Reviewer's report

Title: Variable number of tandem repeat polymorphisms of the interleukin-1 receptor antagonist gene IL-1RN: a novel association with the athlete status.

Version: 1  Date: 6 December 2009

Reviewer: Yannis Pitsiladis

Reviewer's report:

Major Compulsory Revisions:

Methods: As currently presented, the exact caliber of the studied athletes is unclear. It is of some concern that athletes may be of a fairly heterogeneous background both in terms of caliber of athlete (3rd division football) and specialism (i.e. primarily aerobic or anaerobic event as noted from Table 1 in the results section). Given the statement that some 53 of the 205 athletes were of “high-grade” status this study is clearly under powered (if one also considers gender).

Minor Essential Revisions:

Abstract: mention of medical conditions in the abstract not appropriate as far too speculative.

There is no reason for the use of the term “white” in the introduction as colour of skin has little relevance. The ethnicity of the subjects can be mentioned in the methods. It would aid the understanding of the rationale of the study if the type of athlete was mentioned in the introduction (as apposed to colour of skin). The use of the term European would suffice for the methods section.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

'I declare that I have no competing interests'