Author's response to reviews

Title: Prevalence of Metabolic Syndrome in Patients with Schizophrenia, and Metabolic Changes after 3 Months of Treatment with Antipsychotics - Results from a German Observational Study

Authors:

   Susanne Kraemer (kraemer_susanne@lilly.com)
   Anette Minarzyk (minarzykan@lilly.com)
   Thomas Forst (thomasf@ikfe.de)
   Daniel Kopf (dkopf@bethanien-heidelberg.de)
   Hans-Peter Hundemer (hundemer hans-peter@lilly.com)

Version: 2  Date: 14 September 2011

Author's response to reviews: see over
Authors’ response to the Reviewer of

Prevalence of Metabolic Syndrome in Patients with Schizophrenia, and Metabolic Changes after 3 Months of Treatment with Antipsychotics - Results from a German Observational Study

Reviewer: Davy Vancampfort

Introduction

Comment:
1.) Page 3, line nr 9-13: The authors mention that further factors associated with schizophrenia, like unhealthy diet pattern, smoking, and poor living conditions certainly add to the finding that these patients, in particular those on antipsychotics, have a higher risk to develop metabolic syndrome (MetS) than the general population. A number of more recent and relevant papers than the ones presented are available which could be included in order to strengthen your statement:

Action:
We thank the reviewer for these important suggestions and included the proposed publications into the manuscript. (see manuscript page 3, section1 “Background” and reference list.

Comment:
2.) The authors could also add that genetic factors should be considered here. See for example: van Winkel, R., Moons, T., Peerbooms, O., et al., 2010b. MTHFR genotype and differential evolution of metabolic parameters after initiation of a second generation antipsychotic: an observational study. Int Clin Psychopharmacol. 2010;25(5):270-276

Action:
Following the reviewer’s advice, we mentioned the fact that genetic factors can be involved when patients develop a metabolic burden during treatment with antipsychotics, referring to the publication he suggested. (See manuscript page 3, section1 “Background”, and reference list.)

Comment:
3.) In the introduction two aims are presented: the first one was to investigate the prevalence of MetS in schizophrenia patients in Germany, while the second was to assess prevalence of MetS at month-3 of treatment with different antipsychotic medications. In the methods-section a third objective was however presented: to detect predictors for the development of the MetS. Please add this third aim also in the introduction.

Action:
According to the reviewer’s advice a sentence was added to (manuscript page 4; section1 “Background”).
Methods
Comment:
1.) The authors state that candidate covariates entered in the forward selection process were not pre-screened based on the results of univariate analyses, all of them were considered. Tested covariates (both visits) included: age, sex, time since first symptoms, any concomitant somatic diseases (yes/no), any concomitant non-psychiatric medication at baseline (yes/no), Prev-AP cohort (reference category: Prev-None), active smoker (yes/no), CGI-S score at baseline, CRP # 3 mg/l (yes/no), and HbA1c # 6.5% (yes/no). Since you included both in-and outpatients, I suggest to include this difference in setting as well as a co-variate.

Answer:
In our opinion a post-hoc analysis including type of medical facility of treatment (in-patient or out-patient) as a covariate would not be feasible, as 632 patients of all the patient population (N=642) were out-patients. Three patients were missing medical facility information. The number of patients with an in-patient status was only 7. As we have limited number of patients within the covariate level 'in-patient', adjustment for this covariate in the analysis would not be feasible. Also, including medical facility as a covariate in the model would not provide any meaningful explanation on the association between medical facility and metabolic syndrome i.e. any conclusions such as hospitalized patients have increased metabolic syndrome vs. out-patients is not meaningful, as we are not capturing all the other relevant factors associated with hospitalization.

Comment:
2.) Page 6, line 10: Reference 21 seems not a good one to refer to HbA1c as an assessment of long term glucose regulation.

Action:
According to the reviewer`s recommendation we changed the citation for Larsen et al 1989, who directly discuss the value of HbA1c as an instrument for the control of glucose over time. (See manuscript page 6, section1 “Methods”, and references.)
Other editorial requirements:

Title page: Please include a title page in the manuscript file. This should contain; Title, Author list, Affiliations (department names, institution name, street name, city, zip code, country), email addresses. The author list and email addresses must be identical in the manuscript file and on the submission system, and it must be clear which affiliation pertains to each author.

Answer
The authors affiliation and e-mail addresses have been added to the title page.

Structure: Please check the instructions for authors on the journal website to ensure that your manuscript follows the correct structure for this journal and article type.

Answer
The article has been restructured according to the instructions for authors of BMC psychiatry.

Tables: Please ensure that the order in which your tables are cited is the same as the order in which they are provided. Every table must be cited in the text, using Arabic numerals. Please do not use ranges when listing tables. Tables must not be subdivided, or contain tables within tables. Please note that we are unable to display vertical lines or text within tables, no display merged cells: please re-layout your table without these elements. Tables should be formatted using the Table tool in your word processor. Please ensure the table title is above the table and the legend is below the table. For more information, see the instructions for authors on the journal website.

Answer
Tables have been re-formatted deleting all shadings, all vertical lines, and most horizontal lines for better readability and reproduction. A legend including abbreviations has been added to all Tables.

Figure titles: All figures must have a figure title listed after the references in the manuscript file. The figure file should not include the title or number (e.g. Figure 1... etc.). The figures are numbered automatically in the order in which they are uploaded. For more information, see the instructions for authors.

Figure cropping: It is important for the final layout of the manuscript that the figures are cropped as closely as possible to minimise white space around the image. For more information, see the instructions for authors.

Answer
The figure has been reformatted and cropped. The figure legend has been deleted from the figure itself and has been added in the appropriate place in the manuscript text.