

**Figure S1** The scatter plots of the blood gap indicators of the two groups (SPV *vs.* PPV) for different time-points. The figure shows the blood gas of all patients with 11 times of body position changes. Since only one patient had more than 12 times of prone ventilation, the blood gas was not displayed after 12 times. The unit of measurement time is the number of changes in prone position. SPV, supine position ventilation; PPV, prone position ventilation; PaCO<sub>2</sub>, carbon dioxide partial pressure; PaO<sub>2</sub>, partial pressure of oxygen; FiO<sub>2</sub>, fraction of inspired oxygen; PFR, PaO<sub>2</sub>/FiO<sub>2</sub>; s1, the first time of supine position ventilation; p1, the first time of prone position ventilation.