Response to Reviewers

SPECIFIC COMMENTS TO AUTHORS
This manuscript explores the complex relationship between sarcopenia and metabolic dysfunction related fatty liver disease (MASLD). The study emphasizes common risk factors such as insulin resistance and physical inactivity, suggesting a bidirectional relationship between these two diseases. Insulin resistance is identified as a key pathophysiological factor contributing to the development of both sarcopenia and MASLD. The manuscript also discusses the challenges in diagnosing sarcopenia due to the lack of a consensus definition and a gold standard for muscle mass measurement. It emphasizes the importance of early identification and diagnosis, as well as the need for a comprehensive approach to treatment, including weight loss and regular physical activity. The conclusion calls for future research to identify therapeutic targets along the liver-muscle axis to improve outcomes for both conditions. Overall, authors present a quality and well-written manuscript. I suggest that you propose some specific targets based on current pathophysiological knowledge and discuss how these targets be validated in future research.

Thank you for your comments and suggestions. We have expanded our “Challenges to Treatment” discussion section and discuss three potential therapy targets requiring further research validation – including testosterone supplementation, resistance training, and high protein diet. We have cited new references that have been updated as well.
EDITOR COMMENTS

2 Specific comments

(1) Figure and Table Legends: Please do not add figures, figure legends to the “Edit Revision”.

Original figure documents. In the meantime, authors should provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.

Thank you for your input. We have uploaded our original PowerPoint file for our Figure.

(2) Please obtain permission for the use of picture(s). If an author of a submission is re-using a figure or figures published elsewhere, or that is copyrighted, the author must provide documentation that the previous publisher or copyright holder has given permission for the figure to be re-published, and correctly indicate the reference source and copyrights. For example, “Figure 1 Histopathological examination by hematoxylin-eosin staining (200 ×). A: Control group; B: Model group; C: Pioglitazone hydrochloride group; D: Chinese herbal medicine group. Citation: Yang JM, Sun Y, Wang M, Zhang XL, Zhang SJ, Gao YS, Chen L, Wu MY, Zhou L, Zhou YM, Wang Y, Zheng FJ, Li YH. Regulatory effect of a Chinese herbal medicine formula on non-alcoholic fatty liver disease. World J Gastroenterol 2019; 25(34): 5105-5119. Copyright ©The Author(s) 2019. Published by Baishideng Publishing Group Inc[6].” And please cite the reference source in the references list. If the author fails to properly cite the published or copyrighted picture(s) or table(s) as described above, he/she will be subject to withdrawal of the article from BPG publications and may even be held liable.

Thank you for comment. We have cited the original source for our figure icons. They are free to copy and redistribute by the Creative Commons CC BY 3.0 license from Noun Project, and we have cited the original authors in our figure and references.

(3) Core Tip. The Core Tip is a short paragraph that is independent of the content of the Abstract. The ‘Core Tip’ will provide a succinct summary of the study that outlines its most innovative and important arguments. This section should be less than 100 words (105 words in the manuscript). Abbreviations must be defined upon first appearance in the Core Tip. Do not use non-standard abbreviations, unless they appear at least two times in the text preceding the first usage/definition.

An example of correct formatting is:

In this study, CellChat was employed to infer cell-cell communication, thereby selecting highly active cell groups in immune-related pathways on single-cell RNA-sequencing data. Highly active immune cells were identified by intersecting these groups with B and T cells. Subsequently, significantly differentially
expressed genes between highly active immune cells and the remaining cells were incorporated into the Lasso regression model. Ultimately, incorporating genes selected more than 5 times in 10 Lasso regression experiments into a multivariable Cox regression model, 3 genes (stathmin 1, coflin 1, and C-C chemokine ligand 5) significantly associated with survival were identified to construct a gene signature.

Thank you for your comment. We have shortened our Core Tip to meet the 100 word limit.


Thank you for pointing this out. We have updated our reference for Reference 1.