## **Peer Review File**

Article information: https://dx.doi.org/10.21037/tcr-23-455

## <mark>Reviewer A</mark>

**Comment 1:** However, the validation of IL23R as a prognostic predictor is lacking in the current manuscript. Thus, the relationship between IL23R level and overall survival (OS) or disease-free survival (DFS) in this clinical setting should be confirmed.

**Reply 1:** We obtained the OS and DFS data of patients with intrahepatic cholangiocarcinoma (CHOL) in TCGA from the UCSC Xena website (<u>https://xenabrowser.net/datapages/</u>). We used R language and GraphPad Prism 8.0 to verify the relationship between IL23R and OS or DFS (Figure 6J and Figure 6K). At the same time, we elaborated on this part in the manuscript (see Page 8, line 121-124; Page 9, line 142-143; Page 15, line 253-258).

**Comment 2:** The demographic information related to the clinical samples used in the current study should be provided in materials and methods or results, for examples, numbers of sample, age, gender, clinical characteristics. For comparison, the information of normal samples should be provided.

**Reply 2:** The demographic information related to the clinical samples used in the current study from TCGA was provided in Table 1. And the information of normal samples from TCGA was provided in Table 2. At the same time, we elaborated on this part in the manuscript (see Page 8, line 124-126).

Comment 3: The graphical abstract or the graphic summary for the study novelty should be provided. The related pathways and molecules should be highlighted.Reply 3: The graphical abstract, related pathways and molecules were provided in Figure 1.

**Comment 4:** The English usage in the current manuscript required author's attention and professional correction.

**Reply 4:** We carefully revised the English usage in the manuscript again and marked the revised part in red.

## <mark>Reviewer B</mark>

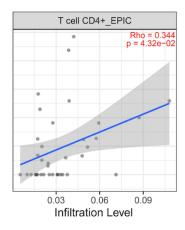
- 1. Figures
  - Please rearrange Figure 4B in Figure 4. You mention 9 correlations with IL23R in the legend while Figure 4B has 14 subparts. Please check and revise.

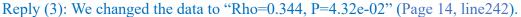
Reply (1): We rearranged Figure 4B in Figure 4 and revised the legend of the Figure 4B (Page 28, line 594-602).

(2) Figure 4C has the same issue as the above Figure 4B, please also check and revise.

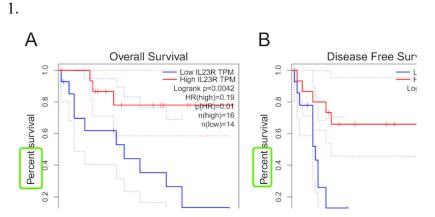
Reply (2): We revised the legend of the Figure 4C (Page 28-29, line 603-605). In addition, different from Figure 4B, we found that the lines in each subpart of Figure 4C could not be aligned one by one, so we marked all the contents of the y-axis.

- (3) Please double-check the data in the following sentence:
  - CD4<sup>+</sup> T cell analysed by EPIC (Rho=0.398, P=1.77e-02) method
  - Figure 4B:





(4) Please remove "Percent" from the y-axis of Figure 6A, B, since the rate is 0-



Reply (4): We removed "Percent" from the y-axis of Figure 6A, B and replaced the

y-axis with "Survival Probability".

(5) It is suggested to add "year" after Age in Tables 1-2, and indicate how data are presented in Age, range?

Reply (5): We added "year" after Age in Tables 1-2. T he data in parentheses are the age range of tumor samples and normal samples and we explained them in the text (Page 9, line138, Page 9, line139-140).

(6) Please double check below data in Table 1.

17+2+3+5=	27	
T←	T1 <b>&lt;</b> ⊐	<mark>17 (53.1)</mark> ↔
	T2a⊄⊐	<mark>2 (6.3)</mark> ఊ
	T2b←	<mark>3 (9.4)</mark> ఊ
	Τ3<-	<mark>5 (15.6)</mark> ఊ

Reply (6): We missed the "T2 stage" when recording TCGA data. We added the data of "T2 stage", since the five samples obtained from TCGA only recorded "T2 stage" and did not specify whether it was T2a or T2b.

(7) In the Acknowledgments, "The image elements in Figure 1 were from Vecteezx (www.vecteezy.com) and SMART SERVIER (www.smart.servier.com)", please also check if Figure 1 is original or not. If not, permission is need too.

Reply (7): We searched the websites again for the relevant requirements of citation. To quote the image elements in these two websites, we only need to thank them in our article and indicate the website address. In addition, we found that the " SMART SERVIER " website was given wrong. We changed the correct website to "smart.servier.com" (Page 22, line403).



## **License information**

Thank you for downloading from Vecteezy!

The license agreement outlines how the resource may be used in various settings. Different rules apply based on whether you're using a resource in a digital project versus a print project. In addition, you will have different responsibilities if you downloaded this resource under our Free License versus our Pro License.

If you downloaded this resource under the Free License, remember to always attribute the author which can be done by adding "vecteezy.com" to your design and linking to vecteezy.com where possible. If you don't want to give attribution, upgrade to a Pro License for additional benefits.

For detailed insight into how this resource may be used in your project, head over to the licensing section of our website or contact our support team.

As always, the Vecteezy  $\ensuremath{\mathsf{Terms}}$  of Use supersede any terms outlined in this document.

Thanks again! Vecteezy

Servier Medical Art by Servier is licensed under a Creative Commons Attribution 3.0 Unported License You are totally free to use Servier Medical Art images as you want. No permission is required. Please use the link smart.servier.com to cite Servier Medical Art in your references. More info

SERVIER MEDICAL ART A service to medicine provided by Les Laboratoires Servier www.servier.com



- 2. Please check if more references should be cited in the following sentence since you mentioned "studies".
  - Many studies have revealed that IL23R performs an essential role in tumorigenesis, especially in immune tumor microenvironment (TME).

Reply 2: We revised and added references. We cited three references as examples (Page 6, line73).