Author's response to reviews

Title: BACE1 inhibitory activity of fungal endophytic extracts from Malaysian medicinal plants

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Author's response to reviews: see over
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Ms Iratxe Puebla  
BioMed Central Editorial Team

Dear Ms Iratxe Puebla,

Re: BACE1 inhibitory activity of fungal endophytic extracts from Malaysian medicinal plants

With reference to the above-mentioned manuscript, I wish to thank you for your e-mail dated 15 March 2010, and the comments from the Referees. We have accepted most of the recommendations given by the Referees, and have revised the manuscript accordingly. Our responses to the points raised by the Referees are given below.

Page numbers refer to the pages in the revised manuscript, unless stated otherwise.

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| 1 | We have tested the cytotoxic activity of the endophytic extract against PC 12 which has neuronal properties as suggested by the reviewer.  

PC-12 cell was selected because it has neuronal properties and the expression of BACE1 is readily detectable in these cells just like neuronal cells [1, 2, 3].  


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3. We have included the cytotoxicity against PC12 cells as mentioned earlier.

2. We fully agree with the suggestion of the Reviewer. Work on amyloid beta production and the isolation of the active compounds are now in progress. We are in the midst of elucidating structure of the compounds.

3. We have included the reasons why we choose to work on endophytic fungi as a source of BACE 1 inhibitor in the manuscript.

   Endophytes have high diversity and are relatively fast growing on routinely used laboratory media. Many of the endophytes species are so-called “creative fungi” and produce large amount of novel compounds [1]. It was predicted that endophytic fungi potentially have a major source for new and useful metabolites [1]. Schulz et al. [2] isolated 6500 endophytic fungi and found 51% of bioactive compounds were new natural products and concluded that endophytic fungi are a good source of novel compounds.


4. We initially thought that all 5 fungi were of the same strain but realized that although the BACE 1 inhibitory activity was similar but found that they showed different pattern when tested for neuroinflammation activities. Work on this is still in progress.

5. We included the other function “anti-inflammatory” that was left out in the sentence.

All amendments in the original copy of the manuscript have been corrected accordingly.
We hope the amendments made to the manuscript and the responses to the comments of the referees are to the satisfaction of the Editorial Board and the paper is accepted for publication.

Thank you.

Yours sincerely,

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