**Supplemental Digital Content 2**

**Additional Methods 2**

*Graphical method for alternative mechanical energy* *and power calculations*

Alternatively to the method described in the main text, mechanical energy was also calculated using the pressure *vs.* volume (PV) curve. Animals were connected to a flexiVent® mechanical ventilator (SCIREQ, Montreal, QC, Canada). Airway pressure was increased from positive end-expiratory pressure (PEEP = 3cmH2O), in 3-cmH2O increments, to a maximum value of 30 cmH2O, and volume was recorded (Supplemental Digital Content Figure 1). First, the total area, obtained by multiplying the volume difference (V) by the pressure difference (P,RS) during the maneuver (30–3 cmH2O), was determined. Second, the area under the PV curve was calculated and subtracted from the total area. Finally, this value was multiplied by RR to obtain the mechanical power.



**Supplemental Digital Content - figure 1.** Graphical method for alternative calculation of mechanical energy. V: volume difference; P,RS: airway pressure difference. The white area represents the mechanical energy transferred from the ventilator to the respiratory system.