Reviewer’s report

Title: Colon cancer patients with a serious psychiatric disorder present with a more advanced cancer stage and receive less adjuvant chemotherapy - A Nationwide Danish Cohort Study
Running title: Are psychiatric patients with colon cancer oncologically undertreated?

Version: 0 Date: 08 Aug 2018

Reviewer: Stefano Rosso

Reviewer's report:

The study's results showed a weak association of previous psychiatric disorders and a possible delay in the diagnosis or in treatment of CC patients.

However, the selection of the cohort in the study may have led to a selective removal of psychiatric patients at the very beginning. Indeed, removing patients not alive 30 days after surgery may have removed proportionally more psychiatric patients with more severe initial conditions, including a delayed diagnosis. A quick-&-dirty chi-square test on the 44 over 466 psychiatric patients versus 1659 over 29897 reference patients showed a statistically significant unbalance.

Authors did not provide details and justification about the model (type, fit, diagnostics, etc) used for controlling confounding effects and how it was built. From text and table it can be inferred that controlling variables were all included without further scrutiny. Given the characteristics of used variables (socioeconomic status and education, or cancer stage and co-morbidity) a certain degree of collinearity could be present (and partly explaining results). Furthermore, estimated coefficient correlation matrix or an appropriately set (with tetrachoric, polychoric, point-biserial-multiserial or pearson coefficients when the case) correlation matrix provided in supplement material could help in evaluating the presented model.

Minor comments:

Analysis section (page 8 second paragraph): "The distribution of the cancer treatment by pre-existing psychiatric disorders status was provided". Where?

Page 10, last forth lines: The OR adjusted for age, gender, comorbidity index score, cancer stage, socio-economic position, and educational level is provided". Where?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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