

Act Early with the Edwards FloTrac System



Shortens the Time from Assessment to Action



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Optimize Fluid Balance and Monitor Cardiac Function in Your High-Risk Surgical Patients

Now, you have the insight you need to make critical decisions earlier and more efficiently for your patients previously monitored with traditional vital signs alone. The FloTrac sensor, when used with the Vigileo monitor, provides continuous cardiac output (CCO/CCI), stroke volume (SV/SVI), stroke volume variation (SVV), and systemic vascular resistance (SVR/SVI)* through an existing arterial line.

The FloTrac system is accurate, easy to use and less invasive:

- Connects to an existing arterial catheter
- Requires no manual calibration enabling rapid setup
- Automatically calculates key flow parameters every 20 seconds
- Continuously monitors changes in patient's vascular tone (compliance and resistance)
- Validated against the clinical gold-standard Swan-Ganz pulmonary artery catheter¹

“In the very acute situation with rapid changes in vascular volume, blood pressure is probably not the optimal physiological variable to be measured, and indeed in some circumstances, relying on blood pressure alone may result in an increase in mortality.” – Bennett²

FloTrac System Algorithm

$$CO = HR * SV$$

- Measures pulse rate
- Beats identified by upslope of waveforms
- Pulse rate computed from 20 second time period of beats

- Based upon the basic physiological principle that pulse pressure is proportional to stroke volume
- Utilizes statistical analysis to compute a robust assessment of PP characteristics
- Computed on a beat-by-beat basis
- Compensates for differences in vascular tone
- Patient-to-patient differences estimated from demographic data
- Dynamic changes estimated by data and waveform analysis

“...pulse pressure is proportional to SV and is inversely related to aortic compliance.” – Boulain et al³

Save Precious Time and Resources

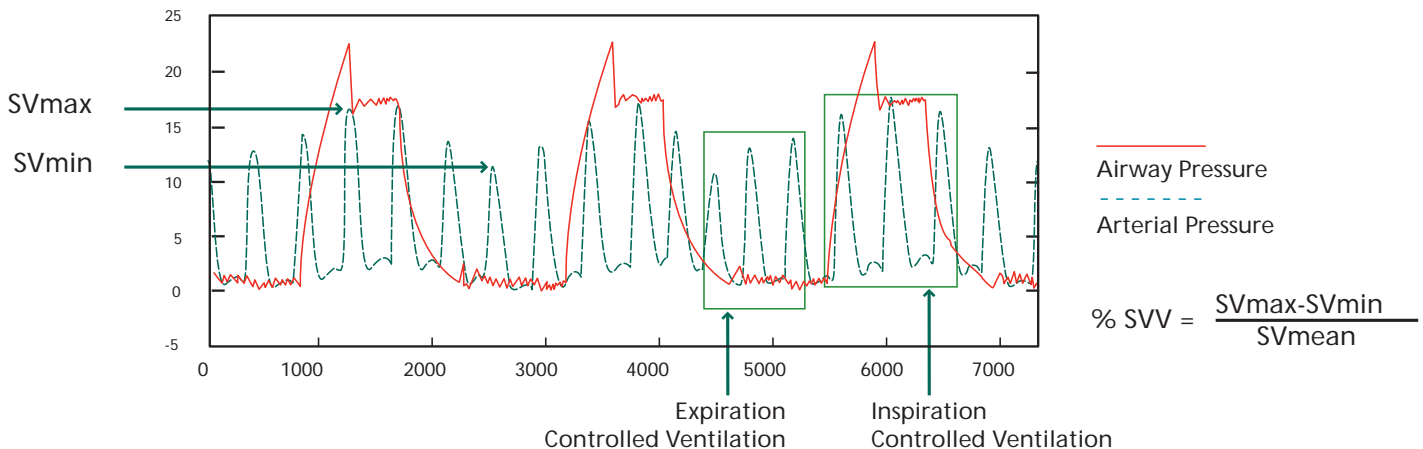
The FloTrac system is easy to set up and use, providing real-time hemodynamic insight from pre-op to the operating room and to the ICU. And because the FloTrac system requires no additional catheters, boluses or chemical indicators, it will save you and your staff precious time and resources.

Expand your options for monitoring high-risk patients:

- Guide fluid optimization
- Assess real-time changes in vascular tone
- Guide inotropic therapy in real time
- Determine optimal cardiac pacing
- Optimize the effects of HR and SV
- Assess real-time effects of positive pressure ventilation
- Manage precise titration of cardiovascular medications

The FloTrac system delivers real-time insight from existing lines.

Stroke Volume Variation and Fluid Optimization On Control Ventilated Patients



“The ability of the SVV variable to predict the responsiveness to such a small volume load and the continuous measurement of SVV and SV are of utmost clinical importance. . . . The receiver-operating curve (ROC) also demonstrated the superiority of SVV over SBP as a predictor of fluid responsiveness.” – Berkenstadt⁴

“SVV values showed a significant correlation to changes in CI and therefore accurately predicted responsiveness to preload enhancement.” – Reuter et al⁵

The FloTrac System

The FloTrac system is engineered for usability by Edwards Lifesciences, the world leader in hemodynamic monitoring and originators of the Swan-Ganz pulmonary artery catheter. Providing new standards in ease of use, flexibility and continuity of information, the FloTrac system is the next major advance in hemodynamic management.



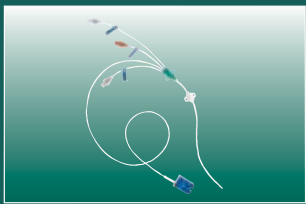
FloTrac Sensor

FloTrac sensor is a less invasive hemodynamic monitoring device that, when used with the Vigileo monitor, continuously measures and displays key flow parameters. Cardiac output, stroke volume, stroke volume variation and SVR* are available using any standard arterial pressure line.



Vigileo Monitor

The Vigileo monitor allows for monitoring the balance of oxygen delivery and consumption on a minimally invasive platform – the FloTrac sensor and the PreSep catheter.



PreSep Catheter

PreSep catheter is a triple lumen central venous oximetry catheter with an added capability for continuously monitoring central venous oxygen saturation (ScvO₂). It is an integral part of Early Goal-Directed Therapy (EGDT)** for sepsis. The PreSep catheter provides central venous oxygen saturation monitoring, high flow rates for rapid fluid administration, and convenient administration of therapeutic solutions.

To learn more about using the FloTrac system and to find valuable educational resources, visit www.Edwards.com/FloTrac.

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* Derived with CVP.
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