

Additional file 3. Characteristics and outcomes of 208 patients who failed a first spontaneous breathing trial (SBT), according to the prevalence of weaning-induced cardiac ischemia (WiCI)

| | WiCI | | p |
|---|---------------|---------------|-------|
| | No (n=141) | Yes (n=36) | |
| Age, year | 66 (56-73) | 70 (60-77) | 0.147 |
| Female sex | 48 (34.0) | 18 (50.0) | 0.077 |
| Body mass index, kg/m ² | 27 (22-32) | 26 (23-30) | 0.669 |
| SAPS-II at admission | 50 (40-63) | 50 (35-64) | 0.702 |
| MacCabe score | | | 0.606 |
| 0 | 75 (53.2) | 22 (61.1) | |
| 1 | 42 (29.8) | 10 (27.8) | |
| 2 | 24 (17.0) | 4 (11.1) | |
| <i>Comorbidities</i> | | | |
| COPD | 41 (29.1) | 5 (13.9) | 0.064 |
| Restrictive lung disease | 16 (11.3) | 6 (16.7) | 0.400 |
| Obstructive sleep apnea syndrome | 21 (14.9) | 4 (11.1) | 0.561 |
| Asthma | 2 (1.4) | 0 (0.0) | >0.99 |
| Current smoker | 67 (47.5) | 14 (38.9) | 0.354 |
| Quantification of cigarette smoking, pack-year | 40 (26-55) | 30 (20-50) | 0.406 |
| Central nervous system disease | 15 (10.6) | 4 (11.1) | >0.99 |
| Peripheral neuropathy | 11 (7.8) | 1 (2.8) | 0.464 |
| Mental illness | 8 (5.7) | 1 (2.8) | 0.688 |
| Heart failure with preserved ejection fraction | 21 (14.9) | 4 (11.1) | 0.561 |
| Heart failure with reduced ejection fraction | 26 (18.8) | 2 (5.6) | 0.059 |
| Atrial fibrillation | 26 (18.4) | 9 (25.0) | 0.378 |
| Hypertension | 71 (50.4) | 24 (66.7) | 0.080 |
| Valvular heart disease | 17 (12.1) | 4 (11.1) | >0.99 |
| Coronary disease | 29 (20.6) | 7 (19.4) | 0.881 |
| Pulmonary hypertension | 12 (8.5) | 0 (0.0) | 0.129 |
| <i>Reason for intubation</i> | | | |
| Coma | 20 (14.2) | 4 (11.1) | 0.788 |
| Septic shock | 25 (17.7) | 4 (11.1) | 0.338 |
| COPD exacerbation | 14 (9.9) | 2 (5.6) | 0.624 |
| Pneumonia | 39 (27.7) | 8 (22.2) | 0.510 |
| Cardiogenic pulmonary edema | 13 (9.2) | 4 (11.1) | 0.731 |
| Cardiac arrest | 8 (5.7) | 8 (22.2) | 0.005 |
| Surgery | 10 (7.1) | 4 (11.1) | 0.489 |
| Others | 11 (7.8) | 2 (5.6) | >0.99 |
| <i>Events between ICU admission and inclusion</i> | | | |
| Acute respiratory distress syndrome | 62 (44.0) | 10 (27.8) | 0.078 |
| Septic shock | 76 (53.9) | 15 (38.9) | 0.108 |
| Ventilator-associated pneumonia | 34 (24.1) | 10 (27.8) | 0.650 |
| Neuromuscular blockade | 69 (49.3) | 15 (42.9) | 0.496 |
| Atrial fibrillation | 45 (31.9) | 14 (38.9) | 0.428 |
| Corticosteroids | 51 (36.2) | 8 (22.2) | 0.113 |
| Time between admission and inclusion, days | 7 (4-14) | 6 (4-10) | 0.614 |
| <i>Outcomes</i> | | | |
| Success weaning (within 7 days) | 116 (82.3) | 33 (91.7) | 0.168 |
| Tracheotomy | 7 (5.0) | 1 (2.8) | >0.99 |
| Ventilator-free days at day-28, days | 16 (0-21) | 18 (3-22) | 0.272 |
| Length of stay in ICU, days | 14 (10-23) | 12 (9-27) | 0.838 |
| Death in ICU | 33 (23.4) | 5 (13.9) | 0.215 |

SBT Spontaneous breathing trial, SAPS Simplified Acute Physiologic score, COPD chronic obstructive pulmonary disease, ICU intensive care unit

Data are expressed as number (percentage) for categorical variables or median (1st quartile- 3rd quartile) for continuous variables.

WiCI was defined as follows: i) ESC 2012: ST elevation in two contiguous leads (≥ 0.10 mV in all leads other than V₂-V₃; ≥ 0.20 mV in V₂-V₃ in men ≥ 40 years; ≥ 0.25 mV in V₂-V₃ in men < 40 years; ≥ 0.15 mV in V₂-V₃ in women), or ST depression ≥ 0.05 mV in two contiguous leads; ii) AHA 2013: ST elevation or depression ≥ 0.10 mV in two contiguous leads.

^a Successful weaning was defined as patient alive and extubated within the next 7 days after extubation; ^b If patient died before day-28, VFD at day-28=0