Reviewer’s report

Title: The pan-HDAC inhibitor panobinostat acts as a sensitizer for erlotinib activity in EGFR-mutated and -wildtype non-small cell lung cancer cells

Version: 2 Date: 7 April 2015

Reviewer: Hiromasa Yamamoto

Reviewer’s report:

This study showed the pan-HDAC inhibitor panobinostat acted as sensitizer to the effect of erlotinib. Although this study may have some interesting findings, the following issues should be addressed.

#1. Resolution of the figures is too low. I cannot understand the contents of Figures 1 and 3 (Major Compulsory Revisions).

#2. The number of cell lines used in this study is small. The authors chose only one cell line (A549) as an EGFR-wild type adenocarcinoma cell line. They should use more EGFR-wild type cell lines (KRAS-mutant or KRAS-wild type) to show the sensitizing effect of panobinostat to the effect of erlotinib. Other EGFR-mutant cell lines should be also used (Major Compulsory Revisions).

#3. The alignment of the protein bands in Figure 3 is difficult to understand. The protein bands should be arranged based on each cell line (Major Compulsory Revisions).

#4. “Results” can be simplified. It is redundant (Major Compulsory Revisions).

Level of interest: An article of limited interest

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.