In this manuscript the authors identified 9 specifically altered miRNAs in HCC-activated Tregs using a murine model. After transfection with siRNAs against Foxp3, control Tregs showed obvious reduction of Foxp3 and five significantly changed miRNAs.

HCC-activated Tregs exhibited a slight reduction of Foxp3 with three miRNAs significantly changed. Tregs from HCC patients and healthy controls finally confirmed the up-regulation of four miRNAs (hsa-miR-182-5p, hsa-miR-214-3p, hsa-miR-129-5p and hsa-miR-30b-5p). Following bioinformatic analysis, the authors suggested that these altered miRNAs could target 8 important signaling pathways which could eventually affect the functions of Tregs.

The novelty of the study is high and the authors describe the first evidences that Tregs in HCC exhibit specifically altered expression of some miRNAs, which are affected by Foxp3. This original article is well written, however the study has some limitations that were discussed by the authors. Further studies are needed to elucidate the discrepancy in reversed changes in the level of miR-129 and miR-30b in murine model and human samples.

These results are useful both in finding new biomarkers and in further exploring the functions of Tregs in HCC patients. However, to accept this article some corrections and clarifications are needed. An English correction by native speaker is also recommended.

Minor Essential Revisions
1. In the part of the study focusing clinical samples, authors compared miRNA profiles in Tregs of HCC patients and controls. There is now direct evidence of HCC-specific activation of Tregs in HCC patients in the study, title should be corrected accordingly (e.g. Special Role of Foxp3 for the Specifically Altered microRNAs in T regulatory cells of HCC patients)

2. Please explain the reason for choosing miR-344e-5p as negative control (page 10)? What are the arguments in favor of this miR in this experimental context?

3. You claimed that you used specific primers for mRNA transcription to cDNA (page 13). Which ones? Please clarify.

4. The abbreviation for Fluorescence-activated cell sorting should be FACS and
not FACs. Please make the change.

5. Figure 1: Please increase the space between figure A and C to avoid confusion.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests