

Peer Review File

Article information: <https://dx.doi.org/10.21037/jtd-23-750>

Reviewer A

1) First, the abstract needs some revisions. The background did not indicate the clinical needs for this research focus and what the knowledge gap is on the role of MMB-FOXMI in NSCLC. The methods need to briefly describe the research procedures and the purposes of these procedures. The results need to quantify the findings by reporting statistics and accurate P values such as the expression levels. The conclusion needs comments for the clinical implications of the findings.

Reply: Thanks. We have made corresponding modifications.

Changes in the text: Page 2-3, line 41-76.

2) Second, in the introduction of the main text, the authors need to briefly review what has been known on the mechanisms of NSCLC, have comments on the limitations of prior studies, and explain why the MMB-FOXMI deserved to be studied. Please explain why identifying novel specific biomarkers can improve the treatment of NSCLC and why “the role of the MMB-FOXMI complex needs more exploration in NSCLC”. Comments on the knowledge gaps on the role of the MMB-FOXMI complex in NSCLC are needed.

Reply: Thanks. We have added more information in the Introduction section.

Changes in the text: Page 3-4, line 85-89 and 121.

3) Third, in the methodology of the main text, please have an overview of the research procedures of this study and the questions to be answered by these procedures. In statistics, please ensure $P < 0.05$ is two-sided.

Reply: Thanks. We have made corresponding modifications as required.

Changes in the text: Page 5-6, line 159-194.

Reviewer B

Non-small cell lung cancer (NSCLC) is a common lung tumor with high mortality. The complex formed by MYB-MuvB complex (MMB) and forkhead box M1 (FOXMI) (MMB-FOXMI) plays a vital role in cell cycle progression to affect the progression of diseases. In the manuscript “Overexpressed FOXMI collaborates with MMB to increase WEE1 inhibitor sensitivity in NSCLC”, authors uncovered the role of the FOXMI-MMB complex in Wee1-like protein kinase (WEE1) inhibitor sensitivity in NSCLC.

Couple questions are required to be answered before it will be accepted.

(1) The methods of abstract were too simple. Please supplement.

Reply: Thanks. We have supplemented.

Changes in the text: Page 2, line 43-47.

(2) The WEE1 was the crucial topic in the study. Please make a brief introduction. And what were the functions of WEE1 inhibitor in NSCLC? Please state in the introduction.

Reply: Thanks. We have added more information in the Introduction section.

Changes in the text: Page 4, line 123-130.

(3) In the introduction, “This discovery might provide novel insight into identifying new biomarkers for neuropathic pain treatment” was showed. What were the correlations between neuropathic pain and WEE1 inhibitor?

Reply: Thanks. We are very sorry for clerical error, and we have revised this mistake.

Changes in the text: Page 4, line 135-137.

(4) It was advised to add reference (DOI: 10.21037/tcr-20-1896) about FOXM1 in the introduction.

Reply: Thanks. We have added the reference (DOI: 10.21037/tcr-20-1896) about FOXM1 in the Introduction section.

Changes in the text: Page 3, line 102, reference 15.

(5) In the text, please state clearly the concentrations of used AZD-1775.

Reply: Thanks. We have stated clearly the concentrations of used AZD-1775.

Changes in the text: Page 5, line 152.

(6) It was better to provide the images of Western blot after silencing LIN54.

Reply: Thanks. We have added western blot to measure the knockdown efficiency of LIN54 in Figure 1H.

Changes in the text: Page 6, line 208-209.

(7) How about the effects of AZD-1775 on the expressions of FOXM1 and LIN54?

Reply: Thanks. We have added experiments in Figure 1I.

Changes in the text: Page 6, line 209-210.

(8) It was advised to text cell cycle and cell apoptosis by flow cytometry.

Reply: Thanks. Due to the limitations of time and economy, flow cytometry was not performed. In the future, if there is an opportunity, we will conduct more experiments to measure cell cycle and cell apoptosis.

(9) The LIN54 and H2AX were both key regulator in the study. What were the roles of them in the regulation of WEE1 inhibitor sensitivity? Please supplement in the discussion. And add LIN54 and H2AX in the figure 4.

Reply: Thanks. We have added more information in the Discussion section. And, we have added LIN54 and H2AX related information in Figure 4.

Changes in the text: Page 9, line 280-281.