Peer Review File

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<mark>Reviewer A</mark>

The authors used Mendelian randomization to identify genes that are causally associated with height, and they also analyzed gene-interacting drugs for possible effects on height. Mendelian studies have shown genes associated with height (PMID: 37626025), but the authors also identified several novel genes that are causally associated with height. Here are some suggestions:

Reply: Thank you for your insightful comments and suggestions regarding our manuscript. We value your feedback and have carefully considered your suggestions. Below, we address each point you raised in detail.

1. In the discussion the author indicated that certain drugs have already been reported to be associated with height, but the authors did not cite specific references.

Reply: Thank you for your valuable feedback. We acknowledge the oversight in not providing specific references. We have included the relevant citations to enhance the clarity and credibility of our discussion in the revised manuscript.

Changes in the text: Page 14, Lines 245-249. Section 4 Discussion, Paragraph 2.

2. The introduction's description of the important role of height in human health needs to be further refined

Reply: Thank you for your insightful comment. We have refined the introduction to provide a clearer and more comprehensive description of the important role of height in human health, ensuring it effectively sets the context for our study.

Changes in the text: Page 6, Lines 57-62. Section 1 Introduction, Paragraph 1.

3. Statistical terms in the article should be standardized, for example, "LD r2" in the article is not the true expression. Similar questions should be carefully examined.

Reply: Thank you for your constructive feedback regarding the standardization of statistical terms. We carefully reviewed the manuscript to ensure that all statistical terminology is accurately and consistently expressed according to established conventions.

Changes in the text: Page 10, Line 155. Section 2.3 Statistical analysis, Paragraph 3.

4. Please follow the Reference style of the target journal.

Reply: Thank you for your comment. We have revised the references to align with the reference style of the target journal.

Changes in the text: The reference list has been formatted according to the journal's guidelines.

5. The language of the article needs to be polished.

Reply: Thank you for your feedback regarding the language of the article. We have taken your

comments into account and have polished the manuscript to enhance clarity and readability. **Changes in the text:** The language throughout the manuscript has been revised for improved clarity and flow.

6. The authors have initially found a drug that may be related to height, but its clinical significance is too early to say. The authors have not further verified the results. Its limitations should be noted in the discussion.

Reply: Thank you for your valuable feedback. We acknowledge this limitation and addressed this limitation in the discussion section, emphasizing the need for further verification and validation of the clinical significance of our results. Your guidance in highlighting this aspect is greatly appreciated.

Changes in the text: Page 19, Lines 345-346. Section 4 Discussion, Paragraph 12.

<mark>Reviewer B</mark>

Overall, the article is well-designed and adheres to the principles of Mendelian randomization, offering novel insights.

Reply: Thank you for your positive feedback! We have considered your suggestions in the revised manuscript. Your support encourages us in our research efforts.

Minor suggestions for improvement:

1. The results section lacks sufficient detail and clarity, with most of the information presented in reference to figures and tables. A more organized and thorough presentation of the key positive findings from each stage of the analysis would enhance the manuscript's readability and impact.

Reply: Thank you for your insightful feedback. We recognize that the results section needs more detail and clarity. In the revised manuscript, we provide a more organized and thorough presentation of the key positive findings from each stage of the analysis, ensuring that the information is clearly articulated and enhances the manuscript's readability and impact.

Changes in the text: Pages 11-12, Lines 187-194. Page 12, Lines 197-200. Page 13, Lines 216-218 and 222-224. Section 3.1 Mendelian randomization analysis, Paragraph 2-3. Section 3.3 Druggable target identification, Paragraph 1.

2. The study identifies new genetic markers related to height, such as BTN2A2 and RBMS1P1. The meta-analysis should further explore the significance of these markers.

Reply: Thank you for your valuable comment regarding the identification of new genetic markers related to height like BTN2A2 and RBMS1P1. We have discussed the potential interactions of these markers with height in the discussion section of the manuscript. We appreciate your feedback and emphasize the importance of further exploration of these markers in future research.

Changes in the text: Page 15, Lines 263-269. Section 4 Discussion, Paragraph 4.