Response to Reviewer 1:

Dear reviewer, we thank you for reading our manuscript carefully and providing constructive comments that we could integrate in the paper. We made changes in the manuscript accordingly and provided a point-by-point reply below.

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors:

1. It is a well-conducting systematic review, in which the authors explore the important underappreciated psychiatric comorbidity in cancer survivors and the prevalence of these comorbidities, with implications for clinical interventions in relevant populations.

We thank the reviewer for this evaluation.

2. Should "prevalence" be added to the key words. We added "prevalence" to the key words.

3. Page 12/35"This is in contrast to the general population, where the prevalence of anxiety disorders is lower than that of depression [33]." Description may be inconsistent with most studies and suggested revision. In the general population, the prevalence of anxiety disorders is usually higher than that of depression. For example, data from the Huang Yueqin (2019) epidemiological survey shows that anxiety disorders are the most common mental disorder in China. Even in the WHO (2017) data, the prevalence of anxiety disorders is higher than that of depression in the United States.

We reviewed the statistics and changed the sentence to the following: Similarly, data on anxiety disorders among U.S. adults showed a higher prevalence than the prevalence of depression³³.

Response to Reviewer 2:

Dear reviewer, we thank you for reading our manuscript carefully and providing constructive comments that we could integrate in the paper. We made changes in the manuscript accordingly and provided a point-by-point reply below.

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Accept (High priority)

Specific Comments to Authors: Thank you for the opportunity to review "Psychiatric comorbidities in cancer survivors across tumor subtypes: a systematic review" ID 71234. The authors present a well-organized and interesting paper about cancer survival and post-cancer mental-morbidity taking into account anxiety, depression, comorbid anxiety and depression and PTSD, worthy of publications with some minor changes.

We thank the reviewer for the positive evaluation of our paper.

See the reviewer feedback in the itemized checklist below:

1 Title. Does the title reflect the main subject/hypothesis of the manuscript? Yes

2 Abstract. Does the abstract summarize and reflect the work described in the manuscript? The search mesh is redundant and described in the methods and could be replaced in the abstract by the overall papers found and then those entering review in addition to the databases searched. The abstract has been modified accordingly.

- 3 Key words. Do the key words reflect the focus of the manuscript? Yes
- 4 Background. Does the manuscript adequately describe the background, present status and significance of the study?
- 1) No. There is an emergent body of information not taken into account. The authors are examining a form of temporal hyper-morbidity: Modern definitions of morbidity could be referenced (Jakovljevic M, Ostojic L. Comorbidity and multimorbidity in medicine today: challenges and opportunities for bringing separated branches of medicine closer to each other. Psychiatr Danub 2013; 25(suppl 1): 18–28. [PubMed] [Google Scholar])

This information has been included accordingly in the introduction.

2) This statement is inaccurate: "Studies have examined psychiatric comorbidities in cancer survivors, mostly restricted to one specific kind of cancer." For example https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6020283/ AND (Zhu J, Fang F, Sjolander A, Fall K, Adami HO, Valdimarsdottir U. First-onset mental disorders after cancer diagnosis and cancer-specific mortality: a nationwide cohort study. Ann Oncol 2017; 28: 1964–9. [PubMed] [Google Scholar]) AND https://pubmed.ncbi.nlm.nih.gov/27427856/

We modified the statement which now reads: Over the last decades, the examination of psychiatric comorbidities in cancer survivors has become a growing research field. According to several studies, each tumor type can have an impact on the risk of developing a psychiatric comorbidity.

5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail?

- 6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field?
- 7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently?
- 8 Illustrations and tables. Are the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? Do figures require labeling with arrows, asterisks etc., better legends?
- 9 Biostatistics. Does the manuscript meet the requirements of biostatistics? tables 3-5 (Prevalence) could be combined and rank ordered form highest to lowest (if possible). We combined the tables as suggested and ordered the studies according to the tumor type.
- 10 Units. Does the manuscript meet the requirements of use of SI units? n/a 11 References. Does the manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections? No see #4 above Please see response to point 4.

Does the author self-cite, omit, incorrectly cite and/or over-cite references? No

- 12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? Very well written.
- 13 Research methods and reporting. Authors should have prepared their manuscripts according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) Case report; (2) CONSORT 2010 Statement Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines Basic study. Did the author prepare the manuscript according to the appropriate research methods and reporting?

Yes. However, tables 3-5 (Prevalence) could be combined and rank ordered form highest to lowest (if possible).

Please see response to point 9.

14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics? Uncertain – no ethics certificate was provided, but this was a review of secondary information so is not likely required.

Indeed, no human study was performed for this systematic review; therefore, no ethics approval was necessary/obtained.

Response to the Editorial Office's comments:

Dear Science Editor, dear Editor-in-chief, we thank you for reading our manuscript carefully and providing us with constructive feedback that we applied to the manuscript and made changes accordingly.

(1) Science editor:

An interesting study with an accurate methodology. The authors explored important underrecognized psychiatric comorbidities among cancer survivors and the prevalence of these comorbidities. Nevertheless, there are a number of points that may deserve some revisions. The discussion of the manuscript can be carried out more fully. Supplement the possible mechanism and treatment of other related tumor patients suffering from psychosis at the same time.

Dear Science editor, thank you very much for reading our manuscript and providing insightful comments. Our focus was on four common types of psychiatric comorbidities in cancer survivors, therefore we did not include the occurrence of psychosis as a comorbidity after a cancer diagnosis since psychosis is extremely rare in cancer survivors. Furthermore, psychosis may be more likely during the course of cancer treatment than the subsequent time of survivorship. We included this aspect in the limitation section.

Language Quality: Grade B (Minor language polishing)
Scientific Quality: Grade B (Very good)

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Psychiatry, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content.

Dear company editor-in-chief, thank you very much for reading our manuscript and giving constructive feedback. We edited the figures and organized them to a single PowerPoint file. Furthermore, we edited the tables to conform to the WJP editing specifications.