



## Postoperative Nausea and Vomiting Prevention.

Level of Evidence	Moderate
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### Consensus Statement

Standardized risk factor assessment and prophylaxis has been shown to prevent postoperative nausea and vomiting.

### Main Points

- PONV is common after cardiac surgery and contributes substantially to patient discomfort and dissatisfaction.
- Standardized risk assessment should identify patients at higher risk and guide multimodal prophylaxis using agents from different antiemetic classes.
- Aligns with broader multisociety guidance favoring structured prevention and rescue strategies within ERAS pathways.

### Key References

1. Apfel CC, Laara E, Koivuranta M, Greim CA, Roewer N. A simplified risk score for predicting postoperative nausea and vomiting: conclusions from cross-validations between two centers. *Anesthesiology*. 1999;91:6937-00.
2. Champion S, Zieger L, Hemery C. Prophylaxis of postoperative nausea and vomiting after cardiac surgery in high-risk patients: a randomized controlled study. *Ann Card Anaesth*. 2018;21:8-14.
3. Gan TJ, Belani KG, Bergese S, et al. Fourth Consensus Guidelines for the Management of Postoperative Nausea and Vomiting. *Anesth Analg*. 2020;131:411-448.
4. Gershengorn HB, Wunsch H, Hua M, Bavaria JE, Gutsche J. Association of overnight extubation with outcomes after cardiac surgery in the intensive care unit. *Ann Thorac Surg*. 2019;108:432-442.

5. Grebenik CR, Allman C. Nausea and vomiting after cardiac surgery. *Br J Anaesth.* 1996;77:356-359.
6. Hasheminejad E, Forner AF, Meineri M, Ender J, Zakhary WZ. Postoperative nausea and vomiting prophylaxis in fast-track cardiac anesthesia: a patient matched retrospective before and after study. *Int J Anesthesiol Pain Med.* 2022;8:78.
7. Hijazi EM, Edwan H, Al-Zoubi N, Radaideh H. Incidence of nausea and vomiting after fast-track anaesthesia for heart surgery. *Braz J Cardiovasc Surg.* 2018;33:371-375.
8. Mace L. An audit of post-operative nausea and vomiting, following cardiac surgery: scope of the problem. *Nurs Crit Care.* 2003;8:187-196.
9. Sawatzky JA, Rivet M, Ariano RE, Hiebert B, Arora RC. Post-operative nausea and vomiting in the cardiac surgery population: who is at risk? *Heart Lung.* 2014;43:550.
10. Wang EHZ, Sunderland S, Edwards NY, et al. A single prophylactic dose of ondansetron given at cessation of postoperative propofol sedation decreases postoperative nausea and vomiting in cardiac surgery patients: a randomized controlled trial. *Anesth Analg.* 2020;131:1164-1172.

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