



Lower ICU mortality

with individualized care guided by direct blood volume analysis (BVA)

Individualized fluid and red blood cell management that integrated BVA results reduced mortality vs conventional management by pulmonary artery catheter (PAC) alone

Mortality rate

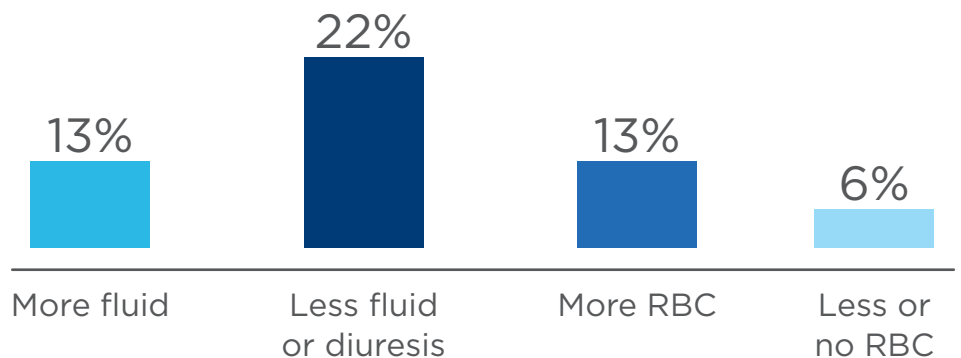


Prospective, randomized, controlled trial in which 100 critically ill surgical patients with septic shock, severe sepsis, severe respiratory failure, and/or cardiovascular collapse. Mean APACHE II scores were comparable across both study arms, at 25 (BVA, n=50) vs 24 (conventional, n=50) ($P=0.16$). All patients underwent BVA testing; physicians were blinded to BVA results for the control group, which was conventionally managed.

BVA delivered actionable results that informed treatment decisions

For the BVA group, **44%** of test results led to a change in treatment strategy

Percentage of patients with change in treatment strategy (BVA group)



More timely and effective care with BVA

than with conventional treatment

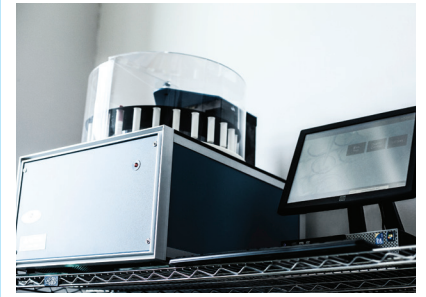
- The control group had a mean delay in transfusion of 1.5 ± 2 days, received fewer mean units of RBCs vs those in the BVA group (2.74 vs 3.85 units; $P=0.049$), and had more significant volume derangements recorded more frequently than the BVA group

Pressures did not reliably correlate with volume

- Pulmonary arterial occlusion pressure was a poor indicator of volume: high for 18% of those whose volume was low, and low for 25% of those whose volume was high²

“An important aspect of care was the earlier treatment of intravascular volume deviations in the BVA group, before the abnormality became clinically manifested.”

— Mihae Yu, M.D.



End the debate at the bedside

- Provides total blood and red blood cell volume along with calculated patient-specific ideals*
- Actionable results—quantifies the excess or deficit with **98% accuracy**
- Confidently identify and address anemia, regardless of plasma expansion or depletion
- Non-invasive, single-venipuncture technique[†]
- Over 40,000 tests performed in over 75 hospitals
- Fully reimbursed by Medicare

*Derived from Metropolitan Life height, weight, and gender data in a uniquely accurate, validated methodology^{3,4}

[†]A ¹²⁵I labeled albumin tracer injection (<25 microcuries: no requirement for thyroid blockade⁵) is followed by 5 blood draws 5-6 minutes apart. The Daxor BVA-100 measures plasma dilution in successive samples and performs a regression analysis to arrive at the total blood volume. Institutional procedural variance drives a real-world time range of ~45-90 minutes for full results; preliminary results may be obtained in <30 minutes.

References: 1. Yu M, et al. A prospective randomized trial using blood volume analysis in addition to pulmonary artery catheter compared with pulmonary artery catheter alone, to guide shock resuscitation in critically ill surgical patients. *Shock* 2011;35(3):220-228. 2. Perkins T, et al. Pulmonary artery occlusion pressure is a poor predictor of circulating blood volume. SCCM Critical Care Congress 2016:0119, presented on February 23, 2016. 3. Feldschuh J et al. Prediction of the normal blood volume—relation of blood volume to body habitus. *Circulation* 1977;56(4):605-612. 4. Feldschuh J, et al. The importance of correct norms in blood volume measurement. *Am J Med Sci* 2007;334(1):41-46. 5. Volumex[®] [package insert]. Daxor Corporation, New York, NY; 2005.