Supplementary Material

Prevalence of High-Risk Group for Obstructive Sleep Apnea Using the STOP-Bang Questionnaire and its Association with Cardiovascular Morbidity

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# Supplementary Table 1. Distribution of STOP-Bang scores in the study population

|  |  |  |
| --- | --- | --- |
| STOP-Bang score | Number | Percent |
| 0 | 610 | 9.8 |
| 1 | 1404 | 21.7 |
| 2 | 1935 | 28.5 |
| 3 | 1525 | 21.9 |
| 4 | 733 | 11.3 |
| 5 | 289 | 4.5 |
| 6 | 109 | 1.8 |
| 7 | 24 | 0.4 |
| 8 | 1 | 0.0 |

Abbreviation: STOP-Bang, snoring, tiredness, observed apnea, hypertension, body mass index, age, neck circumference, and gender.

# Supplementary Table 2. Risk classification according to the STOP-Bang, STOP, alternative scoring model, and modified version of the STOP-Bang for Koreans

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Total | Men | Women | P-value |
| STOP-Bang questionnaire |  |  |  | <0.001 |
|  Low-risk | 3949 (60.1)  | 1088 (38.0)  | 2861 (83.9)  |  |
|  Intermediate-risk | 2258 (33.3)  | 1660 (49.6)  | 598 (15.5)  |  |
|  High-risk | 423 (6.7)  | 404 (12.4)  | 19 (0.5)  |  |
| STOP questionnaire​ |  |  |  | <0.001 |
|  Low-risk | 4947 (74.5)  | 2152 (67.9)  | 2795 (81.7)  |  |
|  High-risk | 1683 (25.5)  | 1000 (32.1)  | 683 (18.3)  |  |
| Alternative STOP-Bang scoring​a |  |  |  | <0.001 |
|  Low-risk | 3949 (60.1)  | 1088 (38.0)  | 2861 (83.9)  |  |
|  Intermediate-risk | 1657 (23.0)  | 1064 (29.9)  | 593 (15.4)  |  |
| High-risk | 1024 (17.0)  | 1000 (32.1)  | 24 (0.6)  |  |
| Modified STOP-Bang for Koreansb |  |  |  | <0.001 |
| Low-risk | 3258 (48.3)  | 505 (18.0)  | 2753 (81.1)  |  |
|  Intermediate-risk | 2523 (38.3)  | 1858 (57.7)  | 665 (17.2)  |  |
| High-risk | 849 (13.5)  | 789 (24.3)  | 60 (1.7)  |  |

aIndividuals with an intermediate risk of OSA (STOP-Bang score of 3–4) are classified as high-risk if they meet any of the following three combinations: (1) a STOP score ≥2 and a BMI >35 kg/m2, (2) a STOP score ≥2 and a neck circumference >40 cm, and (3) a STOP score ≥2 and male sex.

bModified cut-off for BMI (>30 kg/m2) and neck circumference (>36.3 cm) are used.

Abbreviation: STOP-Bang, snoring, tiredness, observed apnea, hypertension, body mass index, age, neck circumference, and gender; STOP, snoring, tiredness, observed apnea, hypertension; OSA, obstructive sleep apnea; BMI, body mass index.