**Supplemental Digital Content 13**

**Supplemental Table 7 -** Respiratory parameters

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Time point | Low-VT/Moderate-PEEP/RM- | Low-VT/Moderate-PEEP/4RM+ | Low-VT/High-PEEP/RM- | Low-VT/High-PEEP/1RM+ |
| VT(mL/kg) | After laparotomy | 6.7 ± 0.3 | 6.5 ± 0.3 | 6.7 ± 0.3 | 6.7 ± 0.2 |
| FDA4 | 6.8 ± 0.3 | 6.7 ± 0.4 | 6.6 ± 0.2 | 6.9 ± 0.2 |
| RR(min-1) | After laparotomy | 48 ± 6 | 54 ± 7 | 54 ± 6 | 54 ± 9 |
| FDA4 | 45 ± 6 | 52 ± 9 | 52 ± 3 | 54 ± 10 |
| Ppeak,RS(cmH2O) | After laparotomy | 14.0 ± 1.4 | 10.9 ± 0.5\* | 17.6 ± 0.3 | 14.6 ± 1.3† |
| FDA4 | 16.0 ± 1.0 | 11.7 ± 1.2\* | 17.4 ± 1.1 | 17.4± 2.4 |
| Pmean,RS (cmH2O) | After laparotomy | 6.4 ± 0.5 | 5.6 ± 0.3\* | 9.5 ± 0.2 | 8.9 ± 0.9 |
| FDA4 | 6.9 ± 0.4 | 5.9 ± 0.4\* | 9.4 ± 0.4 | 10.0 ± 1.3 |
| Pplat,RS(cmH2O) | After laparotomy | 13.0 ± 1.8 | 9.3 ± 0.4\* | 16.7 ± 1.3 | 13.5 ± 1.3† |
| FDA4 | 15.4 ± 0.8 | 10.4 ± 0.8\* | 16.6 ± 1.2 | 16.9 ± 2.4 |
| P,RS(cmH2O) | After laparotomy | 9.8 ± 1.8 | 6.0 ± 0.4\* | 10.4 ± 1.5 | 6.9 ± 1.0† |
| FDA4 | 12.3 ± 0.8 | 7.1 ± 0.8\* | 10.4 ± 1.3 | 10.2 ± 2.1 |
| Energy(J) | After laparotomy | 1.6 ± 0.2 | 1.2 ± 0.2\* | 1.7 ± 0.1 | 1.2 ± 0.2† |
| FDA4 | 1.9 ± 0.2 | 1.2 ± 0.2\* | 1.7 ± 0.1 | 1.5 ± 0.4 |
| Power(J/min) | After laparotomy | 80 ± 13 | 62 ± 8\* | 69 ± 40 | 79 ± 40 |
| FDA4 | 83 ± 12 | 63 ± 7\* | 91 ± 4 | 80 ± 21 |

Respiratory parameters after laparotomy and at FDA4 (functional data acquisition at 4 h). Values are mean ± standard deviation (SD) of seven rats in each group: 1) Low-VT/Moderate-PEEP/RM-: VT = 7 mL/kg with PEEP = 3 cmH2O and no RMs; 2) Low-VT/Moderate-PEEP/4RM+: VT = 7 mL/kg with PEEP = 3 cmH2O and RMs, which were performed through a continuous positive airway pressure of 30 cmH2O for 30 seconds after randomization (before laparotomy) and every 1 hour thereafter; 3) Low-VT/High-PEEP/RM-: VT = 7 mL/kg with PEEP = 6 cmH2O and no RMs; 4) Low-VT/High-PEEP/1RM+: VT = 7 mL/kg with PEEP = 6 cmH2O and RMs (low-VT/high-PEEP, RM+), which were performed as described above but only before laparotomy. VT: tidal volume; RR: respiratory rate; Ppeak,RS: respiratory system peak pressure; Pmean,RS: respiratory system mean pressure; Pplat,RS: respiratory system plateau pressure; P,RS:driving pressure. \* p<0.05 *vs.* Low-VT/Moderate-PEEP (RM-); † p<0.05 *vs.* Low-VT/High-PEEP (RM-).