

ACIST | CVi[®]
Contrast
Delivery System



The ACIST | CVi[®] Contrast Delivery System

Simplifying Contrast Injection

Simplifying Procedures

The ACIST|CVI® Contrast Delivery System – the sophisticated system that simplifies contrast injection for **ALL** your interventional and diagnostic cardiology procedures, from **small injections** in the coronary arteries, to **large volumes** in the ventricles and peripheral vasculature.



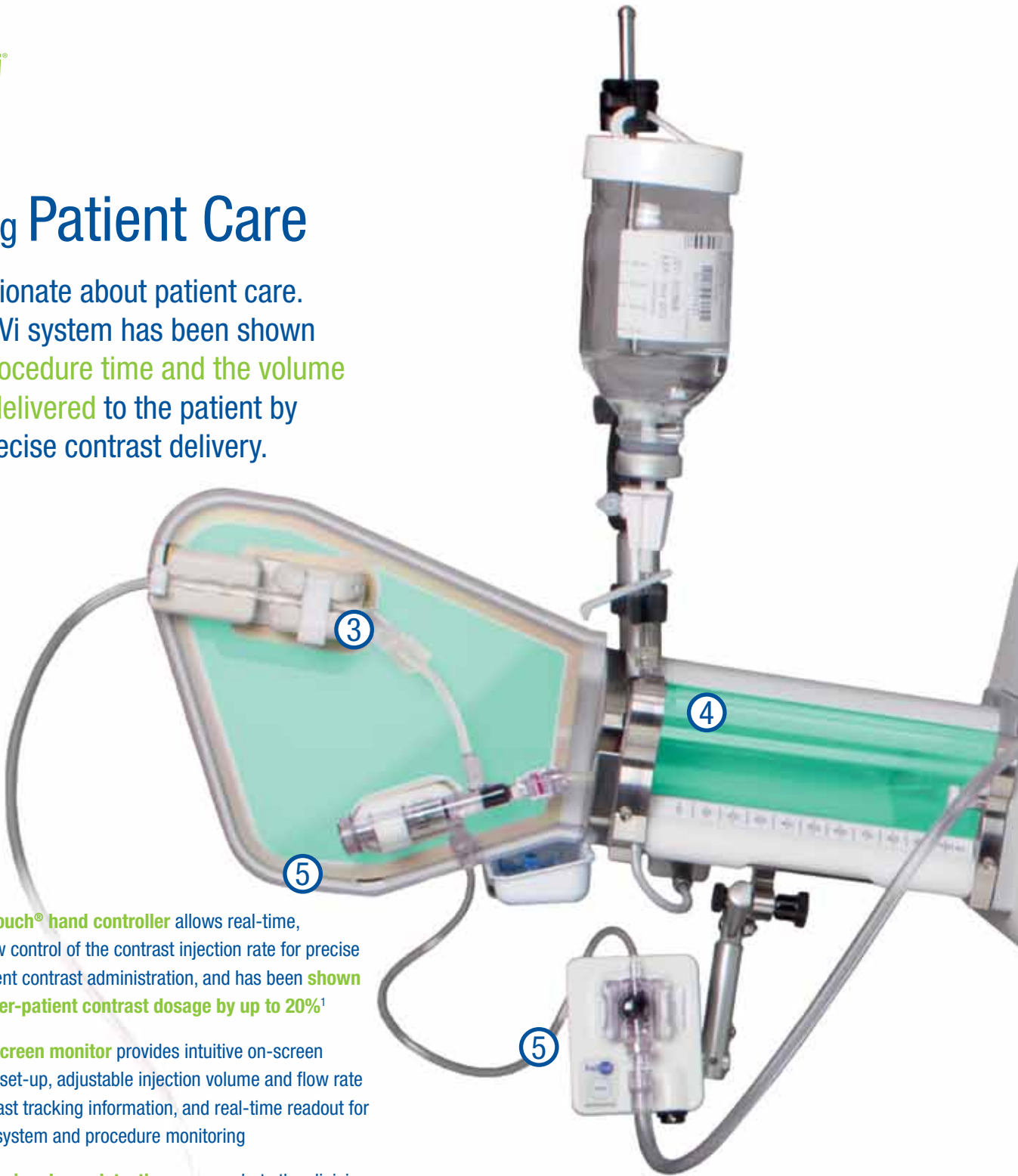


Simplifying **Control**

The ACIST CVi system's **innovative design** helps make it simple to operate, allowing you to generate **quality images** and to focus on what's important – your patient and the procedure.

Simplifying Patient Care

We are passionate about patient care. The ACIST CVi system has been shown to **reduce procedure time and the volume of contrast delivered** to the patient by providing precise contrast delivery.



- ① The **AngioTouch® hand controller** allows real-time, variable-flow control of the contrast injection rate for precise and consistent contrast administration, and has been **shown to reduce per-patient contrast dosage by up to 20%¹**
- ② The **touch screen monitor** provides intuitive on-screen prompts for set-up, adjustable injection volume and flow rate limits, contrast tracking information, and real-time readout for continuous system and procedure monitoring
- ③ The **built-in air column detection sensor** alerts the clinician and **stops the injection if air is detected** in the single-use patient tubing connected to the catheter*
- ④ The five-patient, **isolated contrast reservoir** with rapid automatic refill can **reduce contrast waste** and save time between cases
- ⑤ In-line, continuous hemodynamic monitoring provides a **real-time pressure reading**, and the automated isolation manifold provides a **barrier to the contrast reservoir**



The ACIST CVi boasts an array of advanced, built-in safety features that provide continuous and automated monitoring of all critical systems functions, and can deliver contrast with ease even through 4 Fr catheters.² By reducing overall procedure time the ACIST CVi helps to reduce radiation exposure.³



①



* The air column detection sensor is designed to aid the user in the detection of air columns in the injection line, but it is not designed to replace the vigilance and care required of the operator in visually inspecting for air and clearing air

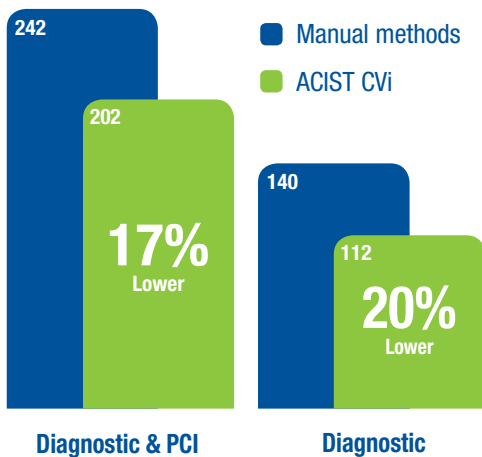
1. Anne G, Gruberg L, Huber A, et al. *J Invasive Cardiol.* 2004;16(7):360–362
2. Khoukaz S, Kern MJ, Bitar SR, et al. *Catheter Cardiovasc Interv.* 2001;52(3):393–398
3. Brosh D, Assali A, Vaknin-Assa H, et al. *Int J Cardiovasc Interv.* 2005;7(4):183–187

Simplifying Workflow and Efficiency

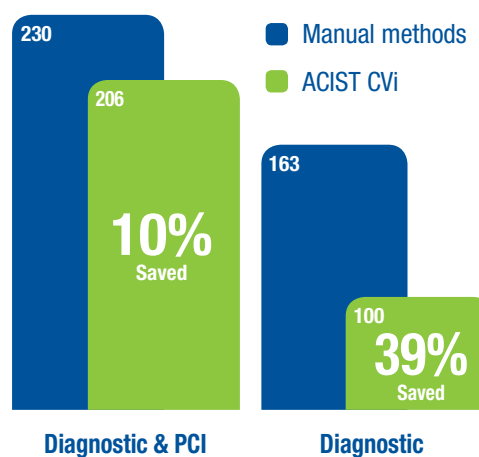
The ACIST CVI system is designed and built to **streamline procedures** and deliver faster case turnaround, while minimizing the use of contrast.

- Up to 20% reduction
in contrast dosage to the patient¹
- Up to 40% reduction
in contrast and cost¹⁻³
- Up to 31% reduction
in procedure and setup time⁴

Lower average contrast dose¹
PER PATIENT IN MILLILITERS



Total contrast volume³
PER PATIENT IN MILLILITERS



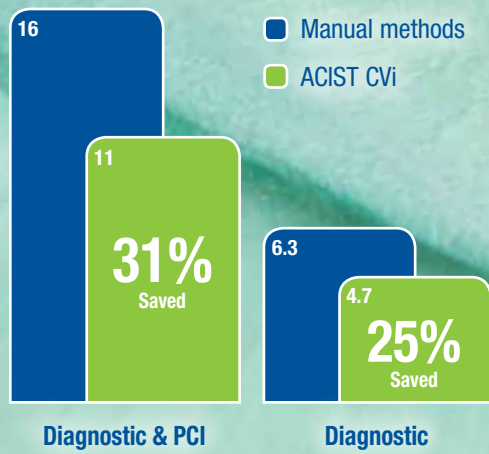
1. Anne G, Gruberg L, Huber A, et al. *J Invasive Cardiol.* 2004;16(7):360-362
 2. Call J, Sacrinty M, Applegate R, et al. *J Invasive Cardiol.* 2006;18(10):469-474
 3. Brosh D, Assali A, Vaknin-Assa H, et al. *Int J Cardiovasc Interv.* 2005;7(4):183-187
 4. Lehmann C, Hotaling M. *J Invasive Cardiol.* 2005;17(2):118-121



Procedural time PER PATIENT IN MINUTES

Setup & arterial⁴

Fluoroscopy³



Product and Technical Specifications

The ACIST|CVi® Contrast Delivery System is intended to be used for controlled infusion of radiopaque contrast media for angiographic procedures.

CVi system	
Flow Rates	
Contrast:	User-Responsive, pre-set Variable and Fixed rates from 0.8 to 40 ml/sec, in 0.10 ml/sec increments
Saline:	Fixed rate: 1.6 ml/sec
Volume	User-Responsive, pre-set limits with variable range of 0.8 to 99.9 ml, in 0.1 ml/sec increments
Pressure Limits	User defined from 200 to 1200 psi
Fill Rate	Manual or automatic refill of 3 ml/sec
Rise Time	User-defined 0 to 1 sec, in 0.1 sec increments
Program Routine Injection Modes	Cardiac: LCA, RCA, LV/Ao, and User Defined Peripheral Vascular: Pigtail, Selective, Microcatheter, and User Defined
Monitoring Sensors	Air Column Detect* Isolation manifold Contrast Source Empty Contrast Reservoir Refill and Contrast Source Isolation
Imaging Interface Synchronization**	Able to synchronize with most brands of X-ray imaging equipment
Injection Delay** or X-ray Delay**	0–99.9 sec
KVO Feature***	Range of 0.1 to 10 ml/min with 20 min timeout; maximum of 200 ml of saline dispensed
Control Panel	27 cm (10.5 inches) Color Touch Screen
Flexible Mounting Configurations	Table Mount with adjustable arm or stationary stem Pedestal Cart
Pedestal Cart Dimensions	Wheelbase footprint 53.3 × 63.5 cm (21 × 25 inches), height 91.4 cm (36 inches)
Contrast Reservoir	100 ml
Consumable Kit Configurations	
Contrast Reservoir (5 patient):	Contrast Reservoir with contrast tubing spike and clamp (for use in up to 5 patient cases)
AngioTouch® Hand Controller & Tubing:	AngioTouch® hand controller, injection line tubing, and 3-way stopcock
Automated Isolation Manifold:	Integrated system with automated isolation-manifold, low-pressure tubing and saline spike, and supplied pressure transducer cartridge; kits with no transducer also available
Component Weights	Power supply 5.5 kg (12 lb), control panel and stem 3.2 kg (7 lb), pedestal cart 10 kg (22 lb), injector head 20.4 kg (45 lb), adjustable arm 0.66 kg (1.45 lb)
Power Requirements	Factory selectable: 100 to 120 VAC, 50–60 Hz, 10 A maximum or 200 to 240 VAC, 50–60 Hz, 5 A maximum

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** Available in synchronized peripheral mode

*** Available in peripheral mode

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