

## Management of Malignant Pleural Effusions An Official ATS/STS/STR Clinical Practice Guideline

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**Background:** This Guideline, a collaborative effort from the American Thoracic Society, Society of Thoracic Surgeons, and Society of Thoracic Radiology, aims to provide evidence-based recommendations to guide contemporary management of patients with a malignant pleural effusion (MPE).

**Methods:** A multidisciplinary panel developed seven questions using the PICO (Population, Intervention, Comparator, and Outcomes) format. The GRADE (Grading of Recommendations, Assessment, Development and Evaluation) approach and the Evidence to Decision framework was applied to each question. Recommendations were formulated, discussed, and approved by the entire panel.

**Results:** The panel made weak recommendations in favor of: 1) using ultrasound to guide pleural interventions; 2) not performing pleural interventions in asymptomatic patients with

MPE; 3) using either an indwelling pleural catheter (IPC) or chemical pleurodesis in symptomatic patients with MPE and suspected expandable lung; 4) performing large-volume thoracentesis to assess symptomatic response and lung expansion; 5) using either talc poudrage or talc slurry for chemical pleurodesis; 6) using IPC instead of chemical pleurodesis in patients with nonexpandable lung or failed pleurodesis; and 7) treating IPC-associated infections with antibiotics and not removing the catheter.

**Conclusions:** These recommendations, based on the best available evidence, can guide management of patients with MPE and improve patient outcomes.

**Keywords:** pleural effusion; malignant; palliation; pleurodesis; pleural catheter

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**PICO 3: Should the Management of Patients with Symptomatic Known or Suspected MPE Be Guided by Large-Volume Thoracentesis and Pleural Manometry?**

**PICO 4: In Patients with Symptomatic MPE with Known or Suspected Expandable Lung and No Prior Definitive Therapy, Should IPCs or Chemical Pleurodesis Be Used as First-Line Definitive Pleural Intervention for Management of Dyspnea?**

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