

## Peer Review File

Article information: <https://dx.doi.org/10.21037/cco-23-106>

### Reviewer A

The authors should cite state-of-the-art studies that evaluate the efficacy of combinatory therapy of nivolumab and cabozantinib to treat hepatocellular carcinoma (Clinical trial ID. NCT03299946):

1. Mi, H., Ho, W. J., Yarchoan, M., & Popel, A. S. (2022). Multi-scale spatial analysis of the tumor microenvironment reveals features of cabozantinib and nivolumab efficacy in hepatocellular carcinoma. *Frontiers in immunology*, 13, 892250.
2. Ho, Won Jin, et al. "Neoadjuvant cabozantinib and nivolumab convert locally advanced hepatocellular carcinoma into resectable disease with enhanced antitumor immunity." *Nature Cancer* 2.9 (2021): 891-903.

### Reply:

we have modified our text as advised, both suggested articles were included as references (see page 2 line 39).

### Changes in the text:

The following paragraph was included:

" Analysis of the tumor microenvironment (TME) in patients with localized or locally advanced HCC, treated first with preoperative cabozatinib (40mg daily for 2 weeks) followed by combined treatment with cabozatinib and nivolumab (240mg IV every 2 weeks for 8 weeks), revealed potential immunoestimulatory effects of this drug. The two-week treatment with isolated cabozatinib resulted in an increase in memory and effector T cell subtypes within the CD4<sup>+</sup> and CD8<sup>+</sup> populations compared to baseline samples. Interferon- $\gamma$ , granzyme B, and Ki-67-positive cell subtypes were included among these populations and are signatures associated with antitumor activity. Cabozatinib treatment also led to reduced levels of CXCL1, a chemokine ligand associated with CXCR2 and mediated by VEGF signaling, linked to immunoresistance and the confinement of T-cells within the TME. A higher density of immune cells, such as lymphocytes, is associated with tumor response when treated with the combination of cabozatinib and nivolumab. On these studies, 5 out of 12

patients (42%) who underwent surgery had major or complete pathological responses. These findings indicate that cabozatinib promotes a favorable environment for an immune response through both systemic and localized effects."

### **Reviewer B**

The authors state the relationship between efficacy and safety in patients with advanced hepatocellular carcinoma treated with Cabozantinib, Nivolumab, and Ipilimumab. The editorial is comprehensive and informative.

I have the following concerns.

1) Line 73: Please add the data of median overall survival and median progression free survival.

#### **Reply:**

We added data regarding median overall survival and median progression free survival (see page 4 line 102).

#### **Changes in the text:**

The median OS (95% CI) was 20.2 months (ranging from 13.1 to 32.2 months) in the doublet arm and 22.1 (15.2 to not reached) in the triplet arm. The median PSF (95% CI) was 5.1 months (2.8 to 10.9) with the doublet therapy and 4.3 months (3.6 to 11.9) with the triplet combination.

2) Lines 96-97: Line breaks are not necessary.

#### **Reply:**

We changed the text removing the line break (see page 4 line 116).

3) Line 125: Hepatic event should be specified.

**Reply:**

We added the description of hepatic events (see page 5 line 152).

**Changes in the text:**

The majority of these events involved elevations of serum transaminases, with one case of bilirubin elevation associated with cholangitis.