Author's response to reviews

Title: Massive parallel sequencing as a new diagnostic approach for phenylketonuria and tetrahydrobiopterin-deficiency in Thailand

Authors:

Pongsathorn Chaiyasap Chaiyasap (chaiyasap.p@gmail.com)

Chupong Ittiwut (chupongi@gmail.com)

Chalurmpon Srirachamthong1 Srirachamthong1 (chalurmpon_s@hotmail.com)

Apiruk Sangsin (oak7148@hotmail.com)

Kanya Suphapeetiporn (kanya_su@chula.ac.th)

Vorasuk Shotelersuk (vorasuk.s@chula.ac.th)

Version: 2 Date: 19 Aug 2017

Author’s response to reviews:

BMC Medical Genetics

August 19, 2017

Dear Editor,

Manuscript ID MGTC-D-17-00124R1 entitled “Massive parallel sequencing as a new diagnostic approach for phenylketonuria and tetrahydrobiopterin-deficiency in Thailand”

Thank you very much for carefully reviewing our manuscript and giving us very useful comments. We have made changes in the manuscript according to the reviewer/editor’s comments or suggestions as the followings:

Editor Comments:

This is an interesting report on use of NGS for molecular diagnosis of Phenylketonuria patients. Your attempt to use NGS for diagnosis of hyperphenylalaninemia is appreciable. The following changes are needed

Q1: There are some disparities with the written text and the legend to the figure given. In the text it is mentioned that patient II had novel mutation at a site which is conserved across species.
(Page 9, line 12-14). But in the table it is given that patient 2 has known mutations since rs id is given.

A1: Thanks to the editor, Patient II has two compound heterozygous missense mutations (c.155A>G and c.200C>T) in the PTS gene. Both have been previously reported. Patient III has two novel compound heterozygous missense mutations (c.274A>C and c.326A>G) in the PTS gene. We have revised the text and the legend to the figure 1B from “II” to “III”. Please see the revised manuscript on page 8, line 4 and the revised Figure 1.

Q2: Table 1: "DNA change" needs to be changed to "cDNA change"

A2: As kindly suggested by the editor, “DNA change” has been changed to “cDNA change”. Please see the revised Table 1.

Q3: English grammar needs to be checked at multiple places

A3: Thanks to the editor, the English grammar has been carefully checked throughout the manuscript.

All the changes suggested by the reviewer/editor were highlighted in yellow.

Thank you very much. We really appreciate all your kind assistance. We hope that it meets all the requirements of the journal.

Sincerely,

Kanya Suphapeetiporn, MD, PhD
Corresponding Author