**Table E1: Diagnostic performance of occlusion pressures for respiratory muscle effort**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Detecting** | **Parameter** | **# Obs (% of total)** | **Predictor** | **AUROC** | **Cut-off, cmH2O** | **Sens** | **Spec** | **PPV** | **NPV** |
| Excessive lung stress | ΔPL > 15 cmH2O | 106 (35%) | Pocc | 0.93 | 16 | 96% | 55% | 90% | 80% |
| P0.1 | 0.90 | 16 | 86% | 71% | 92% | 55% |
| Insufficient diaphragm effort | Pdi <5 cmH2O | 23 (8%) | ΔPocc | 0.89 | 9 | 63% | 89% | 43% | 96% |
| P0.1 | 0.77 | 1.4 | 52% | 90% | 94% | 40% |
| PTPdi < 50 cmH2O**⋅**s**⋅**min-1 | 12 (4%) | ΔPocc | 0.99 | 7 | 87% | 99% | 75% | 100% |
| P0.1 | 0.91 | 1.6 | 100% | 79% | 9% | 100% |
| Insufficient respiratory muscle effort | Pmus < 5 cmH2O | 3 (1%) | ΔPocc | 0.94 | 9 | 95% | 82% | 25% | 99% |
| P0.1 | 0.89 | 1.3 | 72% | 91% | 31% | 98% |
| PTPmus < 100 cmH2O**⋅**s**⋅**min-1 | 10 (4%) | ΔPocc | 0.81 | 8 | 96% | 28% | 40% | 94% |
| P0.1 | 0.80 | 1.8 | 67% | 74% | 19% | 96% |
| Excessive diaphragm effort | Pdi >10 cmH2O | 234 (83%) | ΔPocc | 0.86 | 14 | 83% | 70% | 75% | 80% |
| P0.1 | 0.75 | 2.4 | 64% | 69% | 67% | 63% |
| Pdi > 15 cmH2O | 154 (55%) | ΔPocc | 0.86 | 19 | 73% | 85% | 50% | 93% |
| P0.1 | 0.72 | 3.4 | 52% | 82% | 37% | 89% |
| PTPdi > 200 cmH2O**⋅**s**⋅**min-1 | 97 (34%) | ΔPocc | 0.76 | 15 | 78% | 67% | 43% | 86% |
|  | P0.1 | 0.69 | 2.6 | 63% | 64% | 46% | 78% |
|  | PTPdi > 300 cmH2O**⋅**s**⋅**min-1 | 28  (10%) | ΔPocc | 0.87 | 17 | 88% | 68% | 22% | 98% |
|  | P0.1 | 0.72 | 3.5 | 50% | 81% | 20% | 94% |
| Excessive respiratory muscle effort | Pmus > 10cmH2O | 242 (86%) | ΔPocc | 0.86 | 14 | 82% | 75% | 81% | 75% |
| P0.1 | 0.76 | 3.1 | 45% | 85% | 80% | 53% |
| Pmus > 12cmH2O | 212 (75%) | ΔPocc | 0.87 | 16 | 78% | 78% | 71% | 83% |
| P0.1 | 0.76 | 3.3 | 51% | 86% | 71% | 68% |
|  | Pmus > 15cmH2O | 158 (56%) | ΔPocc | 0.89 | 19 | 80% | 80% | 49% | 94% |
|  | P0.1 | 0.81 | 3.5 | 59% | 85% | 48% | 89% |
|  | PTPmus > 200 cmH2O**⋅**s**⋅**min-1 | 159 (56%) | ΔPocc | 0.84 | 15 | 79% | 76% | 71% | 83% |
|  | P0.1 | 0.74 | 2.7 | 61% | 70% | 60% | 71% |
|  | PTPmus > 300 cmH2O**⋅**s**⋅**min-1 | 65  (23%) | ΔPocc | 0.85 | 18 | 74% | 73% | 18% | 97% |
|  | P0.1 | 0.84 | 3.4 | 74% | 80% | 23% | 97% |

**Table legend:** Note that the given cut-offs are based on the measured Pocc or P0.1 values, no conversion is necessary. Pdi = transdiaphragmatic pressure, Pmus = respiratory muscle pressure, PTP = pressure-time product, Pocc = airway occlusion pressure, P0.1 is the occlusion pressure at 100ms. AUROC = area under the receiver-operator characteristic curve, CI = confidence interval, PPV = positive predictive value, NPV =negative predictive value, Sens = sensitivity, Spec = specificity. Analysis of PTPmus < 50 cmH2O\*s\*min-1 was not possible because no recordings were available with a PTPmus < 50 cmH2O\*s\*min-1.