Reviewer's report

Title: Murine double minute 2 predicts response of advanced esophageal squamous cell carcinoma to definitive chemoradiotherapy

Version: 2 Date: 22 December 2014

Reviewer: Eiichi Morii

Reviewer's report:

Okamato H et al examined expression of MDM2, p53, p16, and Ki-67 in esophageal squamous cell carcinoma, and investigated the relation of their expression levels to the effect of definitive chemoradiotherapy. They analyzed 79 cases, and concluded that high expression of MDM2 and low expression of p16 in Stage III cases were correlated to poor effect. They also showed that overall survival of cases with more than 33.7% of Ki-67 index was better than that less than 33.7%. The experiment is straightforward and the results are clear. However, the criteria of cut-off value in each immunohistochemical index are vague.

Major compulsory revisions

1) In the second paragraph of immunohistochemistry (Methods), the authors mentioned that the values for abnormal expression are p53 > 10%, and p16 < 5%. They cited reference 12 in p53 value and reference 13 in p16 value. However, in reference 13, the cut-off value was as follows; MDM2 > 30%, p53 > 5%, and p16 < 5% (Taghavi N et al, BMC cancer, 2010). The cut-off value of each index was complex, and the reviewer suggested that the authors try to re-examine the cases with p53 > 5% as a cut-off value (as shown in reference 13).

2) The authors divided the cases into p53-positive and negative as a cut off of 10%, and p16-positive and negative as a cut off of 5%. In contrast, the positive rate was examined as for MDM2 and Ki-67 expression. Why p53 and p16 expression is divided into two (positive and negative), and MDM2 and Ki-67 expression is not? Please describe the rationale.

3) The authors described that the percentage of p16-positive nuclei and cytoplasm was counted. When p16 is stained in either nucleus or cytoplasm, did the authors consider the tumor cell is counted as positive or negative?

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

Quality of written English: Acceptable

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