



The Use of Opioid Medications in Lung Transplant: A Scoping Review



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INTRODUCTION

- Opioids are frequently utilized for dyspnea and analgesia in lung transplant patients
- Consensus is mixed regarding the impact of opioids on transplantation outcomes
- Lungs from donors with opioid use disorder (OUD) are increasingly being considered for use in transplant¹⁻³
- There is no data on lung transplants in recipients with OUD

METHODS

We performed a scoping review of all available literature regarding opioid use and lung transplant including: donors with OUD, the use of opioids pre-transplant, in the acute post-operative setting and long term post-transplant, and transplantation of patients with OUD.

For each study we defined the study sample, screening process, outcomes, and conducted consensus quality ranking.

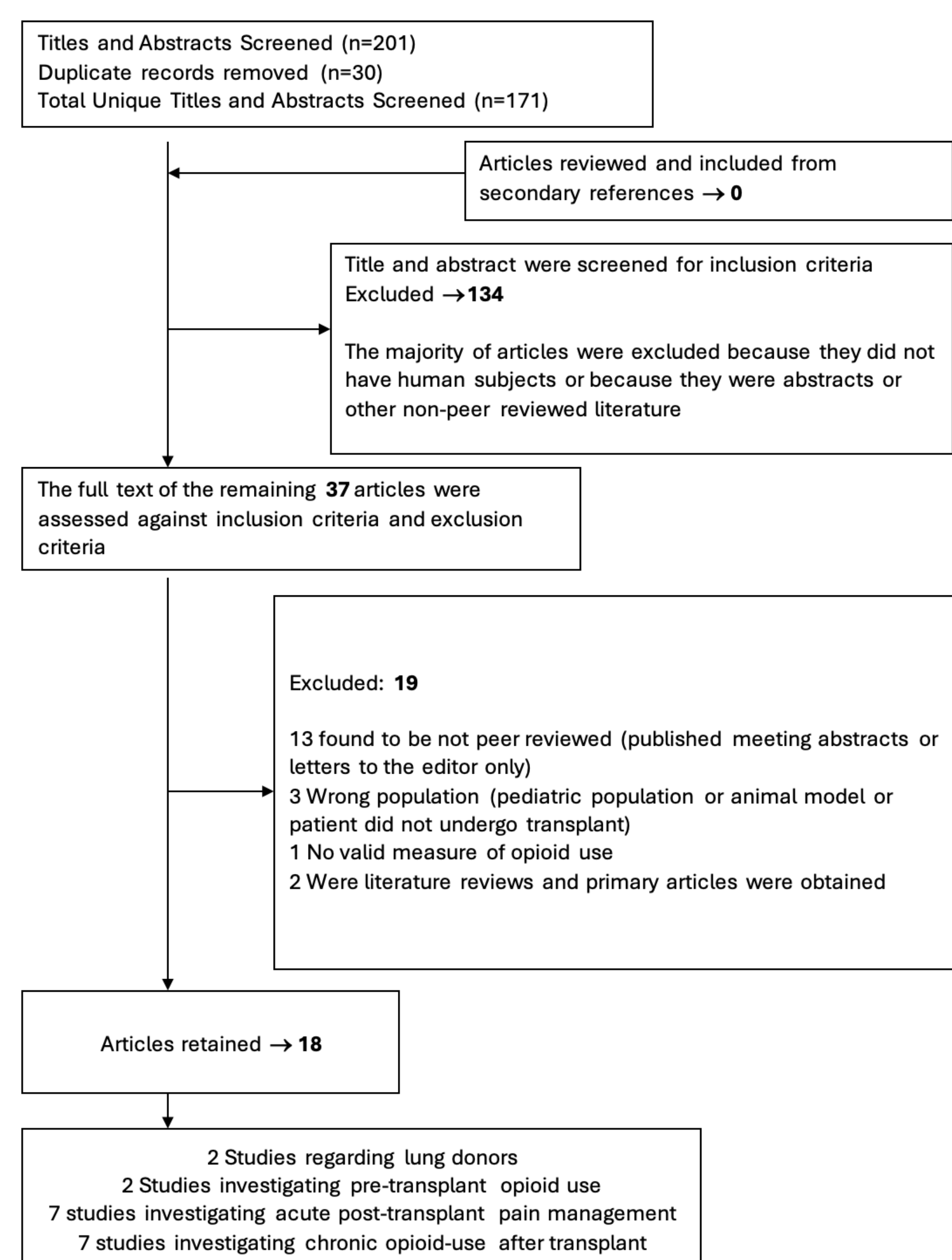
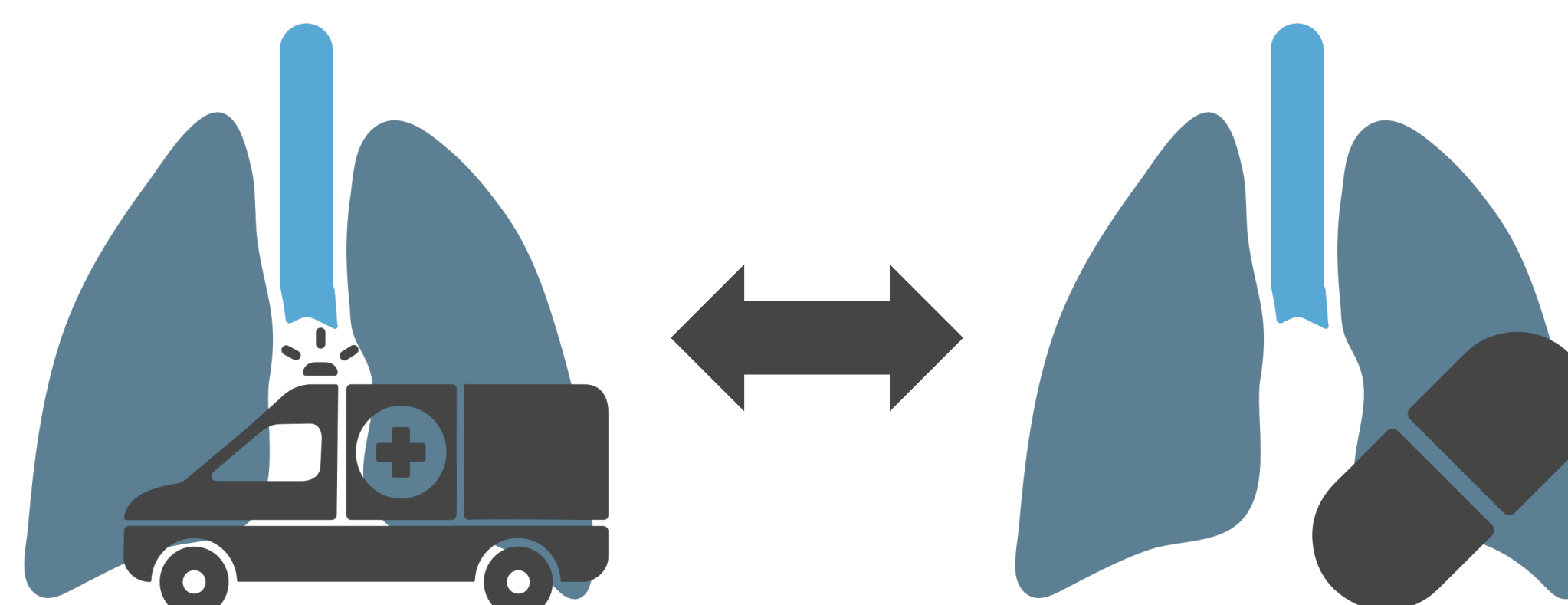
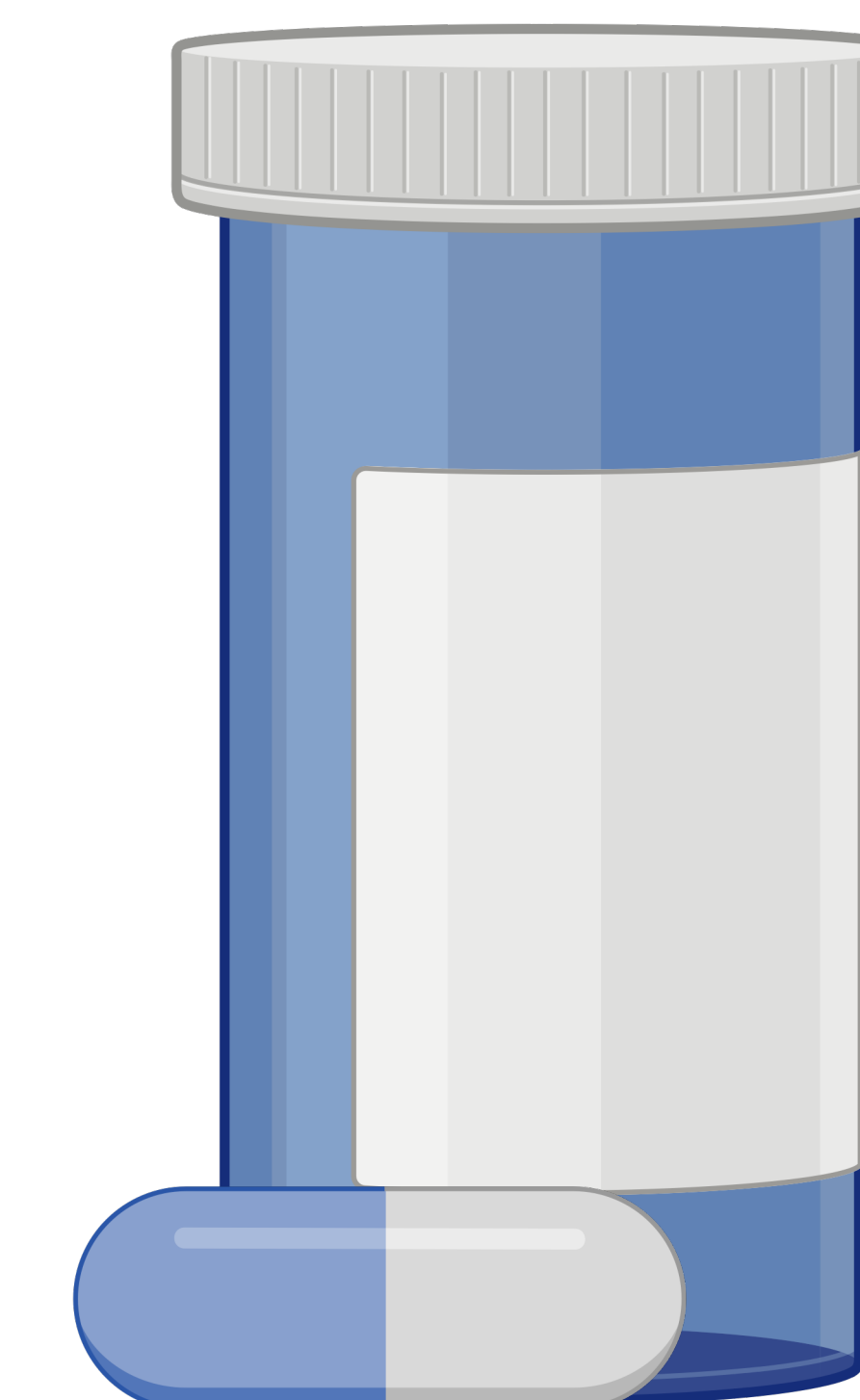


Figure 1. Flow Diagram of Study Inclusion

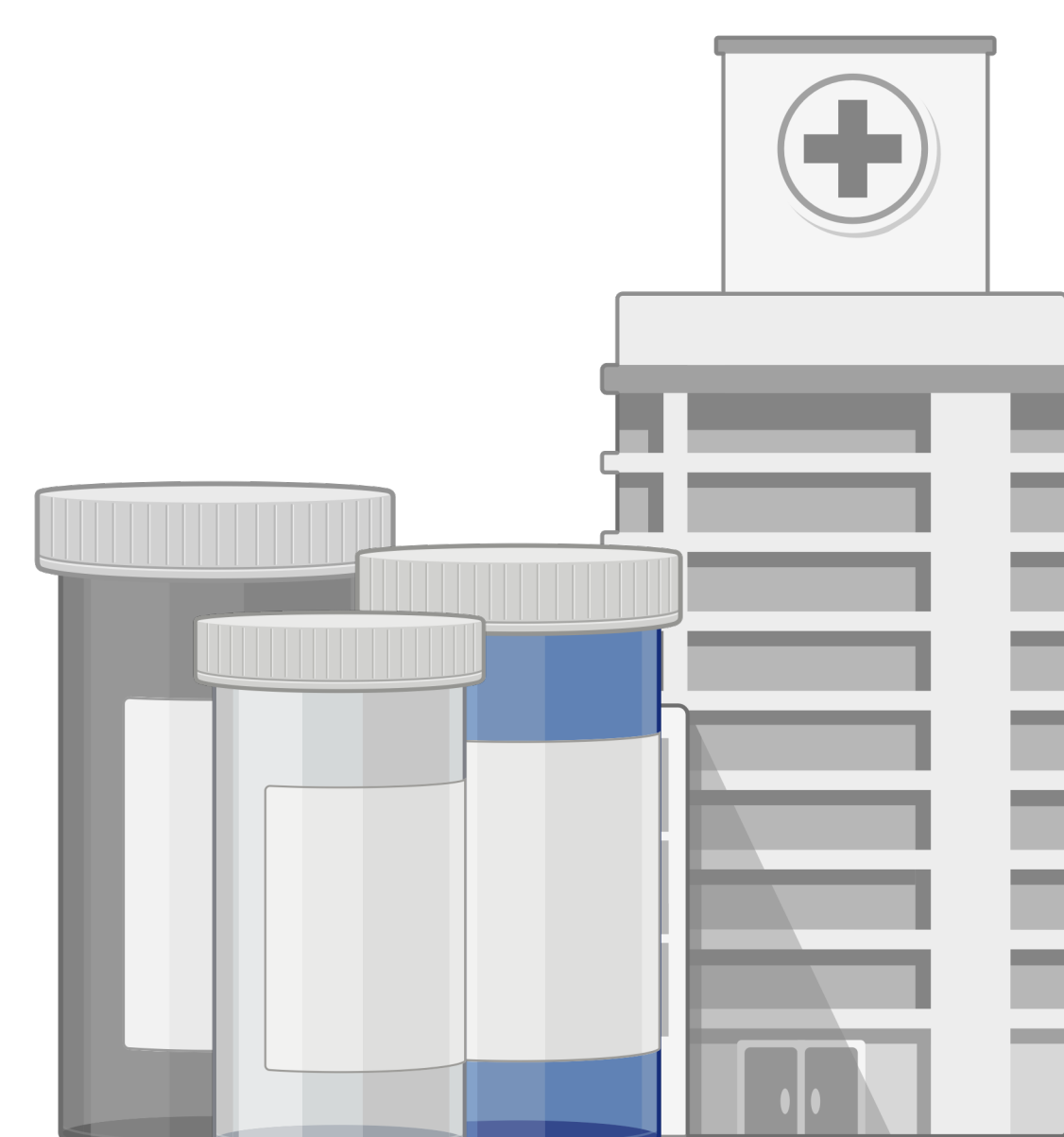
RESULTS



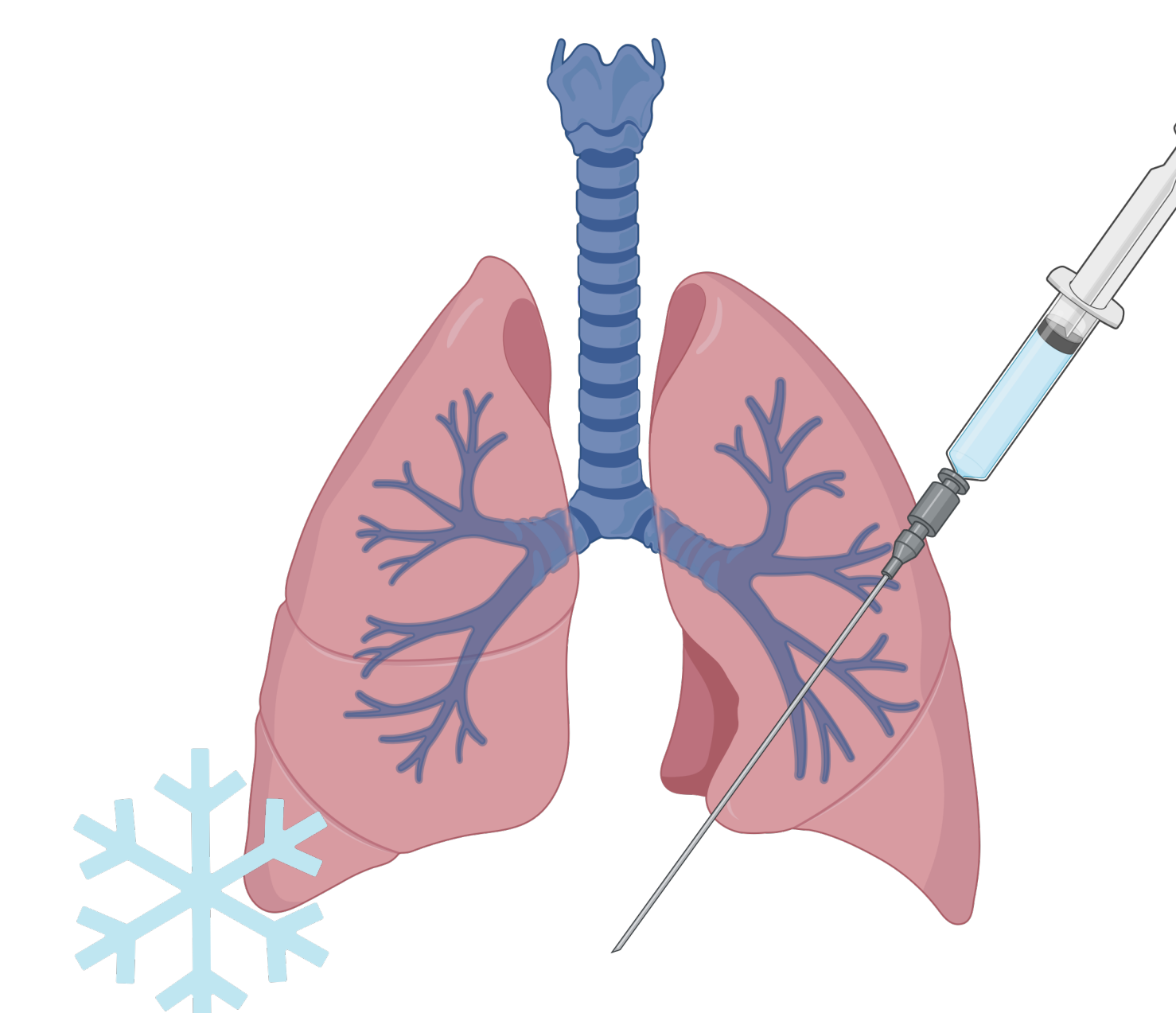
Two studies found that patients who receive organs from opioid overdose donor deaths have similar outcomes to patients who receive organs from non-overdose donor deaths^{2,4}



Two studies found that pre-transplant opioid use at low to moderate doses does not adversely impact transplant-related outcomes, and a majority of patients are able to discontinue opioids after transplant^{5,6}



Seven studies found that chronic opioid use after transplant may be associated with poor outcomes, including increased mortality¹⁴⁻²⁰



Based on seven studies, nerve blocks and cryoanalgesia reduce the need for post-operative opioid analgesia⁷⁻¹³

CONCLUSION

- Lungs from overdose donor deaths may be safe for use in transplant
- Judicious use of prescribed opioids in lung recipients prior to transplantation does not lead to overdose deaths or adverse effects on transplant outcomes
- Opioids are frequently used post-operatively, with mixed conclusions about long-term safety and alternative pain interventions
- More research is needed to determine outcomes in lung transplant patients with a history of OUD

Disclosures and References

