Author’s response to reviews

Title: Propofol attenuated the effect of TNF-α on occludin expression by inhibiting HIF-1α/VEGF/VEGFR-2/ERK signaling pathway in hCMEC/D3 cells

Authors:

Yue Zhang (1498550856@qq.com)
Xiaowei Ding (m13262756120@163.com)
Changhong Miao (chen_xy@126.com)
Jiawei Chen (jiawei_chen@hotmail.com)

Version: 3 Date: 03 Jun 2019

Author’s response to reviews:

Editor Comments:

The second revision of the manuscript has significantly improved the introduction of the relationship among neural inflammation, BBB permeability and HIF-1α/VEGF/VEGFR2/ERK pathway. However, the current writing is not acceptable and requires heavy editing. Many parts are incomplete and lack a logical flow. Therefore, I strongly recommend getting a professional assistance to edit the manuscript.

Respond: Thank you for your valuable suggestions, we realized that we did not describe the results section clearly, completely, and logically. We have modified the manuscript, especially results section carefully.

Here are two examples to explain the comment “some descriptions are inaccurate or incomplete”:

1. The authors wrote “As shown in Fig 1A, we treated hCMEC/D3 cells with different concentrations of TNF-α (1, 5, 10, 50, 100ng/ml) for 8h, and observed that 10 ng/ml TNF-α could significantly decrease occludin expression.” However, the fact was that TNFa at 10, 25, 50 and 100 all significantly reduced occludin expression. 10 ng/ml was the minimal dose of TNFa to show significant effect. This point applies to all the results.
2. The authors wrote “Then we found that 5 μM LY3214996, the inhibitor of ERK, could significantly attenuate the effect of TNF-α on occludin expression (Fig. 3B).” However, Figure 3 also showed that pretreatment with LY3214996 did not affect TNFa-induced upregulation of Hif-1a and VEGF, which at least suggested that ERK was possibly downstream of Hif-1a and VEGF, if all these factors were involved in the modulation of occludin expression. This point also applies to all the results.

Minor points:

1. The word “could” should be removed from all the titles of the results and descriptions of the results. E.g. “TNF-α could decrease the expression of occludin in hCMEC/D3 cells”

Respond: Thank you for your valuable suggestions and we have made revision as suggested.

2. Figure legends: all the “Data was repressed” mean “Data were represented”?

Respond: We are sorry for the mistakes, and have corrected them.

3. Some “occludin” were mistakenly changed to “occluding” by the computer, I guess. Please double check throughout the manuscript.

Respond: we are sorry for our carelessness, and have corrected the spelling.