<u>**Replies to Reviewer 1**</u>
Language Quality: Grade B (Minor language polishing)
Response: Thank you for your valuable advice. The language has been polished as required to ensure the quality of the language.

<u>**Replies to Reviewer 2**</u>
1. Currently, the abstract briefly mentions that the patient received blood transfusion therapy and that there were difficulties in accurately identifying their blood type, but does not provide any specific information on the outcome of the treatment or the lessons learned.
Response: Thank you for your suggestions. We have added relevant information about patient outcomes in our CASE SUMMARY (Page 3, Lines 27–29) and (Page 4, Lines 1–3).

2. Background Additionally, including more background information on ABO subtype AML-M2 and the challenges that can arise in its treatment would be helpful in providing context for the case study presented. This could include information on the prevalence of this subtype, the typical treatment approaches used, and any common complications or challenges that may arise.
Response: Thank you for your comments. In the paper (Page 3, Lines 3–18), we have added background information about AML patients, typical treatment approaches, and challenges faced in the treatment of patients with subtypes of AML.

3. Method To further improve the method/case presentation section, it would also be helpful to include more information on the patient's overall treatment plan and any other therapies that were administered in addition to blood transfusion therapy. This would provide a more comprehensive understanding of the patient's treatment and would allow the reader to see how the blood transfusion therapy fit into the overall treatment plan.
Response: Based on the treatment process of the patient, we supplemented the overall treatment plan and final results of the patient in the paper (Page 8, Lines 3–12).

4. In the method/case presentation section, it would be helpful to include more details on the specific methods used to identify the patient's blood type, such as the serological or genotyping techniques employed. This would provide more context for the difficulties encountered in accurately identifying the blood type and would help the reader to better understand the challenges faced in the case study.
Response: Thanks to the suggestions of the reviewers, we have improved the specific operating methods and principles of serology and molecular biology respectively in the methods section of the paper (Page 9, Lines 7-13, Lines 18-26) and (Page 10, Lines 8-11).

5. Results In the results section, it would also be helpful to include more information on the specific blood typing techniques used and the results obtained. For example, if genotyping was used, it would be helpful to provide more details on this method and the specific results obtained. Additionally, including more information on the patient's overall response to the blood transfusion therapy and any changes in their clinical status would

provide a more complete picture of the outcomes of the treatment. In the results section, it would be helpful to provide more information on the specific outcomes of the blood transfusion therapy, including any complications or adverse reactions that occurred. This would help to illustrate the importance of accurate blood typing in the treatment of this patient and would provide more concrete examples to support the conclusions drawn in the discussion and conclusion sections.

Response: In the results section (Page 10, Lines 25–27), the specific mutated genes of the sequencing results were added. Additionally, the overall response of patients to transfusion therapy was supplemented with treatment results (Page 11, Lines 20–29 and Page 12, Lines 1–5) with or without adverse reactions.

6. One potential improvement for the discussion section could be to provide more context on the prevalence of ABO subtype AML-M2 and how common it is for patients to experience difficulties with blood transfusion therapy. This could help to contextualize the importance of accurate blood typing in the treatment of this subtype of AML.

Response: In the discussion section, we added subtype leukemia background information about the patients (Page 12, Lines 17–27), as well as practical clinical treatment problems and provided references [13] (Page 18, Lines 10–12) and [14] (Page 18, Lines 13–16) to illustrate the complex conditions of such patients.

7. Conclusion In the conclusion, the article highlights the importance of accurately identifying blood types, particularly in the case of ABO subtype AML-M2, to ensure the efficacy and safety of blood transfusion therapy. However, the conclusion could be strengthened by including a summary of the main points discussed in the article and how they relate to the case study presented. Additionally, the conclusion could explore potential future directions for research in this area, such as the potential for genotyping to become more widely available or the development of alternative treatment strategies for patients with ABO subtype AML-M2.

Response: Thank you very much for your comments. In the conclusion (Page 15, Lines 23–29 and Page 16, Lines 1–5), we have made improvements according to the questions you raised, combined with the case itself and clinical treatment.

References

13. Yang Xuan, Guo Siwei, Hong Qiang. Study on blood group identification process and transfusion strategy of subtype A patients [J]. Chin J Health Standards Management,2019,10(23):131-134.

14. Li Xiaofei, Xu Zhiyuan, Sun Chongyun, Zhang Ye, Liu Tingting. Application of molecular biology techniques in the identification of ABO blood group in leukemia patients [J]. Beijing Medicin,2020,42(06):549-551.DOI:10.15932/ J.0253-9713.2020.06.016.