Title: WWOX gene is associated with HDL cholesterol and triglyceride levels

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Author's response to reviews:

Dear editor:

Thank you again for further considering our article for being published in BMC Medical Genetics.

Find below the reply to the referees.

Looking forward hearing from you, sincerely

María Eugenia Sáez, PhD.

Referee 1. No additional comments.

Referee 2. The main objective of the genome wide screening was to establish the genetic structure of the Spanish population. This article has been recently published in another BMC journal (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2887418/). As a secondary objective, we use these data to replicate previously associated genes that we consider interesting, such as WWOX. The sample size is modest and probably underpowered for the identification of new susceptibility variants (only one SNP resist whole genome correction), so we will not publish the whole association analysis unless we have a replication population. This is in the same line of your second comment regarding the possibility of false positives. It is possible of course that some of the reported associations have arisen by chance as esated in our discussion (that have been reinforced in this point). Several linkage and association studies have pointed toward WWOX gene, but associated SNPs differ between them. Are them true? Are these new true?. We don't know and in the light of some recently published articles (Dickson et al., 2010; Fellay et all, 2010), perhaps they are only tracking unobserved disease alleles. We agree in the need of additional replication in independent populations; our article
represent an independent analysis of WWOX in an different population that the one in which the WWOX association with cholesterol was discovered.