**Supplementary material**

**Table S1: Respiratory support at the post-extubation and hospital discharge timepoint after pediatric acute respiratory distress syndrome**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Total**  **(n=73)** | **Mild**  **ARDS (n=27)** | **Moderate ARDS (n=22)** | **Severe**  **ARDS (n=24)** | **P value** |
| Respiratory support at extubation | 54 (74.0) | 16 (59.3) | 18 (81.8) | 20 (83.3) | .11 |
| BiPAP | 24 (32.9) | 6 (22.2) | 8 (36.4) | 10 (41.7) | .38 |
| CPAP | 23 (31.5) | 8 (29.6) | 6 (27.3) | 9 (37.5) |
| HFNC | 4 (5.5) | 1 (3.7) | 2 (9.1) | 1 (4.2) |
| Tracheostomy | 3 (4.4) | 1 (3.7) | 2 (9.1) | 0 (0.0) |
| None | 19 (26.0) | 11 (40.7) | 4 (18.2) | 4 (16.7) |
|  | **Total**  **(n=67)a** | **Mild**  **PARDS (n=25)** | **Moderate PARDS (n=21)** | **Severe**  **PARDS (n=21)** | **P value** |
| Respiratory support at hospital discharge | 12 (18.2) | 4 (16.0) | 5 (25.0) | 3 (14.3) | .67 |
| BiPAP | 3 (4.5) | 2 (8.0) | 1 (4.8) | 0 (0.0) | .86 |
| CPAP | 5 (7.5) | 1 (4.0) | 2 (9.5) | 2 (9.5) |
| Tracheostomy | 4 (6.0) | 1 (4.0) | 2 (9.5) | 1 (4.8) |
| None | 55 (82.1) | 21 (84.0) | 16 (76.2) | 18(85.6) |

Pediatric ARDS severity is based on worst oxygenation index over seven days

aA further six patients were excluded from this analysis as they died before hospital discharge

Categorical variables summarized as counts (percentages).

BPAP – bilevel positive airway pressure

HFNC – heated humidified high flow nasal cannula

**Table S2: Multivariate logistic regression for post-extubation respiratory support in pediatric acute respiratory distress syndrome**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Univariate** | | **Multivariate** | |
| **Odds ratio**  **(95%confidence interval)** | **P value** | **Adjusted odds ratio**  **(95%confidence interval)** | **P value** |
| Weight, kg | 0.97 (0.94-0.99) | .01 | 0.95 (0.92-0.99) | .01 |
| Oxygenation indexa | 1.3 (1.1-1.6) | .008 | 0.98 (0.89-1.08) | .70 |
| Ventilator duration | 1.2 (1.0-1.3) | .007 | 1.34 (1.06-1.69) | .01 |

aWorst oxygenation index over seven days