Reviewer's report

Title: Beta2-Adrenergic receptor promoter haplotype influences the severity of acute viral respiratory tract infection during infancy: a prospective cohort study

Version: 1 Date: 27 April 2015

Reviewer: Lahcen WAKRIM

Reviewer's report:

Summary:
This report documents whether #2-Adrenergic receptor (ADRB2) polymorphisms associated with a response to asthma therapy during an asthma exacerbation is also associated with the severity of viral respiratory infections during infancy. Despite the small size of the studied population, this report has value since it demonstrate that genotype may be predictive of severity of acute respiratory tract infections and allow to potentially identify a subset of infants who may respond to beta-agonist therapy.

1- Major Compulsory Revisions
The authors divided the studied population into two ethnic groups, Caucasians and African Americans, without explaining the raison of this separation. If there is a valid reason, they should be based on this difference to discuss their findings that promoter haplotype CCA was associated with a decreased BSS in African Americans while in Caucasians, no similar protective relationship was identified.

2- Discretionary Revisions
Authors should have included in their study a control population consisting of infants who have the same eligibility conditions and visited the hospital for other diseases than presumed viral bronchiolitis or respiratory tract infection. I think this control population could strengthen the associations between the genetic variants in ADRB2 and the severity of infant acute respiratory viral infections.

3 - Minor Essential Revisions
The following references: 9-10-11-12-15-20-21-22-25-26-27-29-32-38 and 45 must be removed from the list of references. They are not mentioned nowhere in the manuscript.

Level of interest: An article of outstanding merit and interest in its field

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