Author's response to reviews

Title: Resequencing PNMT in European hypertensive and normotensive individuals: no common susceptibility variants for hypertension and purifying selection on intron 1.

Authors:

Katrin Kepp (katike@ut.ee)
Peeter Juhanson (c7pets@hot.ee)
Viktor Kozich (Viktor.Kozich@lf1.cuni.cz)
Mai Ots (Mai.Ots@klinikum.ee)
Margus Viigimaa (margus.viigimaa@regionaalhaigla.ee)
Maris Laan (maris@ebc.ee)

Version: 2 Date: 3 April 2007

Author's response to reviews: see over
To: Dr. Liz Hoffman  
Assistant Editor  
BMC-series journals  
*BMC Medical Genetics*  

Author’s response to reviews.

Re: MS# 6132484481225208  
Tartu, Estonia  
03.04.2007  

Dear dr. Hoffman,  
Dear reviewers,  

Thank you for reading and valuable comments for the manuscript submitted to *BMC Medical Genetics* by Katrin Kepp, Peeter Juhanson, Viktor Kozich, Mai Ots, Margus Viigimaa and Maris Laan “Resequencing *PNMT* in European hypertensive and normotensive individuals: no common susceptibility variants for hypertension and purifying selection on intron 1”.

We have modified the manuscript based on the suggestions of the two reviewers (dr. Comings – REV#1; Dr. Caulfield REV#2) and are submitting a revised version.

1. Typos have been corrected (REV #1).
2. The Abstract (p.2), Results (p.11) and Discussion (p. 15) have been improved by pointing out the higher frequency of heterozygotes for two *PNMT* promoter region polymorphisms (SNP-184; SNP-390) in the pooled sample of hypertensive individuals compared to the pooled control subjects (REV #1).

Reply to the REV#1 concerning the results from Fisher’s exact test for the difference in genotypic distribution of promoter region SNPs between normo- and hypertensives:

In the first version of the manuscript we conducted a case-control comparison only WITHIN a population: Estonian normotensives-Estonian hypertensives (25+25); Czech normotensives-Czech hypertensives (25+25). The non-significant outcome of this test might result from a limited sample size. In the revised version, we have additionally conducted a joint analysis of the Estonian and the Czech case/control samples (50+50), which showed in a significant excess of heterozygotes for the two *PNMT* promoter region SNPs among the patients, as also indicated out by the reviewer.
3. The power of the association test was increased by the joint analysis of the Estonian and Czech individuals (REV#2; see above)

4. The Discussion (p.15) has been supplemented with the comparison of the PNMT data with the GNMT gene coding for structurally and evolutionarily closest enzyme to PNMT (REV #2).

Reply to REV#2 concerning the suggestion to reform the paper as a short report:
We feel that the completeness of this study might suffer when some parts of it would be left out.

Yours sincerely,

Maris Laan,
Corresponding author
Research professor
Institute of Molecular and Cell Biology,
University of Tartu
Riia 23, 51010 Tartu, Estonia
phone: +372-7-375008,
fax: +372-7-420286
email: maris@ebc.ee