Dear editor

We thank you very much for giving us an opportunity to revise our manuscript. We also appreciate the reviewers for the positive, constructive comments and suggestions on our manuscript entitled "Pilot study of genome-wide DNA methylation and gene expression for treatment response to escitalopram in panic disorder".

We read comments carefully and tried our best to revise the manuscript according to the comments. We hope these responses are helpful in revision of the manuscript. I am looking forward to hearing from you.

Best regards!

Yours sincerely,

Zhili Zou

Reviewer #1:
Scientific Quality: Grade B (Very good)
Language Quality: Grade B (Minor language polishing)
Conclusion: Minor revision
Specific Comments to Authors: This paper presents results from preliminary study of differentially methylated DNA positions to predict treatment response in patients with panic disorder. Drug choice and therapeutic monitoring are a major challenge for psychiatry in the era of psychopharmacology, a challenge much more tangible then it is for other clinical medical disciplines. Abstract provides meaningful summary of the findings. Methods appear to be appropriate given the aim of the study. Conclusions are based on data, limitations are duly acknowledged. Perhaps the authors may consider in the discussion broader interpretation of their results in the context of evidence based psychiatry: https://doi.org/10.1007/s13148-010-0014-2

Answer: Thank you for your suggestion, We have carefully read the paper you introduced, and added some interpretation of their results in the discussion. "These findings indicate that DMPs are potential peripheral predictors of antidepressant treatment response, and present an important opportunity to improve symptoms through prediction of medication response. Not only that, there is also some emerging evidence to suggest that PD patients have aberrant DNA methylations. Considering psychiatry as a medical discipline, a diagnosis identifying a disorder should lead to an effective therapy. Hence,

DNA methylation contributing to antidepressant response will be a unique and promising opportunity to implement personalized medicine in PD treatment. “

Reviewer #2:
Scientific Quality: Grade B (Very good)
Language Quality: Grade A (Priority publishing)
Conclusion: Accept (General priority)
Specific Comments to Authors: Zou et al. submitted a very interesting pilot study. This study aimed to compare genome-wide methylation and gene expression patterns between responsive and non-responsive patients with PD after 4 weeks of escitalopram treatment. Thirty patients with PD were enrolled in this study (responders = 13; non-responders = 17). A total of 701 differentially methylated positions (DMPs) were found between responders and non-responders ($|\Delta\beta| \geq 0.06$, $q < 0.05$), and the hyper- and hypomethylated CpG sites were 511 (72.9%) and 190 (27.1%) , respectively. The work of Zou et al. shows that DMPs might be associated with the treatment response to escitalopram in PD. This pilot study is suitable for a publication in a reputable journal because the authors' hypotheses are clinically relevant and have never been tested before. The conduct of the study as well as the text and the layout of the manuscript are not objectionable. It is a very carefully planned and described work. However, there are limitations with regard to the comparatively small sample size and the study design (pre-to-post-treatment design and long-term follow-up are missing). However, the authors discuss these limitations openly and critically in the Discussion and Conclusion paragraphs. I recommend publishing this study without significant changes if such a specific genetic topic is eligible for the WJP.

Answer: We appreciate for your positive, constructive comments and suggestions