Reviewer's report

Title: The CTLA4 variants may interact with the IL23R- and NOD2-conferred risk in development of Crohn's disease

Version: 1 Date: 24 December 2009

Reviewer: Bing Xia

Reviewer's report:

Hradsky et al investigated 6 polymorphisms of the CTLA4 gene in 333 Czech patients with Crohn’s disease and 482 unrelated healthy Czech controls. No associations with Crohn’s disease were found for the tested variants under the log-additive or dominant models. The haplotype of minor variants of three SNPs (ATG) significantly decreased the risk of Crohn’s disease on the background of high-risk 1007fs NOD2 genotype, and was associated with the age of diagnosis and with the ileal form of the disease. It is an interesting paper. However, there are several questions raised for the manuscript:

Major:
1. Since the patients with Crohn’s disease in the paper pooled pediatric and adult, does a difference exit between pediatric and adults in distribution of CTLA4 genotypes or other genotypes?
2. Table 1 only shown data of the patients, not healthy controls. Please put data of the healthy controls.

Minor:
1. In discussion part please explain discrepancy of your results with other studies as well as limitation of your study.
2. Crohn’s disease is one form of inflammatory bowel disease. Several papers have shown association between CTLA4 genotypes with ulcerative colitis. Have you genotyped ulcerative colitis and compare differences of genotypes among ulcerative colitis and Crohn’s disease and healthy controls.

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.