Reviewer’s report

Title: Evaluation of the toll-like receptor 6 Ser249Pro polymorphism in patients with asthma, atopic dermatitis and chronic obstructive pulmonary disease

Version: 1 Date: 3 July 2005

Reviewer: Augusto Litonjua

Reviewer’s report:

General
The authors submit a revised version of a manuscript that studies the association between the Ser249Pro SNP in TLR6 and asthma, COPD, and atopic dermatitis. The major flaw that I had pointed out in the first version was that the control group of non-asthmatic adults was not an appropriate control group to be compared with the cases of childhood asthmatics, which was the only statistically significant finding. The authors respond that they specifically chose adults for the control group because “the risk remains very high for asymptomatic children to develop an allergic disease during childhood or even adulthood.” Thus, they argue that a control group composed of children would only be valid if they were “followed to adulthood to verify that they do not develop an allergic disease later on.” However, this logic should also be applied to the pediatric asthma cases.

The natural history of asthma is complex, but involves remission of disease. In one of the articles that the authors cite (reference # 24, De Marco et al), the overall remission rate for childhood asthma was found to be 45.8%. Thus, they would need to follow the pediatric cases to adulthood to make sure that their asthma does not remit. Alternatively, some of the adult controls may have had “asthma” as a child, but not as an adult. Either way, I do not feel that the authors make a convincing enough case to reverse my original opinion that the controls are not appropriate for the childhood asthma cases.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Reject because scientifically unsound

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests.