Peer Review File

Article information: https://dx.doi.org/10.21037/tcr-22-2593

Reviewer Comments

Comment 1: This article provides a systematic summary regarding tumor STAS in primary lung cancers, which mainly have been clarified by researchers in retrospective studies. It is clinically highly important to predict the presence of STAS preoperatively, although it still remains undetermined. On this viewpoint, this article contributes clinicians to select treatment strategies including surgical procedures, because well systematically and clearly described about the characteristics of STAS on clinical images. The authors also refer to that the detailed invasion mechanisms of STAS remained unclear and needs to be clarified, which is the important issue to develop treating lung cancers with STAS.

I recommend this article to be published, and think no needs to be further revised.

Reply 1: Thank you for your comment. It is because preoperative evaluation of STAS is of great significance for clinicians to choose appropriate surgical methods, so we would like to systematically understand whether there is a suitable imaging method to accurately diagnose STAS before surgery. We will continue to pay attention to the research on the mechanism of STAS.

Changes in the text: We have reviewed the article and revised some grammar and words to improve the quality of language.

Comment 2: STAS is known as a new invasive type among several invasive types of lung adenocarcinoma such as non-lepidic growth, stromal infiltration, and vascular or pleural infiltration. Postoperative pathology is the gold standard for diagnosing STAS. There have been several studies to diagnose or predict STAS before surgery, but there is no definitive preoperative diagnosis yet.

This non systematic review article comprehensively deals with its clinical meaning and the results of CT, PET, radiomics and machine learning which are preoperative diagnosis for predicting STAS.

This review article is expected to provide readers with an overall understanding of STAS and help with future research directions.

Reply 2: Thank you for your comment. At present, the researches on preoperative prediction of STAS focus on traditional CT signs, PET-CT, radiomics and machine learning and deep learning. Although the research on deep learning in predicting STAS is in its preliminary stage currently, it has great development potential and is expected to further improve the diagnostic efficiency, which is the research trend in the future. We intend to conduct further research on deep learning to predict STAS status before surgery.

Changes in the text: We have carefully proofread the manuscript and tried our best to correct language problems.