



Goal directed fluid therapy is recommended to reduce postoperative complications.

Class (Strength) of Recommendation	Class I (Strong)
Level (Quality) of Evidence	Level B-R (Randomized)

Main Points

- Goal-directed therapy (GDT) utilizes monitoring techniques to help guide clinicians with administering fluids, vasopressors, and inotropes to avoid hypotension and low cardiac output.
- Clinicians employ various therapeutic strategies targeted to achieve predetermined parameters for blood pressure, cardiac index, systemic venous oxygen saturation, urine output, oxygen consumption, lactate levels, and other biomarkers.
- Post-operative GDT in cardiac surgery patients has demonstrated reduced length of stay and infection rates, as well as less occurrence of low cardiac output syndrome.
- The full utility of GDT, including its application in the intraoperative phase, requires additional study.

Key References

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4. Magruder JT, Crawford TC, Harness HL, et al. A pilot goal-directed perfusion initiative is associated with less acute kidney injury after cardiac surgery. *The Journal of thoracic and cardiovascular surgery*. 2017;153:118-125 e111.

5. Aya HD, Cecconi M, Hamilton M, Rhodes A. Goal-directed therapy in cardiac surgery: a systematic review and meta-analysis. *British journal of anaesthesia*. 2013;110:510-517.
6. Osawa EA, Rhodes A, Landoni G, et al. Effect of Perioperative Goal-Directed Hemodynamic Resuscitation Therapy on Outcomes Following Cardiac Surgery: A Randomized Clinical Trial and Systematic Review. *Critical care medicine*. 2016;44:724-733

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