

Peer Review File

Article information: <https://dx.doi.org/10.21037/gs-23-349>

Reviewer A

Comment 1: Abstract. Page 2, line 39. The abbreviation CDFI should be explained.

Reply 1: We feel so sorry for our carelessness. The full descriptions of the abbreviations of CDFI have been supplemented in the revised manuscript, and we also checked and added all the other abbreviations.

Changes in the text: We have added the relevant content. (see Page 3, line 41)

Comment 2: Key findings. Page 4. The sentence “Several researchers have discovered that MLR, PLR, NLR, and SII are predictive factors for CLNM and LLNM” is difficult to understand if the abbreviations are not explained beforehand.

Reply 2: We feel so sorry for the carelessness in the manuscript and the inconvenience they caused in your reading. The revised manuscript has supplemented the full descriptions of the abbreviations like MLR, PLR, NLR, SII, and LLNM.

Changes in the text: We have modified our text as advised. (see Page 2, line 21-23, Page 4, line 51 point 4)

Comment 3: Methods. Page 6, lines 96-97. “Totaling 1394 individuals, to establish as well as assess the model, they were randomly allocated into training (70%) and testing (30%) subsets”. To be rigorous in the correct interpretation of this study, the authors should also report the number of patients who were excluded from the study and the reasons for their exclusion. In this way an estimate could be made of the adequacy and representativeness of the sample studied.

Reply 3: We appreciate the Reviewer for rigorously evaluating our manuscript. According to the exclusion criteria, we listed the number of patients excluded for different reasons point by point in the manuscript. A total of 125 patients were eventually excluded.

Changes in the text: We have added the relevant content. (see Page 6, line 92-98)

Comment 4: Methods. Page 7, lines 101-104. The authors should clarify what they mean by solid composition (100% solid component? more than 50% solid component?).

Reply 4: We are very grateful for the Reviewer’s comments. According to the ultrasound reporting norms of our hospital, the solid component refers to close to 100% in this article.

Changes in the text: We have added the relevant content. (see Page 7, line 105)

Comment 5: Tables. Three decimal places are not necessary in the expression of percentages in tables.

Reply 5: We appreciate the Reviewer for attentively checking our manuscript. We have made corrections according to the Reviewer’s comments.

Changes in the text: We have modified our tables as advised. (see Page 16-20, line 350-355 table 1, Page 21-25, line 369-374, table 2)

Comment 6: The units must be expressed in the tables. For example, years for age, mm for tumor size, etc. In dichotomous variables it is not necessary to include the numbers and percentages of the two categories. For example, if 67% of a group has microcalcifications, it is understood that the remaining 33% do not have them. If there are 76% women, it is understood that the remaining 23% are men. In this way the table can be abbreviated without losing relevant information.

Reply 6: We feel so sorry for our carelessness and appreciate the Reviewer for attentively checking our manuscript. We scrutinized and added the units of the variables in each table. Meanwhile, according to the Reviewer's comments, we removed one category in the dichotomous variable to streamline the table.

Changes in the text: We have modified our tables as advised. (see Page 16-20, line 350-355 table 1, Page 21-25, line 369-374, table 2, Page 26-28, line 390-394, table 3)

Comment 7: Table 1. The abbreviations A/T and CDFI must be explained.

Reply 7: We feel so sorry for our carelessness. The full descriptions of the abbreviations of A/T and CDFI have been supplemented in the revised manuscript, and we also checked and added all the other abbreviations in the remaining tables and figures.

Changes in the text: We have added the relevant content. (see Page 16, line 351-354)

Comment 8: The figures are very small, and the curves and values look bad in the manuscript they provided me.

Reply 8: We feel so sorry for the issue about the figures' resolution and the inconvenience they caused in your reading. Figures may suffer compression when loading in Word. We have reloaded the figures in the word and provided the original figures which had a resolution of at least 300 dpi in the attachment.

Changes in the text: We have reloaded the figures. (see Page 31-40, line 424-504)

Comment 9: Figures 4, 6, 8 and 9 could be omitted from the article and provided as supplementary material.

Reply 9: We are very grateful for the Reviewer's comments. We have made corrections according to the Reviewer's comments.

Changes in the text: We have modified our figures as advised. (see Page 37-40, line 476-504)

Reviewer B

1. Please check whether the three groups of Tumor size be “ < 10; 10-20; 21-40”?

Please revise your Tables 1-3, Figures 2, S4.

<u>Tumor size</u> <u>(mm)</u>			
<u>≤10</u>	<u>1,027 (73.7)</u>	<u>606 (84.4)</u>	<u>421 (62.3)</u>
<u>10–20</u>	<u>299 (21.4)</u>	<u>97 (13.5)</u>	<u>202 (29.9)</u>
<u>20–40</u>	<u>68 (4.9)</u>	<u>15 (2.1)</u>	<u>53 (7.8)</u>

Reply 1: We feel so sorry for our carelessness.

Changes in the text: We have modified the tables 1-3, figures 2, S4 as advised.

2. Figures and supplementary Figures

- (1) Please define “CLNM” “PTC” in the legend of Figure 2.

Reply: We are very grateful for the Editorial’s comments.

Changes in the text: We have added the relevant content as advised. (see legend of Figure 2)

- (2) Please **add a space** between words in Figures 4-6, S3-S4.

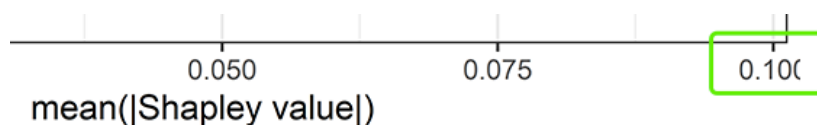
Example:

CDF**bloodflow**
Location
Age
Tumorsize

Reply: We are very grateful for the Editorial’s comments.

Changes in the text: We have added the space as advised in Figure 4-5, S3-S4. However, due to the particular requirements of some R packages (some codes require that no space is allowed in the middle of the variable name; otherwise, the code will report an error), we couldn't implement it in Figure 6 despite all our efforts. We sincerely hope that we can get your understanding.

- (3) The number is not complete in the x-axis of Figure 5A. Please revise.



Reply: We feel so sorry for our carelessness.

Changes in the text: We have modified the Figure 5A as advised.

- (4) Please check if the description of Y-axis is correct or not in Figure S2D.

ROCAUC

- (D) Learning curves of the RF model

Reply: We feel so sorry for our carelessness.

Changes in the text: We have modified the Figure S2D as advised.

- (5) Please **uppercase the first letter** of description of axes in Figures S2C, S2E-S2F.

Reply: We feel so sorry for our carelessness.

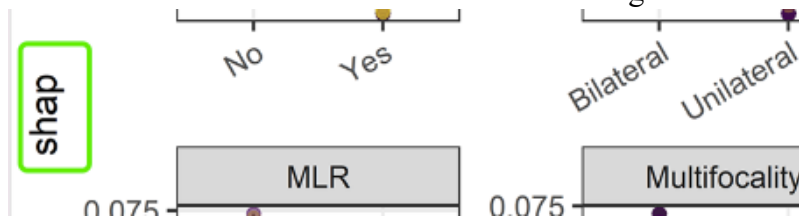
Changes in the text: We have upcased the first letter of description of axes in Figures S2C, S2E-S2F as advised.

- (6) Please check if “.obs” should be defined or removed in Figure S2.

Reply: We feel so sorry for our carelessness.

Changes in the text: We have added the relevant content in Figure S2 as advised.

- (7) Please check whether the word be “**SHAP**” in Figure S4.



Reply: We feel so sorry for our carelessness.

Changes in the text: We have modified the Figure S4 as advised.