<mark>**Review Comments:**</mark>

Reviewer A:

1. Well designed study with good innovation.

Reply 1: Thank you very much for your attention to our study.

Changes in the text: None.

2. Deserves to be published on Cardiovascular Diagnosis and Therapy for inspiring some more research and possible clinical application.

Reply 2: Thanks for your review, and thanks for your approval for our study.

Changes in the text: None.

Reviewer B:

The study design is coherent. First, the authors compare the concentrations of lncRNA XIST in patients with or without gestational diabetes mellitus, using qRT-PCR. Both groups are comparable in age and gender. They show that lncRNA XIST concentration is significantly higher in the GDM group compared to the control group. Secondly, the potential effects of lncRNA XIST on GDM were investigated in diagnosis. Moreover, the impact of lncRNA XIST on cell proliferation was analyzed. This manuscript provided us with new ideas on the regulation of XIST/miR-497-5p/ FOXO1 in gestational diabetes mellitus. Overall, this manuscript is straight forward with clear goals. However, it requires a minor modification to strengthen the quality of the manuscript.

The methodology is insufficiently described. Some imprecisions should be corrected.

qRT-PCR:

Authors did not specify how many independent experiments have been carried out. Did the authors use duplicates or triplicates?

Reply 1: Thanks for your advice. we added some data times of each experiment (see Page 5, line 103).

Changes in the text: Each experiment was conducted at least 3 times.

In the methods section, please provide the primer sequence details of lncRNA XIST and miR-497-5p.

Reply 2: Thank you for your suggestion. We have added the primer sequences of XIST and miR-497-5p (see Page 5, line 99).

Changes in the text: The primers of XIST were as follows: forward 5′-AGCTCCTCGGACAGCTGTAA-3′ and reverse 5′-CTCCAGATAGCTGGCAACC-3′. The forward primer of miR-497-5p was 5′-CCTTCAGCAGCACACTGTGG-3′ and the revers primer was 5′-CAGTGCAGGGTCCGAGGTAT-3′.

Is there any inaccuracy with the units in Table 1? Please check.

Reply 3: Thank you so much for your careful check and we are very sorry for our carelessness. We revised the unit of FBG (see Table 1-revised).

Changes in the text: mM/L

Reviewer C:

The current study is well designed, and the results support the conclusion of the article. The study is interesting and beneficial for research in related fields. But some issues should be clarified.

1. Please elaborate on the key abbreviations in the abstract section, for example, ROC and CCK-8.

Reply 1: Thanks for your advice. The full names were added in the Abstract (see Page 2, line 24 and line 25).

Changes in the text: The clinical diagnosis of XIST on GDM patients was validated by the Receiver Operator Characteristic (ROC) curve. Cell counting kit-8 (CCK-8) was applied to elucidate cell viability.

2. Provide add clear details in the abstract with the clinical features of the study population.

Reply 2: Thanks for your reminding. Considering to your commendation, we supplemented this information in Abstract (see Page 2, line 21).

Changes in the text: 93 patients with GDM and 93 normal pregnant women were included in this investigation.

3. In my opinion, the cut-off value of Figure 1C should be reflected in the results.

Reply 3: Thank you for the suggestion. We have made correction according to your comments (see Page 6, line 142).

Changes in the text: Figure 1C disclosed that the area under the curve (AUC) of XIST was 0.897 together with, the sensitivity of 0.806, and the specificity of 0.860 at the cut-off value of 1.177, suggesting XIST could differentiate GDM patients among healthy pregnant women.