### Acute Respiratory Distress Syndrome (ARDS)

**Definition:**
- Acute onset
- Positive end-expiratory pressure (PEEP)
- **PaO2/FiO2**
- Excludes conditions like left atrial hypertension

**Criteria:**
- **ARDS Definition:**
  - Acute onset
  - Over-distension injury (Volutrauma)
  - Barotrauma
  - Recruitment/de-recruitment injury
  - PEEP
  - Recruitment maneuvers

**Oscillate OSCAR trial:**
- High frequency oscillation ventilation (HFOV)

**The Berlin Definition of ARDS:**
- **Lung protective ventilation strategy**
- Oxygen and carbon dioxide concentrations

**Updated Concepts:**
- Early goal-directed hemodynamic resuscitation
- Open lung approach
- RCTs
- Non-conventional modes of ventilation

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**Systematic Review:**
- Phua and colleagues
- 1984-2006
- Pooled mortality: 44.3%
- Observational studies: 36.2%
- RCTs: 44.0%
- RR: 1.27 (95% CI 1.07-1.50, p = 0.006)

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**New Era in ARDS:**
- The Berlin Definition of ARDS
- Oxygen and carbon dioxide concentrations

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1. Phua and colleagues. (2013) The Berlin Definition of ARDS.
New Era in ARDS: ?? ???. ?????? ?????????

References: