Reviewer's report

Title: A possible role for miRNA silencing in disease phenotype variation in Swedish transthyretin V30M carriers

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Reviewer: Wenqiang Yu

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major compulsory revisions:

In this manuscript, Malin Olsson et al have identified those 3 SNPs on the TTR gene may contribute to the FAP phenotype. According to the rs62093482 SNP on 3'-UTR of TTR gene and prediction of binding sites changes for miRNA, the author proposed the hypothesis that miRNA may take some roles on the low penetrance and high age onset of the disease in Swedish patient population. The result sounds interesting and may help on understanding the mechanism of FAP. The author discover that 4 miRNA especially Hsa-miR-643 may be affected and contributed to the phenotype of FAP. In order to make this points clear the author need to do following experiments:

1. Make the construction placing 3 UTR of TTR WT gene and polymorphism downstream of report gene, transfecting this plasmid and Hsa-miR-643 to the cell line and find out whether the miRNA can make any difference on the report gene.
2. If possible, check the expression level of miRNA hsa-miR-643 and TTR gene in the FAP patient and controls which can make the points clear.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests