

| Patient | OAEI without middle pharyngeal muscle measures: OAEI threshold ≥ 3 | | | | | | | | | | | | | | | | | | | | | ALL PATIENTS | | | | | | |
|---------------------------|---|-----|-----|-----|----|----|-----|----|-----|-----|----|------------|-----|----|-----|-----|----|----|-----|-----|-----|--------------|-----|-----|------|------|-------|--|
| | S8 | S13 | S18 | S11 | S6 | S2 | S24 | S5 | S16 | S22 | S1 | AVG | SD | S3 | S10 | S17 | S4 | S9 | S21 | S14 | S20 | S12 | AVG | SD | AVG | SD | P | |
| ANB (deg) | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 0.9 | 1.0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0.7 | 1.0 | 0.79 | 1.01 | 0.30 | |
| WITS (mm) | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.4 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.1 | 0.3 | 0.24 | 0.44 | 0.10 | |
| ODI | 3 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 1.9 | 1.5 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 0.7 | 1.3 | 1.29 | 1.53 | 0.03* | |
| OAEI score | 5 | 0 | 0 | 3 | 6 | 4 | 4 | 5 | 0 | 3 | 5 | 3.2 | 2.2 | 0 | 2 | 0 | 3 | 2 | 0 | 0 | 3 | 3 | 1.4 | 1.4 | 2.31 | 2.06 | 0.02* | |
| OAEI score ≥ 3 | y | n | n | y | y | y | y | y | n | y | y | | | n | n | n | y | n | n | n | y | y | | | | | | |
| Successful prediction | 8 out of 11 | | | | | | | | | | | 6 out of 9 | | | | | | | | | | | | | | | | |
| Successful prediction (%) | 73 | | | | | | | | | | | 67 | | | | | | | | | | | | | | | | |
| Combined Accuracy | (73%+67%)/2= 70% accuracy | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Scoring Criteria: ANB > 4, WITS > 3, ODI > 70

Table 3. OAEI calculations without inclusion of the middle pharyngeal muscle length change. Both good and poor responder types were evaluated with the OAEI point scoring and compared to their expected response type. Eight of the 11 ‘good’ responder types matched their predictions (denoted by a green box with “y”) by achieving an OAEI of greater than or equal to 3, yielding a 73% accuracy. Of the poor responders, six of nine were consistent with their response type (denoted by a red box with “n”) by obtaining an OAEI of less than 3, yielding an accuracy rate of 67%. The pooled data from both responder types obtained 70% accuracy. OAEI = oral appliance efficiency index; ODI = overbite depth indicator.