**Supplemental Table 2**. **Outcomes for Unmatched High Flow Nasal Cannula and Positive Airway Pressure Groups**

|  |  |  |  |
| --- | --- | --- | --- |
| Outcomes | HFNC (*n* = 158) | PAP(*n* = 102) | *pa* |
| Respiratory support |  |  |  |
|  PAP duration, hours*b* | 0 (0, 0) | 45 (25, 88) | <0.001 |
|  HFNC duration, hours*c* | 13 (4, 41) | 1 (0, 5) | <0.001 |
|  LFNC duration, hours*c* | 57 (30, 110) | 101 (60, 277) | <0.001 |
|  Time to LFNC, hours*d* | 16 (4, 77) | 95 (47, 192) | <0.001 |
|  Time to room air, hours*e* | 82 (43, 156) | 212 (123, 381) | <0.001 |
| Nutrition and LOS |  |  |  |
|  Time to first oral attempt/MBS, days*f* | 1 (1, 5) | 8.5 (5.5, 14) | <0.001 |
|  Time to goal bolus feeding, days*g* | 3 (1, 10) | 16.5 (7, 25.5) | <0.001 |
|  Postsurgical hospital LOS, days | 8 (5.5, 18) | 23 (14, 34.5) | <0.001 |
| Extubation failure rate and mortality |  |  |  |
|  48 hour extubation failure | 16 (10) | 15 (15) | 0.266 |
|  In-hospital mortality | 0 (0) | 4 (4) | 0.023 |

HFNC = high flow nasal cannula, LFNC = low flow nasal cannula, LOS = length of stay, MBS = modified barium swallow, PAP = positive airway pressure.

*a*Statistical comparisons performed using Chi-square, Fisher Exact, or Mann Whitney U test, as appropriate, for categorical/ordinal or continuous data.

*bn* = 101 PAP.

*cn* = 97 PAP.

*dn* = 98 PAP.

*en* = 145 HFNC, *n* = 83 PAP.

*fn* = 153 HFNC, *n* = 90 PAP.

*gn* = 157 HFNC, *n* = 97 PAP.

Data presented as *n* (%) or median (interquartile range) as appropriate.