## #1

## SPECIFIC COMMENTS TO AUTHORS

I read the manuscript written by Hong Guo et al. with great interest. In my honest opinion, the topic is interesting and the observational studies novel enough to attract the readers' attention. Post-stroke depression is one of the common complications of stroke patients. patients with post-stroke depression in diabetes, requiring simultaneous treatment of blood glucose, depressive symptoms and neurological dysfunction. This study explores the clinical efficacy of hyperbaric oxygen therapy for stroke complicated with depression and diabetes mellitus, and to provide reference and basis for clinical treatment and development through the application of relevant rating scales and laboratory test indicators. The methods of data analysis are very clear, and the results are presented well. The manuscript is written clearly and I do agree with them about the limitations of retrospective studies.

## #2 SPECIFIC COMMENTS TO AUTHORS

Dear author, thank you for sharing your article. Your study is a well-written, good structured recommendation for the reference treatment of depression after diabetic stroke. The authors suggest that hyperbaric oxygen therapy can significantly improve depressive symptoms and neurological dysfunction in patients with poststroke depression, and reduce the levels of hypersensitive C-reactive protein, tumor necrosis factor  $-\alpha$  and fasting blood glucose, which is worthy of clinical promotion. The recommendations are beneficial for clinical use. Also, your article is good in grammar and scientific writing rules. The topic is actual and well described. Thank you for a useful and important synopsis of this important topic. In addition to hyperbaric oxygen therapy, is there any other way to assist escitalopram in the treatment of post-stroke depression? Could you add the discussion of differences between hyperbaric oxygen therapy and these methods? I recommend that the manuscript can be published after a minor editing.

## Dear editor

Thank you for your question. I have made the necessary revisions.

1.In addition to hyperbaric oxygen therapy, is there any other way to assist escitalopram in the treatment of post-stroke depression?

In addition to hyperbaric oxygen therapy, there are other methods that can also help treat post-stroke depression with escitalopram. For example, strategies to improve the effectiveness of depression treatment include changing antidepressants, adding another antidepressant, or strengthening treatment by adding another drug (such as atypical antipsychotics or lithium). Some non pharmacological forms of intensified depression treatment have been proven to be effective; They include cognitive behavioral psychotherapy, psychological education, aerobic exercise, Neuromodulation therapy through vagus nerve stimulation, electroconvulsive therapy (ECT), transcranial direct current stimulation (TDCS), repetitive transcranial magnetic stimulation (rTMS) or deep brain stimulation (DBS), and phototherapy.

2. Could you add the discussion of differences between hyperbaric oxygen therapy and these methods?

Compared to traditional treatment methods for depression, such as medication and psychotherapy, hyperbaric oxygen therapy is an unconventional treatment method. It alleviates symptoms of depression by increasing the concentration and pressure of oxygen in the body. Compared with medication, hyperbaric oxygen therapy does not have the side effects of medication and can quickly alleviate symptoms in a short period of time. However, hyperbaric oxygen therapy also has some risks and limitations that are not applicable to all patients. Therefore, it should be seen as a supplementary measure for the treatment of depression, rather than a substitute for traditional treatment methods.