Meta-analysis of ambroxol treatment for acute lung injury/acute respiratory distress syndrome based on randomized controlled trials.


- Potential benefits of high dose ambroxol treatment for acute lung injury (ALI)/acute respiratory distress syndrome (ARDS) were evaluated by conducting a meta-analysis based on 10 randomized controlled trials involving 508 patients.

- Adjuvant treatment with ambroxol:
  - Improved parameters of alveolar gas exchange (\(\text{PaO}_2/\text{FiO}_2, \text{PO}_2\)), indicating improved breathing.
  - Reduced levels of inflammatory markers in serum (TNF-\(\alpha\), IL-6).
  - Increased levels of the antioxidant serum superoxide dismutase.

**Ambroxol exhibits anti-oxidant and anti-inflammatory properties, and also appears to improve lung function.**