Reviewer’s report

Title: The association of 9p21-3 locus with coronary atherosclerosis: A Systematic Review and Meta-Analysis

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Reviewer: Alexandre Stewart

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The manuscript by Munir et al. examines the relationship between the 9p21.3 locus and various phenotypes associated with coronary atherosclerosis in a systematic meta-analysis. The questions addressed were whether the 9p21.3 risk variant associates with the severity of coronary artery disease and whether the 9p21.3 variant predicts adverse clinical outcomes in those with documented coronary artery disease.

There have been many studies examining this question, and a recent report by Chan et al. in JACC in 2013 has provided a larger collaborative meta-analysis to address these questions. Munir et al. find essentially the same result as reported by Chan et al. except that they claim to report, for the first time, an association of the risk allele with elevated (modified) Gensini index. This is factually incorrect as stated. Dandona et al. (JACC, 2010) were the first to report an association between the 9p21 risk allele and Gensini index. The authors should state instead: “Our meta-analysis is the first to confirm an association between the 9p21.3 HR genotype and a higher Gensini score”. The authors should also be careful not to associate the 9p21.3 locus with risk of a given phenotype, but rather the 9p21.3 risk allele with risk of a given phenotype.

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

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I have no competing interests.