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

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| AutoPEEP: Intrinsic PEEPCRS: Compliance respiratory systemP: Driving PressurePaw: Airway PressurePEEP: (set) Positive pressure at the end of exhalationPIP: Peak inspiratory pressurePPL: Plateau pressureQI: Maximum inspiratory flowQE: Maximum expiratory flowRawE: Resistance expiratory airwayRawI: Resistance inspiratory airwayKTI: Inspiratory time constantKTE: Expiratory time constanttPEEP: Total PEEPVT: Tidal volume  | **Equation of Motion:** Paw = VT / CRS + RawI · QI + autoPEEP**Resistive component** RawI = (PIP - PPL) / QIRawE = (PPL - tPEEP) / QE**Elastic component:** P = PPL - tPEEP CRS = VT / P**Threshold Component:**autoPEEP = tPEEP - PEEP**Time constants:** KTI = CRS · RawI KTE = CRS · RawE |