Additional file 1 Table S1. Equations and calculations for lung mechanics in quasi - static conditions.

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| AutoPEEP: Intrinsic PEEP  CRS: Compliance respiratory system  P: Driving Pressure  Paw: Airway Pressure  PEEP: (set) Positive pressure at the end of exhalation  PIP: Peak inspiratory pressure  PPL: Plateau pressure  QI: Maximum inspiratory flow  QE: Maximum expiratory flow  RawE: Resistance expiratory airway  RawI: Resistance inspiratory airway  KTI: Inspiratory time constant  KTE: Expiratory time constant  tPEEP: Total PEEP  VT: Tidal volume | **Equation of Motion:**  Paw = VT / CRS + RawI · QI + autoPEEP  **Resistive component**  RawI = (PIP - PPL) / QI  RawE = (PPL - tPEEP) / QE  **Elastic component:**  P = PPL - tPEEP  CRS = VT / P  **Threshold Component:**  autoPEEP = tPEEP - PEEP  **Time constants:**  KTI = CRS · RawI  KTE = CRS · RawE |