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**Post-extubation high-flow nasal cannula oxygen therapy *versus* non-invasive ventilation in chronic obstructive pulmonary disease with hypercapnic respiratory failure**

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**Key words:** chronic obstructive pulmonary disease, airway extubation, ventilator weaning, non-invasive ventilation.

**Supplementary Table 1. Parameters of high-flow nasal cannula and non-invasive ventilation.**

<b>High-flow nasal cannula</b>	
Mean temperature	35.8±2.17 degree Celsius
Mean flow rate	43.66±11.36 L/min
Mean FiO <sub>2</sub>	30.26±6.72
<b>Non-invasive ventilation mode</b>	
Mean support	16.5±3.33 cmH <sub>2</sub> O
Mean PEEP	7±0.87 cmH <sub>2</sub> O
Mean FiO <sub>2</sub>	24.37±3.16

Data are shown as means ± standard deviation. PEEP, positive end-expiratory pressure; FiO<sub>2</sub>, fraction of inspired oxygen.

**Supplementary Table 2. Arterial blood gas analysis parameters.**

Groups	pH	PaCO <sub>2</sub>	PaO <sub>2</sub> /FiO <sub>2</sub>
<b>High-flow nasal cannula</b>			
Baseline	7.42±0.03	47.73±6.68	249±74.82
1 hour	7.41±0.03	49.4±6.19	254.53±83.58
24 hours	7.40±0.04	50.33±8.17	262.6±93.86
48 hours	7.40±0.04	49.53±7.23	274.8±83.46
72 hours	7.39±0.05	49.20±9.11	279.6±84.53
p-value	<b>0.04</b>	<b>0.2</b>	<b>&lt;0.05</b>
<b>Non-invasive ventilation mode</b>			
Baseline	7.41±0.03	47.19±5.01	264.38±47.85
1 hour	7.40±0.02	49.06±3.62	266.44±49.94
24 hours	7.40±0.02	49.38±4.53	276.62±57.96
48 hours	7.39±0.04	54.88±4.73	283.12±55.55
72 hours	7.39±0.05	51.31±0.12	289.62±52.29
p-value	<b>&lt;0.05</b>	<b>0.148</b>	<b>&lt;0.05</b>

Data are shown as means ± standard deviation. Friedman repeated measures analysis of variance on ranks; PaCO<sub>2</sub>, partial pressure of carbon dioxide; PaO<sub>2</sub>, partial pressure of oxygen; FiO<sub>2</sub>, fraction of inspired oxygen.