Peer Review File

Review A：

Comment 1: The authors responded appropriately to the invitation for a systematic/narrative review on the topic of disparities in management of advanced lung cancer. This is well-written and addresses all relevant subjects in this topic.
No suggested changes.

Reply 1: Thank you for your kind feedback.

Review B:

This is a very well written manuscript which provides an excellent review of disparity in the care of advanced lung cancer patients. Contents are extremely thorough (as thorough as you will find on this topic). Below are a couple suggestions to improve their already great work.

Comment 1: While Table 1 and Figure 2 speak to the rigorous methodology of the review, I don't think these add much value to the readers. In my mind, I think these can be moved to supplementary for those interested.

Reply 1: Noted, we have moved Table 1 and Figure 2 to supplementary materials.

Comment 2: Tables 2 and 3 provide a great summary of the very thorough review, but they are also too big. I would personally suggest combining the tables but breaking them down by topics so they go with each written section (this will also allow you to omit column "Topic" in both tables). I think each table then would be more concise/pertinent and as a whole will read better as the readers read each section.

Reply 2: Thank you for this suggestion. We have merged the tables and divided them up by content topic.
To the editor: this required them to be in landscape format, thus they are now in a separate file.

Review C:
Comment 1: Objective of this review was to assess and synthesize the literature on sociodemographic disparities in the management of advanced Non-small cell lung cancer (NSCLC). Disparities exist in the quality of NSCLC care across geographic regions, hospitals, age and racial and ethnic groups, including treatment variability among comparable patients. Racial disparity is a ubiquitous feature of the US healthcare system and is defined as racial or ethnic differences in the quality of

healthcare that are not due to access related factors or clinical needs. Though, this is an interesting topic in the arena of racial and ethnic disparity in care, general lack of clarity, poor understanding of the issues, weak methods section and weak analytical section leads to a weak presentation. Overall this is an ambitious undertaking by authors in just one manuscript, it may be helpful to concentrate on one issues (example: palliative or end of life care).

Reply 1: Thank you for your thorough and thoughtful feedback. To address the concern on clarity and understanding of the issues, we would first like to note that this manuscript was an **invited narrative review** specifically on socioeconomic disparities in the management of advanced lung cancer. As defined in our introduction (page 3, line 96-97), socioeconomic disparities encompass disparities according to race, insurance status, income, and educational status. Furthermore, the conventional definition for advanced lung cancer includes stages III and IV disease. Thus, in keeping with the guidance on preparing narrative reviews provided by the journal, we provide a synthesis of the literature on the various domains of socioeconomic disparities in the management of stage III and IV lung cancer. Accordingly, our methods section (page 3-4) details our approach to identifying all relevant literature on socioeconomic disparities in the management of advanced lung cancer using methodology consistent with systematic reviews and adherent to the guidelines provided by the journal. Moreover, in keeping with the guidance of preparing narrative reviews, we provide a narrative synthesis of the data as opposed to a statistical or meta-analytic approach. In response to the presentation of the data, we have changed the table format so that the results are easier to follow and understand as the reader moves through each section.

Below, please find our response to the specific sections of the manuscript.

Comment 2: ABSTRACT:
Methods section is incomplete and the analysis part is not included in the abstract. Usually, 'common themes' emerge out of qualitative work, and not out of literature review or meta analyses.

Reply 2: As stated in our response above, our methods section was following guidelines on preparing a narrative review. Statistical analyses are not performed with narrative reviews but rather a narrative synthesis of data. We agree that "common themes" are more typical of a qualitative research effort and have thus changed this to "recurring findings." Our goal is to summarize a wide range of variable findings in a way that is digestible for a reader interested in the current state of the literature.

Comment 3: INTRODUCION:

Conceptualization of the issue is not comprehensive. The authors do not provide a clear understanding of the unique relevance of this study for NSCLC care.

Reply 3: Given the purpose of this narrative review was to synthesize the **current state** of the literature on socioeconomic disparities in the management of advanced lung cancer, we intentionally focused this review on the treatment paradigm of advanced NSCLC in the targeted therapy and immunotherapy era. The emergence of precision oncology with molecular biomarker and PD-L1 expression testing over the past decade is uniquely relevant to NSCLC care and we, therefore, provide a thorough summary of the existing literature while also identifying the gaps in the literature in understanding these disparities.

Comment 4: Rationality about the inclusion and exclusion criteria for the review may strengthen the introduction section. Example, why authors focused on stage III NSCLC, not including surgery, and etc.

Reply 4: Our task was to review the literature on advanced lung cancer, which includes stages III and IV disease. We have added a line to clarify this on page 3, line 98. Operable stage III lung cancer is limited to a specifically defined population and is beyond the scope of this review.

Comment 5: More importantly, authors need to use a conceptual model (either Anderson or Donbadien) and discuss the important factors (structure, process, outcome) associated with racial and ethnic disparity in care and outcomes.

Reply 5: We thank the reviewer for this suggestion. However, the use of a conceptual model would be beyond the scope of a narrative review. The goal of the narrative review is to summarize the existing literature on socioeconomic disparities in the management of advanced lung cancer.

Comment 6: It is unclear why the authors have focused on just four domains.

Reply 6: In the second paragraph of the introduction, we detail the importance of these 4 domains as the core elements of guideline-recommended care for advanced lung cancer (page 3, line 76-90).

Comment 7: Another minor point is that it is not clear if the review is just for stage III (as reported in the abstract) or advanced NSCLC.

Reply 7: The focus is on advanced NSCLC which includes stage III and IV NSCLC, as detailed in the abstract (page 2, line 55-58) and the introduction (page 3, line 96-105). We have added additional clarification on this point (page 3, line 98).

Comment 8: METHODS:
Standard protocol for literature review methods needs to be followed.

Reply 8: We followed the narrative review guidelines provided by the journal, which we include with this revised submission.

Comment 9: RESULTS:
Not reported

Reply 9: Results are summarized in Tables 1-4 and referenced in the search results section of the paper (page 4, line 126-131). These tables have since been re-organized in response to another reviewer's suggestion.

Comment 10: DISCUSSION:
Discussion of the unique contribution made by this manuscript is unclear.
Some of materials reported in this section should be in the result section.

Reply 10: The purpose of this narrative review was to describe the state of the literature on disparities in the management of advanced lung cancer care, rather than to contribute unique data to the literature. However, such a review has not been done to date, and we highlight this in the introduction, page 3, lines 93-96. We have edited this line to highlight the lack of pre-existing literature on this topic.

Comment 11: Finally, the conclusions derived are too general and cannot be supported due to the weakness in the design and methods mentioned above.

Reply 11: We again appreciate the thorough feedback. We provide general conclusions and also highlight the current gaps in the literature following the purpose of a narrative review.

Review D：
Comment 1: Congratulations to the authors on a well conducted and important study. This narrative is extremely well-written and flows logically. It concisely summarizes the relevant literature and accomplishes the proposed purpose.

While not explicitly related to the publication of this manuscript, I hope the authors

take their advice and perform some of the proposed needed research to help inform and correct the disparities identified and summarized in this review.

Reply 1: Thank you for your feedback. We are certainly working on performing some of the much-needed research in this important field.