

American Thoracic Society Guideline Update for Patients with ARDS



ARDS is a life-threatening respiratory failure characterised by acute hypoxaemia and bilateral radiographic infiltrates. The definition of ARDS has evolved over 50 years, with recent suggestions to include intubated and non-intubated patients. Management remains largely supportive, focusing on strategies to limit lung injury, but high mortality rates persist, and survivors often face long-term impairments.

In 2017, the American Thoracic Society (ATS), European Society of Intensive Care Medicine (ESICM), and Society of Critical Care Medicine published a Clinical Practice Guideline providing recommendations on ventilatory and adjunctive measures in ARDS. Since then, new data on multiple ARDS therapies and supportive care interventions, including corticosteroids, VV-ECMO, neuromuscular blocking agents (NMBAs), and PEEP, have emerged, prompting an update to the guidelines.

This guideline provides updates and additional recommendations for the management of ARDS. It incorporates recent evidence related to corticosteroids, venovenous extracorporeal membrane oxygenation (VV-ECMO), neuromuscular blocking agents, and positive end-expiratory pressure (PEEP) in managing ARDS. The document summarises evidence related to four specific aspects represented by "PICO questions" (patient, intervention, comparison, and outcome). A multidisciplinary panel of experts in acute respiratory distress syndrome (ARDS) utilised the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) framework to formulate clinical recommendations based on the available evidence.

The document suggests the following recommendations for the management of acute respiratory distress syndrome (ARDS):

1. Corticosteroids are suggested for patients with ARDS (conditional recommendation, moderate certainty of evidence).
2. VV-ECMO is suggested for selected patients with severe ARDS (conditional recommendation, low certainty of evidence).
3. Neuromuscular blockers are suggested for patients with early severe ARDS (conditional recommendation, low certainty of evidence).
4. Higher PEEP without lung recruitment maneuvers is recommended over lower PEEP for patients with moderate to severe ARDS (conditional recommendation, low to moderate certainty).
5. Prolonged lung recruitment manoeuvres are not recommended for patients with moderate to severe ARDS (strong recommendation, moderate certainty).

The guideline suggests higher PEEP without lung recruitment manoeuvres for moderate to severe ARDS (conditional recommendation, low to moderate certainty) and strongly recommends against prolonged lung recruitment manoeuvres (strong recommendation, moderate certainty). Previous 2017 guideline recommendations that remain include limiting tidal volume and inspiratory pressures during mechanical ventilation, prone positioning for severe ARDS patients, and against routine use of high-frequency oscillatory ventilation in moderate or severe ARDS cases. Individual patient factors should be considered, and the guidelines acknowledge the ongoing need for additional evidence from clinical trials.

Source: [Am J Respir Crit Care Med](#)

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