Dear Dr. Wang,

RE: Manuscript NO.: 82905 Zhou et al. Experiences of Genetic Testing for Autism Spectrum Disorders among caregivers, patients, and health providers: a Systematic Review

Thank you very much for your consideration of our submitted paper above and for you email dated on March 1, 2023, detailing the issues relating to the paper.

We have now addressed all the comments from reviewers and the manuscript has been revised accordingly, highlighting the major changes. A list of the changes and the response to each point raised by the reviewers can be found in the attachment to this letter. We have also carefully checked the format again.

This revised manuscript has been submitted online. Please do not hesitate to contact us should you require further information. Thank you very much for your consideration. We look forward to hearing from you.

Yours sincerely,

Tao Li & Yamin Zhang

Response to the comments of Reviewer #1

1) "Diagnosis of ASD lacks subjective biomarkers and primarily relies on clinical observation and evaluation of individuals' behavioral and developmental characteristics" I think this should be: "Diagnosis of ASD lacks objective biomarkers and primarily relies on subjective parameters such as clinical observation and evaluation of individuals' behavioral and developmental characteristics"

Response: We have revised our manuscript according to your suggestions.

2) A background regarding the genetic polymorphisms associated with ASD may be added.

Response: We have added information about the genetic polymorphisms associated with ASD in the revised manuscript as follows.

"The estimated heritability of ASD ranges from 64% to 91% [7], and there are a large number of studies to elucidate the genetic mechanism of this disorder. Thousands of ASD risk genes carrying different kinds of mutations have been reported, such as rare *de novo* mutations, single nucleotide polymorphisms (SNPs), and copy number variations (CNVs) [PMID: 36038624, 30804558, 36368308]. There are several comprehensive databases that aim to summarize all ASD risk genes and SFARI Gene (gene.sfari.org) [8] is one of the most well-recognized. SFARI Gene features a ranking system that gives users an estimate of the strength of the evidence in favor of each gene. For example, there are 232 genes with high confidence, which means these genes have been clearly implicated in ASD."

3) There must be a clear distinction between the perspectives of the care givers and health care providers. These two groups cannot be merged under one heading.

Response: To make a clear distinction between caregivers and health care provides, we have divided each part in the results into two sections: 1) Parents and other caregivers, 2) Health providers.

Overall, the manuscript is the first study that systematically reviews caregivers', patients', and health providers' knowledge, experiences, and attitudes toward genetic testing for ASD. It must be considered for publication after a few minor changes.

Response to the comments of Reviewer #2:

The manuscript can be published at this stage.

Response: We thank the reviewer for the positive comments.