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Reviewer1:

In the manuscript, the authors discussed comprehensively the biological mechanisms of MATs dysfunction, provided an overview of recent progresses on the importance of MATs in liver carcinogenesis including mitochondrial dysfunction, cancer stem cells, CCA, and further indicated their potential as targets for cancer therapy. This is the critical update to previous unsolved issue on the association MATs and liver diseases [Experimental Biology and Medicine 2018; 243: 107-117.] and cancer [Liver Res. 2017; 1(2): 103-111.]. The manuscript is too long, if possible, the length should be reduced.

Response: We thank the reviewer for his/her positive feedback and suggestion that the length should be reduced. We have shortened the manuscript where possible, but the long length is because we wanted to present the most up-to-date comprehensive review of this subject. The attached comments to the authors document are not related to this review and was likely attached by mistake.

Reviewer 2:

I would suggest to add a very small section on perspectives and future development, considering some pharmacological or therapeutic implication.

Response: As suggested by the reviewer we have re-organized the manuscript to include a small paragraph on perspectives and future directions for targeting MAT proteins in liver cancer in the conclusions.