

Peer Review File

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Reviewer A

1. First, important ML protocols should be proposed as a review article. I think that we should research retrospectively using the same protocols with each institution in future. Thereafter, we should research prospectively.

Reply 1: Thank you for your comment. We added a figure (Figure 1) to show the ML protocol.

Changes in the text: We displayed Figure 1 after the references (see Page 20, line 362, 363). We added a sentence to describe the ML protocol (see Page 5, line 78).

2. Second, CT or MR image of the primary lesion are often affected by the metal artifact in oral region. So, PET or US (using intraoral probe) image of the oral region is thought to be good for quantitative analysis as for me.

Reply 2: Thank you for your advice. Indeed, the metal artifact does affect the presentation of the primary lesion in oral region in CT or MR. However, these cases with affected images would be excluded to guarantee the reliability of the research. In our opinion, CT and MR can clearly present the oral lesions and surroundings, while metal artifact may affect the image quality. US can clearly present the oral lesions without metal artifact, but it is an operator-dependent modality and has a relatively limited view, which may influence the image quality and lesion evaluation. PET can present the metabolism of the lesions, but its resolution is low, which means it needs the support of CT or MR. Therefore, we think that these modalities have their own advantages and disadvantages.

3. Third, you should mention the problems of radiomics. Especially, the difference by the apparatus should be discussed.

Reply 3: Thank you for the suggestion. We have revised the manuscript in accordance with your advice.

Changes in the text: We added the limitations of ML in the article (see Page 11, line 200-203).

4. Finally, I think that you should show a relation with radiogenomics. And, titled [Development of a radiomics and machine learning model for predicting occult cervical lymph node metastasis in patients with tongue cancer] published at July 2022, should be cited and commented.

Reply 4: Thank you very much for valuable comments. We have added a description of radiogenomics and cited the article mentioned.

Changes in the text: We added a description of radiogenomics (see Page 11, line 206, 207) and cited the article mentioned (see Page 9, line 161-163).

Reviewer B

1. I am sorry to have to reject this manuscript as the current version does not reach the requirements of a full paper. Each paper you reviewed must be discussed and how each study contributed to the literature, or practice as a whole must be given.

Reply 1: Thank you for the comment. We divided the papers into different groups and discussed how each group of studies contributed to the literature.

Changes in the text: We have added the discussion according to different groups (see Page 7, line 128, 129; see Page 8, line 142-144; see Page 8, line 149; see Page 9, line 171, 172; see Page 10, line 192, 193).

Reviewer C

1. You mention your search strategy is limited to pubmed and the Chinese medical knowledge database. It would be worth exploring other engines such as google scholar, scopus etc. for completeness.

Reply 1: Thank you for the valuable advice. We added Scopus and Web of Science databases into our search strategy. Additionally, we added the keyword "tongue cancer" and excluded the papers that are irrelevant to TSCC to make our search more reliable.

Changes in the text: We added two databases and one keyword (see Page 3, line 55, 56; see Page 6, line 96, 97; see Page 6, line 99-101). We added the contents of the papers newly included (see Page 7, line 125, 126; see Page 8, line 134-140; see Page 8, line 152-153, see Page 9, line 154).

2. Table 1 needs to be reformatted, it is too hard to read at present due to the two columns appearing merged.

Reply 2: Thank you for your comment. We have reformatted Table 1 to make it easier to read.

Changes in the text: We displayed the reformatted table after the references (see Page 21, line 365, 366).

3. It would be worth including a diagram of the results of the searches showing the number of papers, then how many were excluded and the various reasons for doing so. There is no clear mention of the number of papers looked at in total. Similarly, you could classify the papers by number on diagnosis, prognosis etc.

You could also demonstrate number of papers per year to get an indication of the rate of growth if this area of research.

Reply 3: Thank you for the kind advice. We added a figure (Figure 2) to show the search flow and the classification of the papers included in the review. Moreover, corresponding contents were also shown in the main text.

Changes in the text: Figure 2 was displayed after the references (see Page 22, line 369, 370). We added the description of the search flow and the classification of the papers included in the review (see Page 6, line 103-108).

4. The English is generally of a good standard and is clear. There are occasional grammatical errors/typos so professional proof reading by a native English speaker prior to publication would be beneficial.

Reply 4: Thank you for the valuable suggestion. The revised manuscript was edited by a professional English language editing company for better expression. The language editing certificate was uploaded as supplementary material.