

Supplemental Digital Content 3

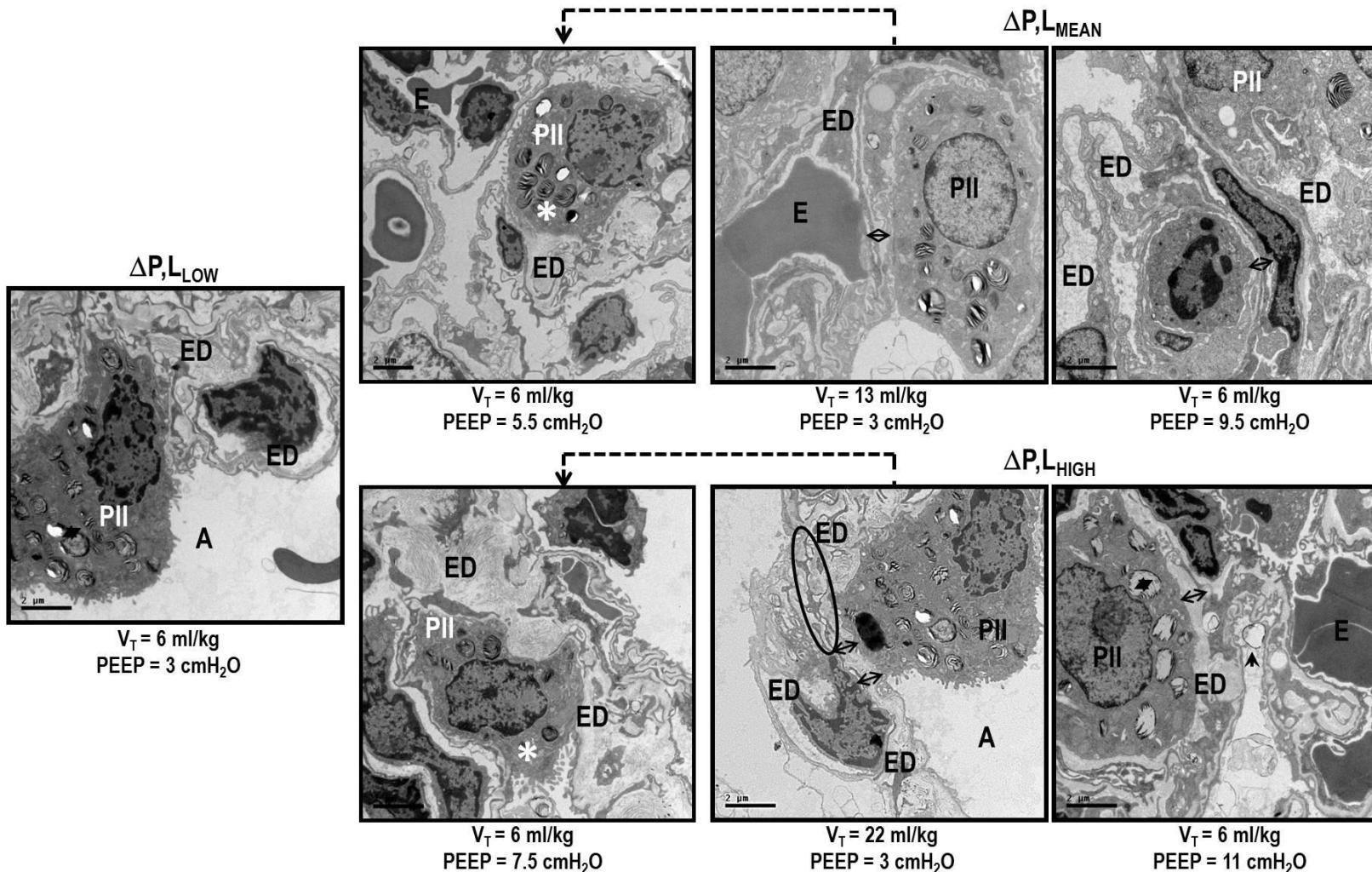


Fig. 1. Electron microscopy of lung parenchyma

Photomicrographs are representative of data derived from lung sections obtained from five rats in each group. $\Delta P,L$: transpulmonary driving pressure; V_T : tidal volume, PEEP: positive end-expiratory pressure. Note cytoplasmic degeneration of type II pneumocyte (PII), with damaged alveolar capillary barrier and presence of interstitial edema (ED). Arrowhead: surfactant extrusion; A, alveolar space; E: erythrocyte; double arrow: ACB. Note presence of different degrees of interstitial edema and disarrangement of type II epithelial cells with degenerative features in lamellar bodies (asterisks) depending on the combination of V_T and PEEP. Greater damage to epithelial cells, as well as rupture of alveolar capillary membrane (circle), thus allowing increased edema, occurred in animals ventilated with $V_T = 22$ ml/kg and PEEP = 3 cmH₂O. Animals ventilated with $V_T = 6$ ml/kg and PEEP = 11 cmH₂O presented less epithelial damage and edema.