Reviewer’s report

Title: Prescription of respiratory medication without an asthma diagnosis, not just in young children: a population based study.

Version: 1 Date: 18 October 2007

Reviewer: Tuomas Jartti

Reviewer’s report:

The paper reports prescription of asthma medications with and without an asthma diagnosis in children. This is an important subject since many children are treated with asthma medications, as the paper states, even 35% of children <3yrs of age had ICS. There is obvious discrepancy between the treatment and diagnosis of asthma in children, surprisingly still in school-aged children as the paper states. The paper is well written. The data is sound and well controlled, limitations are appropriately discussed. The manuscript adheres to the relevant standards for reporting and data deposition.

Major Compulsory Revisions

1. The topic is up-to-date and well-defined, but different wheezy phenotypes need more attention. Most of young wheezers have transient or self-limiting disease. One or two sentences would suffice in the introduction or discussion.

2. The methods are appropriate and well described, but on-line repository material is needed about definition of “doctor-diagnosed asthma”.

3. Conclusions are correct and adequately supported by the data. Discussion follows strictly the results, but I think it needs a bit broader view. Especially, the high prevalence of ICS in young children needs more attention. To begin with, introduction section of the paper needs numbers (%) about the prevalence of different wheezing illnesses/phenotypes. In the discussion section, it should be shortly stated what the guidelines say about the treatment of these early/recurrent wheezers. Finally, is the observed prevalence of treatments in balance with the prevalence wheezing illnesses and suggested treatments in the guidelines. The numbers of systemic corticosteroid courses should be added if they are available and discussed.

4. Tables are clear and informative. Although Fig. 1 is informative, the definition of doctor-diagnosed asthma is not clear, is it limited to physician visits during the past year etc., I think “asthma ever and symptoms within 12 months” or something like it would be more clear, since asthma by its definition is a chronic illness.

5. The paper should start with shortened version of the international definition of asthma, emphasis on the chronic inflammatory nature of illness and its association with recurrent typical airway symptoms / exacerbations.

6. More patient characteristics available for Table 1, e.g. allergies, parental
asthma, pet ownership…?

Minor Essential Revisions
7. The title: I would just use … asthma diagnosis in children, i.e. omit “not just” and “young”

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance 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