

FloTrac Guidelines

The Edwards Lifesciences FloTrac is a pulse-contour based hemodynamic monitoring system requiring only an arterial catheter for insertion. In certain patients it is an accurate, minimally invasive technique to estimate cardiac output and cardiac index. Furthermore, the novel calculation of Stroke Volume Variation (SVV) can be used to estimate preload responsiveness – a more accurate measure of intravascular volume than CVP.

Patient selection:

- Requires an arterial catheter (any location) with good waveform
- Hemodynamically unstable patients requiring dynamic assessment of fluid responsiveness or cardiac output, or patients requiring flow augmentation
- Hypotension refractory to pharmacotherapy and adequate volume resuscitation
- Requires normal sinus rhythm without excessive ectopy*
- Requires minimal patient interaction with mechanical ventilations*

Technical requirements:

- Accurate transducer height
- No air bubbles in the line
- Accurate height and dry weight
- Regular heart rate*

*Spontaneous breathing and irregular heart rate may interfere with SVV calculation. Passive leg raise may be used in lieu of SVV in these situations. A 10% increase in SV suggests fluid responsiveness.

General Guidelines for use:

- It is suggested that a SVV cutoff of 12% be used for the threshold of “volume responsiveness.”
 - ie: $SVV \geq 12\%$ suggests the patient’s cardiac output would respond to an increase in intravascular volume
- It is not recommended to use FLOTRAC together WITH a right heart catheter – the CO/CI numbers are unlikely to match exactly, although trends will be in parallel.