Reviewer's report

Title: Association of Retinol Binding Protein 4 and Transthyretin with Triglyceride Levels and Insulin Resistance in Rural Thais with High Type 2 Diabetes Risk

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Reviewer: Claudia Menzaghi

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In this paper Kwanbunjan and coworkers evaluated the association between RBP4 and TTR with triglycerides levels pre-diabetes and insulin resistance in a Thai population. They found that RBP4, TTR and HOMAIR are increased in subjects with high between triglycerides levels. The aim is sound and the results interesting, however I have several concerns as follow.

It is not really clear why the authors have decided to carry out a case control study for triglycerides levels. This point need clarification.

No data regarding gender are reported in the manuscript, however analyses are adjusted for age and gender. Please report these data.

The authors are talking about metabolic syndrome. What is the correlation between RBP4 and TTR with all the metabolic syndrome parameters? And with blood glucose and HOMAIR? And with a metabolic syndrome score?

In Table 3, according to the title, it is reported the association between RBP4, TTR and HbA1c, but there are no data regarding HbA1c.

My major concern is about analyses reported in Table 3. In fact the risk of having high triglycerides levels according to RBP4 and TTR quartile distribution is obtained in very small subgroups of subjects, so I suggest to use great caution in describing this result and consider this as a pilot study that need replication in a much larger population.

Are the methods appropriate and well described?

If not, please specify what is required in your comments to the authors.

Yes
Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
No

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I am able to assess the statistics

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