Reviewer’s report

Title: Association between second-generation antipsychotics and newly diagnosed treated diabetes mellitus: does the effect differ by dose?

Version: 4 Date: 7 September 2011

Reviewer: Lars Kessing

Reviewer’s report:

I still have some comments that have to be considered:

Major Compulsory Revisions:

1. The authors should make an analysis for each antipsychotic drug in which it is tested whether there is an effect of dose resulting in a p-value in relation to each drug and add the results to Table 2.

2. The conclusion in the abstract should be revised. The authors have not tested that “aripiprazole and ziprasidone were not associated with significant risk of diabetes…” as they have not presented analyses of this but only analyses within each drug of dose relationships. In fact such analyses would require that a reference drug was chosen, which they did not. The sentence should be deleted.

3. The authors should state under limitations that polypharmacy, which they did not take into account, may have affected the results in unpredictable ways. A prior study has shown that polypharmacy of antipsychotics increases the risk of developing diabetes. Thus, it cannot be excluded that polypharmacy is rare with especially aripiprazole due to interactions with other antipsychotics causing akathesia.

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.