Reviewer’s report

Title: Ever dispense of prescribed allergy medication in children growing up close to traffic: a registry-based birth cohort.

Version: 2 Date: 24 July 2015

Reviewer: Christopher Codispoti

Reviewer’s report:

Major Compulsory Revisions:
1. Statistical analysis: The authors’ perform a 4-step process to develop their model. The first step is fine for reducing the variables. The subsequent steps 2-4 of Backward, then Forward and finally stepwise regression seems excessive and lead to an erroneous final model. Why not just use Best-subsets method of model selection? Please ensure the current method has been approved by a biostatistician. The manuscript should go under statistical review for accuracy.

2. Generalizability: Given the linkage to a pharmacy registry, this study could not be replicated in a country without a socialized healthcare model. Thus, while interesting, this study could not be easily reproduced in countries that do not have socialized healthcare model.

3. Assumptions: It is an assumption of the author’s that “most parents are likely to go to a doctor first time their children have allergic symptoms.” This is certainly not accurate in the USA, and the author’s do not provide any evidence to support this statement.

Minor Essential Revisions:
1. Month of completion of capture of live births in 2010: All children born beginning in JULY 2005 are specified, but what month in 2010 was the cut-off for ending collection.

2. Use “non-specific” instead of “unspecific” on line 141 of page 6

3. Font characters: There appears to be some problems with font on:
   a) Page 2, lines 32-33
   b) Page 13, line295

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

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