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## 主題:

Non-intubated Anesthesia for Thoracoscopic Surgery: All About Innovation and Sustainability!

## 摘要:

Non-intubated anesthesia for thoracic surgery represents a transformative shift, prioritizing sustainability and innovation in cardiothoracic anesthesia. This approach exclusively uses intravenous anesthesia without inhalational agents, significantly reducing environmental impact and supporting global sustainability efforts in healthcare. By forgoing intubation, it reduces airway manipulation and associated risks like ventilator-associated lung injury, airway trauma, and complications from residual neuromuscular blockade and nausea.

Since 2009, National Taiwan University Hospital has pioneered this technique, successfully treating thousands of patients, including those needing complex procedures such as lobectomy and segmentectomy for lung cancer. Non-intubated anesthesia eliminates the inherent risks of intubated general anesthesia, lowers postoperative nausea and vomiting, and expedites recovery, leading to greater patient satisfaction. Additionally, high-flow nasal oxygen in these procedures enhances arterial oxygenation, supporting spontaneous breathing and stable sedation, essential components of the non-intubated approach.

Clinical research and retrospective analysis have validated this method, particularly when combined with single-incision or tubeless video-assisted thoracoscopic surgery, making it an optimal choice for early-stage lung cancer patients. Outcomes for non-intubated thoracoscopic lobectomy are comparable to intubated surgeries, providing a viable alternative that aligns with sustainable practices.

The key to non-intubated anesthesia lies not in the absence of a breathing tube but in the careful balance of regional anesthesia, spontaneous breathing, and targeted sedation. This approach redefines patient-centered care, merging clinical efficacy with environmental consciousness and setting a new standard for thoracic surgical practices.