Reviewer's report

Title: Kif2a Silencing Inhibits the Proliferation and Migration of Breast Cancer Cells and Correlates with Unfavorable Prognosis in Breast Cancer

Version: 2  Date: 29 April 2014

Reviewer: Pauline Funchain

Reviewer's report:

Wang et al present a clean, well supported paper showing relative overexpression of KIF2A in cancer tissue as compared to adjacent normal, in vitro inhibition of cell migration and proliferation with KIF2A silencing, and allude to the potential of KIF2A as a prognostic biomarker for unfavorable prognosis in breast cancer.

Major Compulsory Revisions

1. The discussion in the second to last sentence of the first results paragraph (pg 8) refers to a p-value for a Western blot but there is no quantitation shown. Please add a numerical table or graphical plot that justifies the p-value.

2. KIF2A expression is more appropriately analyzed with multivariate analysis in Table 1 and as discussed in the first paragraph of page 9.

3. Figure 2 showing HER2 expression is unnecessary. Please remove.

4. The last sentence of the first paragraph of page 9 (as well as the last sentence in the first paragraph of the discussion and the 4th line on pg12) refers to the frequency of overexpression of KIF2A in patients with lymph node metastasis and states the p-value is significant but does not provide any numbers regarding frequency. Please provide the observed frequencies to provide a basis for the p-value.

Minor Essential Revisions

5. The authors should take care to correctly refer to human proteins in all caps (e.g. KIF2A) and and genes should be both italicized and all caps.

6. Small English revisions: pg 3, mid page: "2.95 folds" should be "fold"; pg 3, last paragraph, "adjacent epithelium tissues" should be "adjacent epithelial tissue"; multiple places with spacing mistakes e.g. "tissues( Fig.1E)" should be "tissues (Fig. 1E)"

7. Multiple grammatical errors in the discussion - please check that verbs agree in number with subjects and other including MDA-MB-231 is referred to as a breast cancer cell, rather than a cell line.

Discretionary Revisions

7. The paper would be stronger if data were shown with a second, confirmatory breast cancer cell line.
**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:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests'