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RESPONSE TO LETTER

Reply to "Exploring New Avenues for OSA Screening: Optimization and Future Perspectives of Nomogram for Hypertensive Patients" [Response to Letter]

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Dear editor

We sincerely thank Pan et.al, for their interest in our study and for their constructive suggestions. Waist circumference (WC) was indeed statistically significant in our analysis and has been shown to play a valuable role in the diagnosis and prognosis of metabolic diseases.[1] However, to maintain simplicity and practicality in the nomogram, we selected five predictors—gender, age, Body Mass Index (BMI), neck circumference (NC), and the Epworth Sleepiness Scale (ESS)—based on the results of univariate logistic regression and clinical relevance.[2] As both WC and BMI are anthropometric measures and may offer overlapping predictive information, we decided not to include WC in order to preserve the model's ease of use.

Our choice of predictors was also informed by the well-established STOP-Bang questionnaire, which has demonstrated strong validity across diverse populations and clinical settings. In our sleep medicine center, NC has proven to be a reliable predictor of obstructive sleep apnea (OSA). Furthermore, our previous research has shown that incorporating ESS can enhance the predictive performance of tools such as the STOP-Bang questionnaire and the NoSAS score.[3,4] Therefore, in this study, we integrated the subjective ESS score with gender, age, BMI, and NC to construct a practical and efficient nomogram.

We truly appreciate the insights provided by Pan et al, and we agree that WC deserves further exploration in the context of OSA screening and treatment. In future studies, we plan to investigate the role of WC and the impact of WC-related interventions on OSA management. We also acknowledge the potential of integrating additional objective markers, such as hematological parameters, to improve the model's specificity and clinical utility. However, we recognize that such enhancements might reduce the model's practicality in primary care settings—our primary focus. Our goal was to develop a user-friendly tool that enables frontline healthcare providers to rapidly screen for OSA, even in the absence of specialized diagnostic equipment.

As previous studies have confirmed, ESS scores tend to be elevated in OSA patients,[5] and we found that combining ESS with anthropometric indicators offers a meaningful level of predictive efficacy. Nevertheless, we agree with Pan et.al, that numerical comparisons alone are insufficient to establish the superiority of our nomogram over the STOP-Bang questionnaire—this represents a limitation of our study. Additionally, our sample size was relatively small. To address this, we aim to conduct multicenter collaborations in the future to expand the sample size and further validate and compare the performance of our model.

Lastly, we share Pan et al's concern regarding the strong link between OSA and psychiatric disorders. Unfortunately, sleep-disordered breathing often goes unrecognized in patients with psychiatric conditions.[6] Due to limitations in screening tools, many cases remain undiagnosed and untreated, compromising both sleep quality and daily functioning, and potentially exacerbating psychiatric symptoms and hindering recovery. The nomogram developed in our study offers a straightforward, equipment-free tool based on five easily obtainable indicators—gender, age, BMI, NC, and ESS—that can be applied during routine psychiatric consultations, even in grassroots medical settings. This enhances its accessibility and operational value. By enabling the early identification of high-risk patients, the tool not only supports timely diagnosis and treatment but also contributes to

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comprehensive patient management. In cases of comorbid OSA and psychiatric illness, addressing sleep and respiratory health may lead to improvements in psychiatric symptoms and overall recovery.

In conclusion, the nomogram developed in this study presents a simple, practical, and effective approach for assessing OSA risk in both primary care settings and the general population. It not only facilitates the identification of high-risk individuals but also provides a valuable reference for holistic patient care—highlighting its potential for meaningful clinical application.

Data Sharing Statement

No new data was generated for this communication.

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Author Contributions

Conceptualization: RC, WLY, JL, WFL and WMY. Methodology: YY, MC, ZZZ and WMY. Writing – original draft: WLY, JL, ZZZ, WFL, YY, MC, WMY and RC. Writing –review and editing: JL, YY and WMY. All authors have read and approved the final version for publication, have agreeed on the journal to which the letter will be submitted, and agree to take responsibility and accountability for the contents of this communication.

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Disclosure

The authors have no conflicts of interest.

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