Thank you for your precious comments. It is very helpful to improve my article. And thank World Journal of Methodology gives me the opportunity to revise my research. According to your suggestions, we have revised it. Hopefully it can reach WJM requirement.

Best Regards

Sincerely yours

Xiangke Niu

COMMENTS:

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: Dear Authors, Your paper titled "Mapping research trends of transarterial chemoembolization for hepatocellular carcinoma from 2012 to 2021: a bibliometric analysis" provides a comprehensive analysis of scientific publications on transarterial chemoembolization (TACE) for the treatment of hepatocellular carcinoma (HCC) from 2012 to 2021. The study aims to identify research trends, collaboration patterns, and key topics in the field of TACE for HCC. The original findings of this manuscript include the analysis and visualization of scientific results and research trends in transarterial chemoembolization (TACE) treatment for hepatocellular carcinoma (HCC) from 2012 to 2021. The study identified the countries, institutions, authors, journals, and keywords that were most prominent in this field during the specified time period. It also revealed the increasing trend of international collaboration in TACE for HCC and highlighted the important themes and research topics in this field. The study focused on conducting a bibliometric analysis rather than hypothesis-driven research. The study relied on analyzing and visualizing existing scientific literature to identify trends and patterns in TACE treatment for HCC. The study did not conduct experiments to confirm hypotheses. As mentioned earlier, it focused on bibliometric analysis rather than hypothesis-driven research, so there were no specific hypotheses to confirm through experiments. Overall, the paper provides a comprehensive analysis of the research trends and collaboration patterns in the field of TACE for HCC. It offers valuable insights for researchers interested in this area and highlights

the importance of practice guidelines, targeted therapies, and prediction of treatment outcomes. The Authors adequately discuss the results and provide insights into the findings, appropriately highlighting the increasing trend in the number of publications, the leading countries and institutions in terms of productivity, collaboration patterns, and the most productive journals. The identification of hotspots and emerging research topics, such as the prediction of TACE treatment and the use of propensity score matching, adds depth to the analysis. The paper could benefit from some improvements and clarifications. Firstly, the paper does not explicitly state the inclusion and exclusion criteria for selecting articles from the Web of Science database. It would be helpful to provide details on how the articles were screened and selected to ensure the transparency and reproducibility of the study. Secondly, while the paper discusses the highly cited articles and their characteristics, it would be useful to provide a brief summary or key findings of these articles to give readers an overview of the influential studies in the field. Additionally, the discussion section could be expanded to provide more context and interpretation of the results. The authors could discuss the implications of the findings for clinical practice, research directions, and potential areas for future investigation in the field of TACE for HCC. Finally, it would be beneficial to include limitations of the study and address any potential biases or shortcomings in the methodology or data analysis. This would enhance the transparency of the research and help readers better understand the scope and validity of the findings. Overall, the paper provides a valuable bibliometric analysis of the research trends in TACE treatment for HCC. With some improvements and clarifications, the paper has the potential to make a significant contribution to the field.

Firstly, the paper does not explicitly state the inclusion and exclusion criteria for selecting articles from the Web of Science database. It would be helpful to provide details on how the articles were screened and selected to ensure the transparency and reproducibility of the study.

Response to Rev. 1, comment 1.

Thank you for your compliments.

We thank the reviewer for this important comment. We have added the inclusion and exclusion criteria for selecting articles, please check the Data sources and search strategies section: " Inclusion criteria included: articles from peer-review journals; written in English. We also excluded reports, books or book chapters, conference proceedings, dissertations, theses, expert opinion, commentaries, editorials, and letters. We excluded 102 studies from the list after removing duplicates because they failed all inclusion criteria or met at least one exclusion criterion"

Secondly, while the paper discusses the highly cited articles and their characteristics, it would be useful to provide a brief summary or key findings of these articles to give readers an overview of the influential studies in the field.

Response to Rev. 1, comment 2.

We thank the reviewer for this important comment. We have added the new sentence to describe the highly cited articles: "In summary, these studies introduce the positive results of recent randomized clinical trials, and describe targeted therapy combination regimens for patients with intermediate stage HCC"

Additionally, the discussion section could be expanded to provide more context and interpretation of the results. The authors could discuss the implications of the findings for clinical practice, research directions, and potential areas for future investigation in the field of TACE for HCC.

Response to Rev. 1, comment 3.

We thank the reviewer for this important comment. We have added the new paragraph to discuss the implications of the findings for clinical practice, research directions, and potential areas for future investigation in the field of TACE for HCC. Please check the discussion section: TACE is also used to downstage before hepatectomy or as bridging therapy in patients before liver transplantation in advanced-stage tumors. However, prior to considering TACE as a treatment option in patients with unresectable HCC, the patient's risk profile, comorbidities, and treatment prognosis and benefits should be taken into account in order to improve overall survival and minimize the occurrence of adverse events. Notably, in addition to the traditional TACE monotherapy, some researchsrs are now focusing on TACE-based combination therapies, such as the combination of TACE and tumor thermal ablation, the combination of TACE and radiotherapy, and the combination of TACE and systemic therapeutic agents. However, further research is needed to determine which combination therapy is more cost-effective in prolonging patient survival.

Finally, it would be beneficial to include limitations of the study and address any potential biases or shortcomings in the methodology or data analysis. This would enhance the transparency of the research and help readers better understand the scope and validity of the findings.

Response to Rev. 1, comment 4.

We thank the reviewer for this important comment. We have added the new paragraph to address the shortcomings in the methodology or data analysis. Please check the discussion section: "The present study also has some limitations. First, we only included articles published in English in WoS; therefore, not all publications were considered and the number of citations may have been underestimated. Second, CiteSpace only analyzed the main findings of the studies rather than reviewing the full text; therefore, some important information may have been overlooked. Finally, our results only reflect the current status of TACE in HCC, as data usually change over time."

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: The study titled "Mapping Research Trends of Transarterial Chemoembolization for Hepatocellular Carcinoma from 2012 to 2021: A Bibliometric Analysis" provides a comprehensive analysis of research trends in the treatment of hepatocellular carcinoma (HCC) using transarterial chemoembolization (TACE). The study employs robust methodology, including publication trends, collaboration between countries/institutions/authors, and the co-occurrence of keywords, keyword bursts, and references to identify key research areas, influential articles, and collaborations in the field. The findings offer valuable insights into the global scientific landscape of TACE for HCC and have the potential to inform future research directions, clinical practice, and policy decisions. Overall, this study contributes significantly to the understanding of TACE for HCC and provides a solid foundation for further research in this area. I have some suggestions. The authors included the terms TS = (Hepatocellular Carcinoma OR HCC OR Liver Cancer OR Liver Neoplasms OR Hepatic Neoplasms OR Cancer of Liver). What precautions were taken to include only HCC (and not other types of liver cancer) among the selected studies? The study could be further strengthened by expanding the discussion of the current gaps in the literature and proposing future studies in this area.

Response to Rev. 2, comment 1.

Thank you for your compliments. The study was conducted by two observers who independently read the abstracts of the included literature, and only articles on hepatocellular liver cancer were included for analysis. We've added a new paragraph to the Discussion section to investigate the current gaps in the literature and proposing future studies in this area: “TACE is also used to downstage before hepatectomy or as bridging therapy in patients before liver transplantation in advanced-stage tumors. However, prior to considering TACE as a treatment option in patients with unresectable HCC, the patient's risk profile, comorbidities, and treatment prognosis and benefits should be taken into account in order to improve overall survival and minimize the occurrence of adverse events. Notably, in addition to the traditional TACE monotherapy, some researchsrs are now focusing on TACE-based combination therapies, such as the combination of TACE and tumor thermal ablation, the combination of TACE and radiotherapy, and the combination of TACE and systemic therapeutic

agents. However, further research is needed to determine which combination therapy is more cost-effective in prolonging patient survival."

Reviewer #3:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: The article covers the bibliometric analysis of TACE. But the clarity of the need for the analysis is not up to the standard level of the present journal.

Response to Rev. 3, comment 1.

We thank the reviewer for this important comment.We've been doing a lot of revision of the article. Hopefully it can reach reviewer's requirement.