

Figure S1 Four quadrants in the RALE score. To determine the RALE score, each radiograph was divided into four quadrants, defined vertically by the vertebral column and horizontally by the first branch of the left main bronchus. Each quadrant was assigned a consolidation score from 0 to 4 to quantify the extent of alveolar opacities, based on the percentage of the quadrant with opacities, and a density score from 1 to 3 to quantify the overall density of alveolar opacities, unless the consolidation score for that quadrant was 0. The density score (1= hazy, 2= moderate, 3= dense) allows for a more quantitative assessment of the density of opacities by quadrant. To calculate the final RALE score, the product of the consolidation and density scores for each quadrant was summed for a final RALE score ranging from 0 (no infiltrates) to 48 (dense consolidation in >75% of each quadrant) (5,16,17). RALE, radiographic assessment of lung edema.

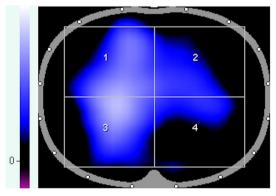


Figure S2 Four ROIs within the chest contour on EIT. EIT measurements were conducted using the Dräger PulmoVista 500 device (Lübeck, Germany) in accordance with the international consensus statement. Tidal impedance variation was averaged from each minute and analyzed in four ROIs, defined as quadrants, which has been shown to be correlated with TV. The differences in TV between the left and right lungs, or the surgical-side and nonsurgical-side lungs, were calculated. The sum of the TV signals from all pixels representing the left and right hemithorax was separately determined. The TV signals within each hemithorax were quantified as a percentage of the total TV signals from both lungs. Two coefficients were then calculated by taking the root mean square value of the cyclic components mentioned above for each VT signal (12). These coefficients were labeled as TV_L and TV_R , representing tidal ventilation in the left and right lung respectively. $TV_R = TV_{ROI 1} + TV_{ROI 3}$; $TV_L = TV_{ROI 2} + TV_{ROI 4}$ (18). The coefficients TV_S and TV_{NS} represented tidal ventilation within the surgical side and nonsurgical side of the lungs respectively. ROI 1: right lung ventral; ROI 2: left lung ventral; ROI 3: right lung dorsal; ROI 4: left lung dorsal. ROIs, regions of interest; EIT, electrical impedance tomography; TV, tidal volume.