Reviewer’s report

Title: Genetic effect of CysLTR2 Polymorphisms on its mRNA synthesis and stabilization

Version: 2 Date: 2 March 2009

Reviewer: Mayumi Tamari

Reviewer’s report:

Shin and colleagues reported genetic effect of CysLTR2 polymorphisms on its mRNA synthesis, stabilization, and protein expression.

I have following comments.

In introduction, the author described that CYSLTR2 is expressed in lung interstitial macrophage, pulmonary vascular smooth muscle, endothelium, eosinophils, and mast cells. However, in the present study, mRNA expression, DNA binding affinity, and luciferase analyses were conducted in B cell lines. The authors should describe the role of CYSLTR2 in B cells in aspirin hypersensitivity in asthmatics. Functional studies using monocytes or macrophages may strengthen the genetic effects of the variants.

In discussion session, several descriptions overlap with those in result session. To demonstrate the generalizability of the study results, it would be better to explain about linkage disequilibrium information among the three SNPs with actual D’ and r2 values and allele frequencies in several ethnic populations. Explanations for the roles of CYSLTR2 in other diseases would be helpful for readers.

Addition of rs numbers to the three SNPs would be helpful for readers.

Level of interest: An article of limited interest

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