Reviewer's report

Title: ANGPTL4 variants E40K and T266M are associated with lower fasting triglyceride levels in Non-Hispanic White Americans from the Look AHEAD Clinical Trial

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Reviewer: Yvonne Böttcher

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ANGPTL4 variants E40K and T266M are associated with lower fasting triglyceride levels in Non-Hispanic White Americans from the Look AHEAD Clinical Trial

The presented article by Melissa C Smart-Halajko describes effects of two ANGPTL4 non-synonymous variants E40K and T266M on triglyceride levels in T2D. The authors used for their investigations the Look AHEAD population and included in their study 2708 type 2 diabetes individuals. The revised manuscript benefits from a clear presentation of the working hypothesis and a well structured re-written discussion. The revised version is therefore now generally well-written. The authors answered most of the questions adequately. However, some issues need to be considered before publication.

Major comments:

1. the reviewer is afraid the authors are confused about definition of linkage disequilibrium (LD). Since $r^2$ is relevant for association studies $r^2 = 0.05$ is no linkage at all. Therefore, it is not clear to the reviewer why the authors talk about partial linkage. Please correct this.

2. Table 2 still shows genotype frequencies, not allele frequencies as explained in legend.

3. How many of the individuals are on lipid lowering medication?

Minor comments:

1. Please present SI units throughout the entire manuscript.

Level of interest: An article of outstanding merit and interest in its field

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.