Reviewer's report

Title: Tumor-related Gene Expression Levels in Pulmonary Pleomorphic Carcinoma

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Reviewer: Hiroyoshi Tsubochi

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My comments refers the following issues:

1. The authors conclude that it is unlikely that PPC is sensitive to anti-metabolic drugs whereas VEGF therapy maybe a candidate for PPC from their data of the tumor-related gene expression. However, in general the gene expression is not directly associated with the drug sensitivity. Therefore, high level gene expressions of thymidylate synthase (TS) or VEGF do not always reveal sensitivity of these target drugs. Conclusion should be changed.

2. Do the authors have some information regarding adenocarcinoma or squamous cell carcinoma which reveal significant correlation between high level gene expression and drug sensitivity?

3. Among investigated cases, seven patients had recurrence. What regimen of the chemotherapy was selected in those cases? Did they find some relationship between the response to drugs and gene expression analysis?

4. The authors describe on page 11 that lower TS activity thought to be correlated with greater sensitivity anti-metabolic drugs. Proper attribution should be given.

5. DTP method should be described in more detail.

6. In figures 1-3, there are no informations about the vertical line.