Author’s response to reviews

Title: ACTN4 and the pathways associated with cell motility and adhesion contribute to the process of lung cancer metastasis to the brain

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Author’s response to reviews: see over
March 26, 2015

Ms. Cherry Battad  
Journal Editorial Office  
BioMed Central  

RE: Resubmission of our manuscript (ID 7417542111512503)

Dear Ms. Battad:

Thank you very much for your email with encouraging news regarding our manuscript. We also thank the reviewers for their positive/constructive comments and suggestions, which truly helped us to improve our manuscript. After incorporating their comments into the revised manuscript, I would like to resubmit it for your consideration for publishing in BMC Cancer. The amendments are highlighted in red in the revised manuscript, and our point-by-point answers to the reviewers’ comments are attached below. This manuscript has been edited and proofread by Medjaden Bioscience Limited (Hong Kong, China).

Thank you again, and I hope that the revision is acceptable. I am looking forward to hearing from you soon.

Sincerely,

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Our responses to the reviewers’ comments are as follows:

Reviewer #1

The authors examined only one patient in this study. It is difficult to generalize the results reported here.

We fully understand the reviewer’s concern. This was a proof-of-principle study, and our future study will focus on some of these altered genes in lung cancer that has metastasized to the brain. For the revision, we have added data from 10 patients analyzed by the qRT-PCR confirmation experiment.

Reviewer #2

Major Compulsory Revisions

1- As highlighted by the authors, the present study is based on only one patient. To improve the quality of their manuscript and confirm their results, the authors should include additional patients.

We fully agree and have added data from 10 patients analyzed by the qRT-PCR confirmation experiment.

2- The increased expression of ACTN4 gene in the brain metastasis only suggests its implication in the metastasis process of lung tumor cells but could not be considered as an evidence as claimed by the authors.

We fully understand the reviewer’s concern and agree. We have modified the title and conclusion section accordingly.
3- Because clusters were defined by RPKM values, it is important to briefly explain what is RPKM value and specify the reason of this choice to determine the clusters. In the figure 1, it will be necessary to use a drawing to explain the signification of cluster squares, in particular the line across the square.

We thank the reviewer and fully agree. We have added a description in the text accordingly.

4- In Figure 6, the ACTN4 gene was validated by RT-PCR on the same samples than the RNAseq. It would be more significant and pertinent to validate this gene and others genes obtained from RNAseq results in additional lung tumor samples from different patients.

We fully agree and have added more patients to the qRT-PCR confirmation experiment.

However, since this was just a proof-of-principle study, our future study will focus on some of these altered genes in lung cancer that has metastasized to the brain. Therefore, we did not analyze additional genes in the current manuscript.

Minor Essential Revisions

1- The reason of the use of abbreviations N16, T16 and T30 to distinguish between samples is not explained and it is not evident during the reading of the text.

We fully agree and have added a description in the text accordingly.

2- The legend of figure 6 is not the same than in the manuscript. It is the same for table 1.

We thank the reviewer and have fixed it accordingly.