Peer Review File

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Review A:

Comment 1: Methods used to conduct search could be strengthened to allow for a more comprehensive search that would include some articles that address the health policy pertaining to disparities, the impact of segregation, the residual impact of historical atrocities committed in these populations. Indeed, these might more comprehensively provide context upon which many of the cited manuscripts have been based.

Reply 1: Thank you for your review and constructive feedback. We have reviewed our included literature, added new citations but have maintained the search criteria in line with the journal's recommendations. Additionally, we have taken the opportunity to add text and citations addressing how geography and proximity to large academic/cancer centers affects the receipt of surgical therapy.

Review B:

Comment 1: This review discusses literature from 1990 to 2020 in regard to disparities in treatment of non-small cell lung cancer based on socioeconomic status and race. The authors found that lower socioeconomic status was generally associated with no surgical treatment, and Black patients demonstrated lower rates of surgery and survival for non-small cell lung cancer. These two disparities are clearly communicated from the beginning and defined as linked.

In their discussion of racial inequities, the authors present data demonstrating lower survival rates for Black patients with non-small cell lung cancer as well as higher incidence rates in comparison to White patients. They briefly review some previously proposed explanations for these differences between Black and White patients and suggest that this is likely associated with a complex range of sociological differences. This is supported by the subsequent literature all of which demonstrated Black patients received surgery at significantly lower rates and had similar or lower survival rates compared to white patients whereas comparisons of Black and White patients controlling for surgery demonstrated no difference in survival. With no difference in survival when controlling for surgery, data on the outcomes of patients of other races and their rate of surgical treatment may provide more clarity on the disparities at hand.

Further discussion of perceptions of patient-physician communication and survival rates after surgery aim

to explain the lower rates of choosing surgery in the Black patient population, and the authors mention that Black patients with two or more comorbidities were very likely to defer surgery. It is unclear if the relation of comorbidities to deferral of surgery is exclusive to Black patients or prevalent in all patients. This presents a potential limitation in regard to the previously detailed perception of survival after surgery, and should be made clear as to how the comorbidities affected the estimated survival rates.

In regard to socioeconomic status, the authors present a clear correlation between Black people and lower socioeconomic status as well as a connection between low socioeconomic status and incidence of lung cancer. The data demonstrating an association between lower socioeconomic status and not receiving surgery while lower socioeconomic status was not associated with refusal of surgery, poses the question of why patients with lower socioeconomic status are more likely to not receive surgery. Further data on if this was a financial issue or other factor would be beneficial. This can also be extended to the connection between socioeconomic status and likelihood of receiving adjuvant chemotherapy.

The authors aptly conclude that there is a correlation between lung cancer incidence and socioeconomic status and race and acknowledge limitations in the literature reviewed. It may be beneficial to present data on socioeconomic status and lung cancer outcomes while controlling for race as well as data on race and lung cancer outcomes while controlling for socioeconomic status, if possible. Overall, this review provides a clear and concise discussion of the race and socioeconomic status and their associations with outcomes for lung cancer.

Reply 1: Thank you for your feedback and comments regarding the manuscript.

Review C:

Comments 1: The manuscript provides a nice review of the socioeconomic and disparity issues in the treatment of early stage lung cancer patients. Please see below for comments.
Major comments:
Can the authors perhaps comment on why Black race is associated with less receipt of surgical treatment? I believe that race and socioeconomic status is closely related as are socioeconomic status and medical comorbidities (and hence surgical candidacy).

Reply 1: Thank you for your feedback. We believe that the reasons for this are multifactorial and have a complex interplay of racism, nihilism, communication, trust, and socioeconomic factors. We have made

our best efforts to distribute these concepts through the manuscript.

Review D:

Comments 1: Please see attached versions (one with tracked minor changes).

Reply 1: Thank you for your comments and edits made within the manuscript.