

Dear editors and reviewers

We would like to thank the reviewer for careful and thorough reading of this manuscript and for the thoughtful comments and constructive suggestions, which help to improve the quality of this manuscript. Our response follows (In red).

Reviewer #1: The activation of epithelial-mesenchymal transition (EMT) is a crucial event for the invasion and metastasis of cancer cells. This study revealed the underlying mechanism of EMT by which FOXF2 could promote EMT of colon cancer cells by mediating Wnt/ $\beta$ -catenin signal pathway in colon cancer which could give a new option in the colon cancer treatment. The manuscript is well designed and had an appropriate methodology. The data is presented and the discussion is well organized. The text is easy to follow and is accompanied by appropriate figures and tables. In the literature review, recent researches are listed to this topic. In reference list the references No.3 and No16 are identical. In conclusion, this is very interesting research.

**Reply: As suggested by the reviewer, we have modified.**

Reviewer #2: Recension of manuscript No. 51933: „ miR-19a-3p regulates FOXF2-mediated Wnt/ $\beta$ -catenin signal pathway and affects biological functions of colorectal cancer cells, written by Fu-Bing Yu, Juan Sheng, Jia-Man Yu, Jing-Hua Liu, Xiang-Xin Qin, Bo Mu “, which will be published in World Journal of Gastroenterology. The structure of the manuscript is in keeping with the commonly required criteria. The topic of the work is very actual. Colorectal cancer causes an extremely high risk of death, and patients with it often miss the best treatment period due to the lack of clinical symptoms of early colorectal cancer causes, which affects their prognosis. At present, colorectal cancer

causes are complicated to prevent and treat. In this study, authors tried to make an investigation into the changes in biological functions of colorectal cancer cells from the perspective of mechanism, to study the effects of regulating FOXF2-mediated Wnt/ $\beta$ -catenin signal pathway by miR-19a-3p on biological functions of colorectal cancer cells. Work is clearly legible, brings summarizes new knowledge. The citations are actual, and their format respect usual standards. The conclusion reflects the author's knowledge, and these can be accepted. However, more research is needed to determine the preclinical and clinical effects of miR-19a-3p to mediate changes of colorectal cancer cells by regulating FOXF2 expression. I recommend the manuscript to be published. Kosice, 11. November 2019 MUDr. Jana Katuchova, PhD.  
Professor of Department of Surgery University Hospital Košice Slovakia

**Reply: As suggested by the reviewer, we have modified.**

Reviewer #3: Through the author's research, it was able to obtain information on the low expression of FOXF2 and overexpression of miR-19a-3P in colorectal cancer, and it could suggest the possibility of a new anticancer target using these clues. However, the author should address the following issues. 1. Methodology in the abstract is missing information how the patients' samples were prepared and used. 2. It has been well-known that targeting FOXF2 and miR-301b functions in proliferation, invasion, migration and finally local recurrence as well as metastatic feature via Wnt signaling. In this paper, the theoretical background or rationale for the signaling target between miR-19a and FOXF2 in colorectal cancer is very poor. 3. In Figure 5A, it is not possible to distinguish groups in the bar graphs. 4. There is missing information how the number of research has been repeated in all groups. 5. In Figure 6B, no error bar is shown. Tumor growth in the control group (miR-NC) is only up to 200 mm<sup>3</sup>, this is supposed to have been an experimental error. Therefore, the authors' discussion must be included in

matters that may be considered experimental errors. Further, the authors must present the size bar using centimeters in the figure 6D photo.

Unified reply: Shortcomings of figures and discussions have been addressed.

Sincerely,

Bo Mu