Supplementary file (B) - Comparing characteristics of obstructive sleep apnea patients in the derivation and validation cohorts. Results shown are n (%) and the p value for each cluster (first line of each variable) is a result of Chi-square test, unless specified otherwise.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Cluster 1** | **Cluster 2** | **Cluster 3** |
| Gender (male) | 0.120\* | >0.999\* | 0.539\* |
| Derivation cohort | 95 (85) | 9 (20) | 44 (80) |
| Validation cohort | 8 (67) | 4 (20) | 15 (71) |
| Age (years) | 0.349\* | 0.621 | 0.112 |
| 20-44 |  |  |  |
| Derivation cohort | 7 (6) | 5 (11) | 6 (11) |
| Validation cohort | 2 (17) | 4 (20) | 2 (10) |
| 45-64 |  |  |  |
| Derivation cohort | 73 (65) | 25 (57) | 15 (27) |
| Validation cohort | 7 (58) | 11 (55) | 11 (52) |
| 65-90 |  |  |  |
| Derivation cohort | 32 (29) | 14 (32) | 34 (62) |
| Validation cohort | 3 (25) | 5 (25) | 8 (38) |
| Obesity | 0.001\* | 0.531\* | 0.737\* |
| Derivation cohort | 50 (45) | 23 (52) | 46 (84) |
| Validation cohort | 1 (8) | 13 (65) | 17 (81) |
| Increased neck circumference | 0.024 | 0.051 | >0.999\* |
| Derivation cohort | 57 (51) | 31 (70) | 3 (5) |
| Validation cohort | 2 (17) | 9 (45) | 1 (5) |
| Mallampati | 0.043\* | 0.417\* | 0.002\* |
| Class I |  |  |  |
| Derivation cohort | 16 (14) | 5 (11) | 6 (11) |
| Validation cohort | 6 (50) | 2 (10) | 0 (0) |
| Class II |  |  |  |
| Derivation cohort | 71 (63) | 28 (64) | 17 (31) |
| Validation cohort | 5 (42) | 16 (80) | 15 (71) |
| Class III |  |  |  |
| Derivation cohort | 21 (19) | 9 (20) | 25 (45) |
| Validation cohort | 1 (8) | 1 (5) | 2 (10) |
| Class IV |  |  |  |
| Derivation cohort | 4 (4) | 2 (5) | 7 (13) |
| Validation cohort | 0 (0) | 1 (5) | 4 (19) |
| Witnessed apneas | 0.221\* | 0.090 | 0.080\* |
| Derivation cohort | 60 (54) | 13 (30) | 36 (65) |
| Validation cohort | 9 (75) | 8 (40) | 16 (76) |
| Nonrepairing sleep | 0.953 | 0.423 | 0.374 |
| Derivation cohort | 55 (49) | 31 (70) | 16 (29) |
| Validation cohort | 6 (50) | 16 (80) | 4 (19) |
| Morning headaches | 0.730\* | 0.309 | 0.727\* |
| Derivation cohort | 27 (24) | 32 (73) | 8 (15) |
| Validation cohort | 2 (17) | 12 (60) | 4 (19) |
| Driving sleepiness | >0.999\* | 0.531\* | 0.479\* |
| Derivation cohort | 11 (10) | 1 (2) | 1 (2) |
| Validation cohort | 1 (8) | 1 (5) | 1 (5) |
| Alcohol consumption | 0.007\* | 0.085\* | <0.001\* |
| Derivation cohort | 96 (86) | 11 (25) | 50 (91) |
| Validation cohort | 6 (50) | 1 (5) | 8 (38) |
| Congestive heart failure | >0.999\* | 0.419\* | 0.161\* |
| Derivation cohort | 12 (11) | 6 (14) | 11 (20) |
| Validation cohort | 1 (8) | 1 (5) | 1 (5) |
| Arrhythmias | 0.519\* | 0.419\* | >0.999\* |
| Derivation cohort | 6 (5) | 6 (14) | 6 (11) |
| Validation cohort | 1 (8) | 1 (5) | 2 (10) |
| Pulmonary hypertension | 0.464\* | >0.999\* | 0.717\* |
| Derivation cohort | 5 (4) | 4 (9) | 8 (15) |
| Validation cohort | 1 (8) | 1 (5) | 2 (10) |
| Obstructive sleep apnea | 0.230\* | 0.128\* | 0.831 |
| Mild |  |  |  |
| Derivation cohort | 63 (56) | 27 (61) | 25 (45) |
| Validation cohort | 9 (75) | 15 (75) | 10 (48) |
| Moderate |  |  |  |
| Derivation cohort | 27 (24) | 9 (20) | 14 (25) |
| Validation cohort | 3 (25) | 5 (25) | 4 (19) |
| Severe |  |  |  |
| Derivation cohort | 22 (20) | 8 (18) | 16 (29) |
| Validation cohort | 0 (0) | 0 (0) | 7 (33) |

\*Fisher's exact test