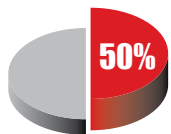


Volume management across the continuum of care with the 100% noninvasive STARLING™ SV

The Starling™ SV monitoring technology quickly provides a dynamic assessment of fluid responsiveness which will help to guide fluid therapy in pre-, intra- and post-operative settings.



Approximately 50% of hemodynamically unstable patients will not respond to fluids.¹



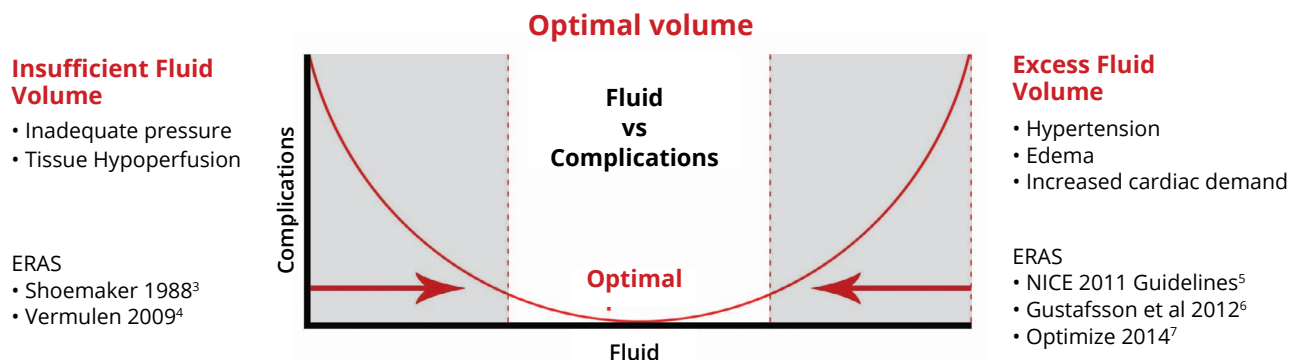
Studies involving over 1000 patients indicate CVP is not reliable for determining fluid responsiveness.²



Excess fluids can lead to increased length of stay, increased mortality and increased complications.^{6,11}

100% noninvasive STARLING™ SV

Serious consequences can result from sub-optimal volume status in surgical patients.



Relevant clinical studies regarding volume management for surgical patients

- **Corcoran et al (2012)⁸: Perioperative fluid management strategies in major surgery: A stratified meta-analysis**
 - Goal-directed therapy vs. liberal therapy exhibited decreased LOS (4 days, 95% CI 3.4 to 4.4)
 - Conclusion: Perioperative outcomes favored a goal-directed therapy compared to a liberal fluid therapy without hemodynamic goals.
- **Waldron et al (2014)⁹: A Prospective Comparison of a Noninvasive Cardiac Output Monitor Versus Esophageal Doppler Monitor for Goal-Directed Fluid Therapy in Colorectal Surgery Patients**
 - The CHEETAH NICOM™ performs similarly to the Esophageal Doppler Monitor in guiding goal-directed fluid therapy, with no clinically significant differences in outcomes, and offers increased ease of use as well as fewer missing data points.
- **Lee et al (2015)¹⁰: Efficacy of Goal-Directed Therapy Using Bioreactance Cardiac Output Monitoring after Valvular Heart Surgery**
 - Randomized controlled trial evaluating outcome in postoperative goal-directed therapy compared between treatment protocols utilizing CHEETAH NICOM or PAC
 - CHEETAH NICOM-based goal-directed therapy was associated with significantly less resource utilization in terms of amount of fluid used, epinephrine required to meet predefined hemodynamic goals, and less ventilator care > 24 hours.
 - Conclusion: CHEETAH NICOM-based postoperative hemodynamic GDT showed promising results in patients with atrial fibrillation undergoing valvular heart surgery.

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R-MRK-036