

Dear editor,

We really appreciate your helpful comments and suggestions, and we have carefully revised the manuscript (88710) according to each suggestion. Taking reviewers' comments into consideration, we have rephrased the manuscript. All the changes we made in the manuscript have been highlighted in colorful text.

The following are the details.

**Reviewers' comments:**

**Reviewer A:**

1. The MS pays little attention to the comparison of different treatment approaches, their advantages and disadvantages. It is unclear which approaches the authors consider most promising. The "Summary and Outlook" section would be useful to expand the analytical information.

**Re:** Thank you for your valuable comments. As targeted therapies continue to progress, we believe that immuno-combination targeted therapies are even more promising. We have compared the efficacy and safety of different regimens in detail in the "Summary and Outlook" section.

2. Tables 1 and 2 are of poor quality.

**Re:** Your comments are very helpful. We searched for relevant studies and found that for efficacy, patients included in different studies may have biased the results. We therefore added the characteristics of patients included in the studies in Tables 1 and 2 to improve their quality.

**Reviewer B:**

1. Authors have discussed almost all drugs. However, it would be desirable if they give comprehensive statements regarding what is actually approved and can be used in clinical practice at present.

**Re:** Thank you for raising this point, and after reviewing the content, we have

decided to summarise the information on immunological drugs that are currently approved and used in clinical practice, and produce this as Table 4.

2. The investigational drugs should be mentioned, however, at the end it should be clear that they await recommendations.

**Re:**We have carefully discussed your valuable comments. We have identified some of the treatment options mentioned in the article such as some of the CAR-T and cancer vaccines that are temporarily in the clinical trial stage and have elaborated on them in the "Summary and Outlook" section.

3. A flow chart algorithm can be included so that readers are benefitted.

**Re:**Thank you for noticing this. After fully discussing your comments, we believe that Fig1 has made it easier for readers to understand the current trends in the timing of approved systemic therapies for liver cancer, and that the different immune combination regimens for liver cancer have been described in parts according to their different categories and mechanisms.