).” However from the figure it should be noted that the CLL specimen #10 shows no induction of the wild type transcript. Hence the sentence needs clarification.

Under the subheading Effect of E-cad expression……wnt pathway, the figure number indicated as “figure 4A lower panel” should be changed to “figure 5A lower panel”.

It would be clearer if the authors could improve the following sentences

1. The sentence “The data shows that a number of different HDAC genes are over expressed in CLL specimens and in our small cohort of CLL specimens a smaller subset of individual HDAC genes that are active in CLL for cannot be identified” in the 2nd paragraph under the subhead “ChIP analysis of E-cadhering promoter and HDAC expression”

2. The sentence “HDACi increase the E-cadherin expression in a majority of CLL specimens and this increase also translated into an increase in E-cadherin signal on the western blot analysis” in the 2nd paragraph of Discussion.

There are a few repetitive sentences regarding splicing under the head Discussion

It could be more convincing if the exact significance of the manuscript be presented in the Conclusions section.
In Figure 2C & 2D, it would be good to see the inclusion of error bars for “Emetine” and also for Figure 5B control data.

Why data of CLL#7 not shown in Fig.5C table?
The previous questions have been addressed to my satisfaction.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests