Reviewer A

Search summary and general impression

The research entitled "Use of the Epworth Sleepiness Scale, the NoSAS, and the STOP-BANG questionnaire to identify patients with moderate-to-severe obstructive sleep apnea" is an interesting and pertinent topic in current discussions of the academic literature. They present good writing, with clear reading and easy to understand. The theme focuses on clinical applicability, which reinforces its relevance.

Comment 1: The authors propose to assess the ability of the Epworth Sleepiness Scale (ESS), NoSAS and the STOP-BANG questionnaire to predict moderate to severe obstructive sleep apnea (OSA) by gender. Based on the results obtained in the application of these instruments, added to other clinical information collected, it also proposes a predictive model of moderate to severe obstructive sleep apnea (OSA) based on the STOP-BANG questionnaire.

Reply 1: Thank you very much for your comment.

Discussion of specific areas for improvement.

Comment 2: No important issues were identified in the manuscript that compromise the results observed by the authors.

Reply 2: Thank you very much for your comment.

Minor issues:

Comment 3: Regarding the cohort period, in the abstract, the authors speak from 2012 to 2016, in the methods section they describe it as the cohort period from 2014 to 2016. I suggest making this more clear and standardized, both in the abstract and in the session of methods;

Reply 3: Thank you very much for your comment. The total cohort period was from 2012 to 2016, including the test cohort from 2012 to 2014 and the validation cohort from 2014 to 2016. We have improved the description in revised manuscript (see Page 4, line 53-54 & Page 8, line 116-118).

Original	Revised
Abstract	**Abstract**
Methods	**Methods**
This cross-sectional study screened 2031 consecutive subjects referred with suspected OSA from 2012 to 2016.	This cross-sectional study screened 2031 consecutive subjects referred with suspected OSA from 2012 to 2016, including the test cohort from 2012 to 2014 and the validation cohort from 2014 to 2016.
Methods	**Methods**
Study design and population	**Study design and population**
The test cohort consisted of consecutive subjects admitted to the Sleep Center of the Affiliated Sixth People's Hospital with suspected OSA from 2012 to 2014; those admitted from 2014 to 2016 constituted the validation cohort.	The total cohort consisted of consecutive subjects admitted to the Sleep Center of the Affiliated Sixth People's Hospital with suspected OSA from 2012 to 2016, including the test cohort from 2012 to 2014 and the validation cohort from 2014 to 2016.

Reviewer B

Methods:

Comment 1: Have the NoSAS and STOP-BANG questionnaires been validated in Chinese?

Reply 1: Thank you very much for your comment. The NoSAS score is a relatively new screening tool and has been widely used including Chinese; STOP-BANG is a part-self-administered questionnaire including both subjective symptoms and objective indicators, and it has performed better in Chinese. We have improved the description in revised manuscript (see Page 10, line 145-146 & Page 10, line 151).

Original	Revised
Methods	**Methods**
Questionnaire	**Questionnaire**
The final NoSAS score can range from 0–	The NoSAS has been widely used including

17, with 4 points for an NC ≥40 cm; 3 for a BMI 25–30 kg/m2 or 5 for a BMI ≥30 kg/m 2; 2 for snoring; 4 for age ≥55 years; and 2 for being male [17].	Chinese [17,18], and the final score can range from 0–17, with 4 points for an NC ≥40 cm; 3 for a BMI 25–30 kg/m2 or 5 for a BMI ≥30 kg/m 2; 2 for snoring; 4 for age ≥55 years; and 2 for being male [19].
The STOP-BANG questionnaire features eight questions exploring snoring (S), tiredness (T), observed breathing cessation (O), blood pressure (P), BMI (B), age (A), neck circumference (NC), and gender (G).	The STOP-BANG questionnaire features eight questions exploring snoring (S), tiredness (T), observed breathing cessation (O), blood pressure (P), BMI (B), age (A), neck circumference (NC), and gender (G).The STOP-BANG questionnaire features eight questions exploring snoring (S), tiredness (T), observed breathing cessation (O), blood pressure (P), BMI (B), age (A), neck circumference (NC), and gender (G) with better performance in Chinese[18,19]

Comment 2: Differences between stop bang scores of men and women have already been described. Some previous articles showed that STOP-Bang score was different between genders: for example, Neves Junior et al., 2020 (https://doi.org/10.1590/0004-282X20200086), showed that women had lower STOP-Bang scores than men (3 vs. 5; p=0.002 for Mann-Whitney test), despite being similar to men in the classification of the AHI.

Reply 2: Thank you very much for your comment. We apologize for not learning other articles on gender-related differences in STOP-BANG scores. And we have corrected the improper description in revised manuscript (see Page 15, line 224 & Page 18, line 271-273).

Original	Revised
Discussion	**Discussion**
We are the first to discover gender-related differences in optimal STOP-BANG diagnostic cutoffs.	In addition, we also found gender-related differences in optimal STOP-BANG diagnostic cutoffs.

The ESS and STOP-BANG questionnaires differed in terms of their optimum cutoffs for males and females in terms of predicting moderate-to-severe OSA.	In addition, we found gender-related differences in optimal STOP-BANG diagnostic cutoffs, which was in accordance with previous research [32]. And the ESS also differed in optimum cutoffs for males and females in terms of predicting moderate-to-severe OSA.

Results:

Comment 3: What was the percentage of females with mild-moderate OSAS? There were fewer women than men, and with lower AHI. If the prevalence of OSAS changes among samples, the predictive value will be affected. Please comment on this limitation.

Reply 3: Thank you very much for your comment. According to your suggestion, we have added the percentage of females with mild-moderate OSA into Table 1, and comment on this limitation in Discussion section (see Page 19, line 290-295).

Original	Revised
Discussion	**Discussion**
None.	Significantly, in our sample, the percentage and severity of female OSA were much lower than that of male OSA, but the situation may be different in other samples and the predictive value will be affected as the prevalence of mild-moderate OSA changes among samples. Therefore, the diagnostic efficacies of our two models must be further verified in other samples including different country of residence and ethnicity.

Comment 4: Legend for Tables 1 and 3 is incomplete.

Reply 4: Thank you very much for your comment. We apologize for the incomplete legend, and we have complemented them in revised tables (see Table 1 & Table 3).

Comment 5: Include table 2 caption.

Reply 5: Thank you very much for your comment. We apologize for the missing caption, and we have added them in revised table 2 (see Table 2).

Comment 6: References: data are incomplete in references 6,11,14,25; authors' names need to be corrected in references 1,3,4,5,7,8,15,18,29,30.

Reply 6: Thank you very much for your comment. We apologize for the non-standard references. We have improved them in revised manuscript as suggested.