Review of: "Evidence of new intragenic HBB haplotypes model for the prediction of beta-thalassemia in the Malaysian population"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

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Let me congratulate all the authors for such nice piece of work on HBB SNPs and haplotypes. This is wonderful study, however i would suggest for improvement of the article by adopting recommendation given blow.

Minor allele frequency (MAF) for all SNPs and the corresponding sample sizes is given below, based on such information the power calculated is indicated against each SNP. Since the power against all the SNPs appears to be extremely low, hence interpretation and conclusion based on given data doesn't represent samples under study, thus conclusions can't be accepted as true picture of the data. Therefore, I recommend evaluation of HBB gene SNPs with increased sample size for appropriate power.

1. IVS2-74T>G

Sample size

Case= 119

Control=166

MAF

Case= (0.239)

Control= (0.283)

Power= 11.5%

2. IVS2-16G>C

Sample

Case= 178

Control=246

MAF

Case= (0.357)

Control= (0.420)

Power= 23.8%

3. IVS2-666C>T

Sample

Case= 179

Control=248

MAF

Case= (0.359)

Control= (0.423)

Power= 24%

4. 3'UTR + 233G>C

Sample

Case= 15

Control=26

MAF

Case= (0.030)

Control= (0.044)

Power= 3.6%

5. 3'UTR + 314G>A

Sample

Case= 46

Control=28

MAF

Case= (0.092)

Control= (0.048)

Power= 9.5%