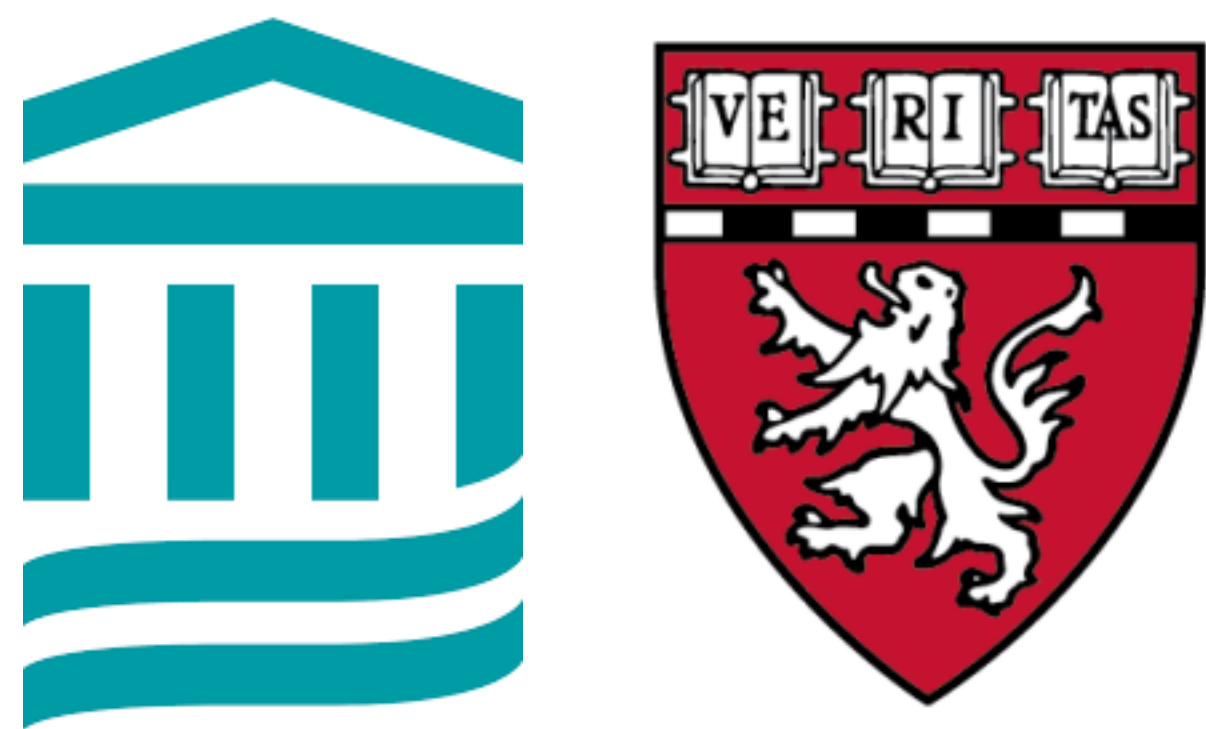




Impact of Centrally Acting Pain Modulators on Rebound Pain in Patients Receiving Continuous Interscalene Nerve Block

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Background

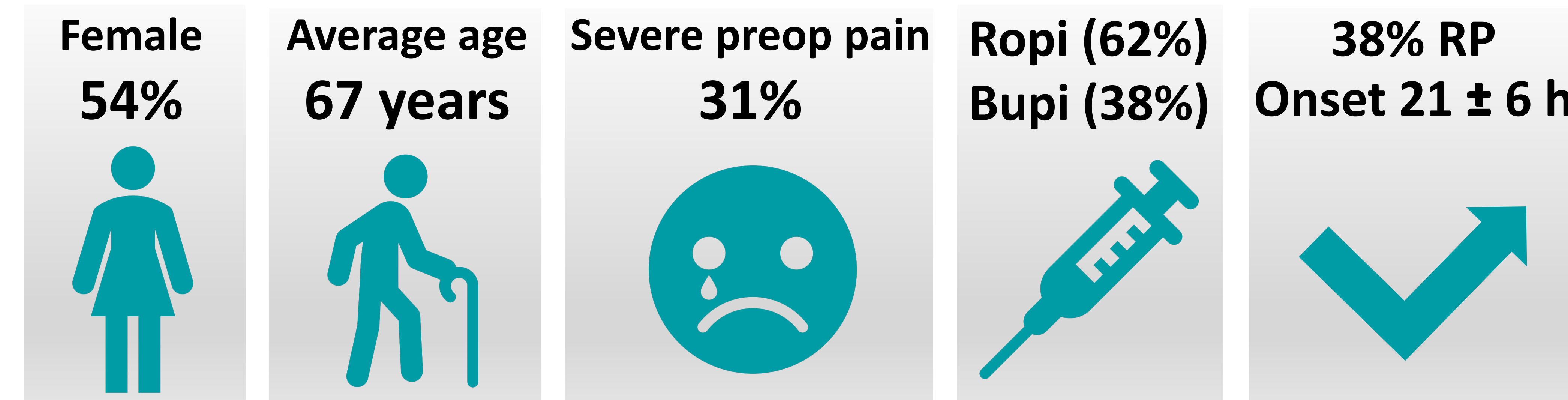
Rebound pain (RP)

- A sudden onset of severe pain (numeric rating scale ≥ 7) after resolution of a peripheral nerve block.^{1,2}
- The reported incidence of RP following single-shot nerve block is approximately 40–50%.^{3,4}
- Continuous peripheral nerve blocks (CPNB) may reduce the risk of RP.³
- The **impact of centrally acting pain modulators** on RP remains unclear.

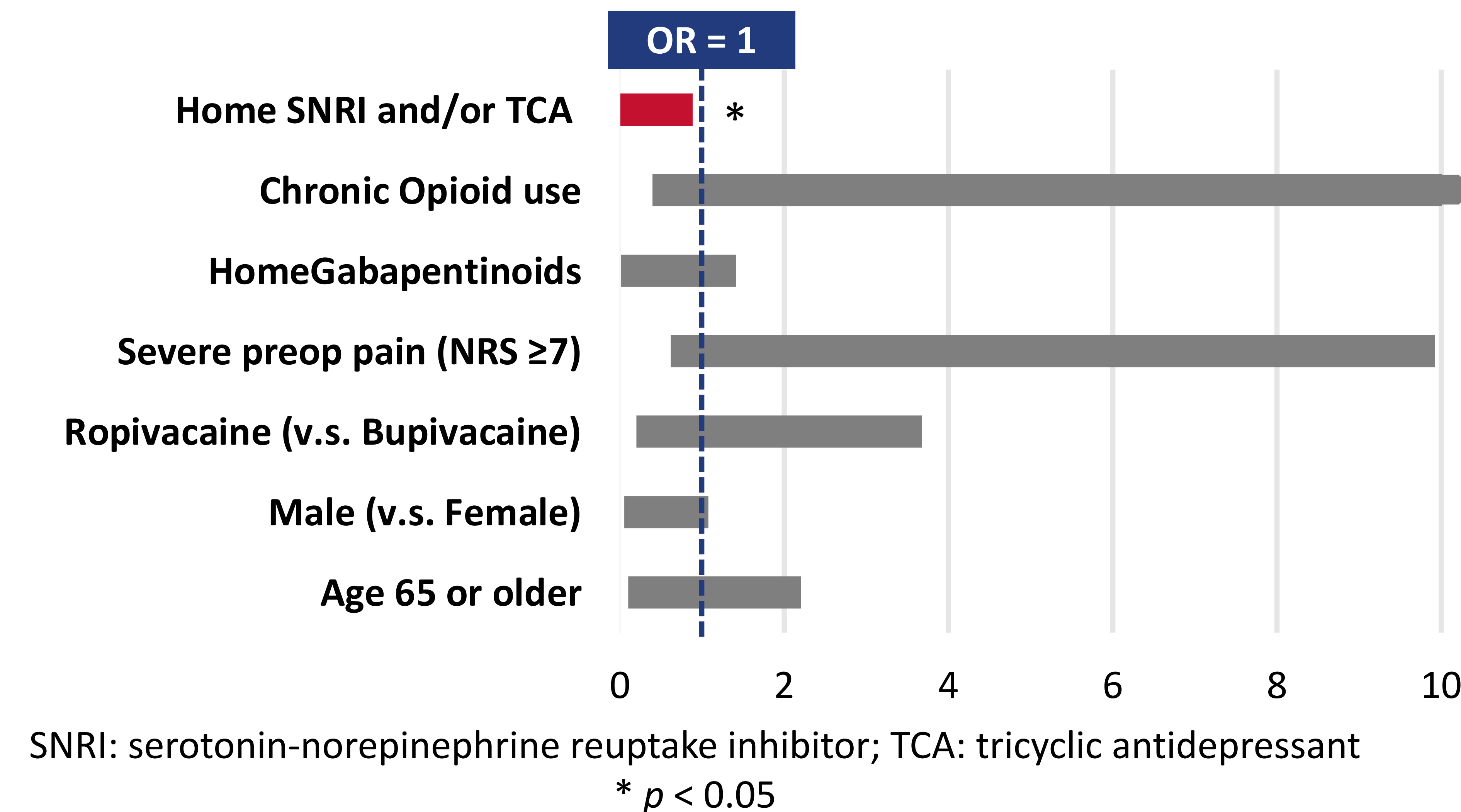
Methods

- Adult patients undergoing **shoulder surgery at MGH** between Sept 2025 and Feb 2026 were included if they received a single-shot interscalene brachial plexus nerve block followed by CPNB.
- **Logistic regression** was used to examine whether **home use of centrally acting pain modulators** (SNRI, TCA, gabapentinoids, opioids) associates **RP**, adjusting for age, sex, severe preoperative pain, and local anesthetic type.

Results (n = 52 patients)



Odds ratio of rebound pain in patients with CPNB



Conclusions

- Home use of SNRI and/or TCA could be **protective** for RP.
- Home gabapentinoids or chronic opioid use has **no significant** effects.

Future Directions

- What mechanisms contribute to rebound pain?
- How can rebound pain be prevented (eg, CPNB modes, SNRI/TCA)?

References

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