The ACIST CVi® Contrast Delivery System

Simplifying Contrast Injection

Bracco Group
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%**.

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 sterile 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 4Fr catheters². By reducing overall procedure time the ACIST CVi helps to reduce radiation exposure³.

*Sensors are designed to aid the healthcare professional but are not intended as a substitute for proper technique, monitoring, and due diligence.

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 patient\(^1\)

- **Up to 40% reduction**
  in contrast and cost\(^1,2,3\)

- **Up to 31% reduction**
  in procedure and setup time\(^4\)

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**Lower average contrast dose\(^1\)**

**PER PATIENT IN MILLILITERS**

<table>
<thead>
<tr>
<th>Method</th>
<th>Diagnostic &amp; PCI</th>
<th>Diagnostic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual methods</td>
<td>242</td>
<td>140</td>
</tr>
<tr>
<td>ACIST CVi</td>
<td>202</td>
<td>112</td>
</tr>
<tr>
<td><strong>17% Lower</strong></td>
<td><strong>17% Lower</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total contrast volume\(^3\)**

**PER PATIENT IN MILLILITERS**

<table>
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<tr>
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<td>230</td>
<td>163</td>
</tr>
<tr>
<td>ACIST CVi</td>
<td>206</td>
<td>106</td>
</tr>
<tr>
<td><strong>10% Lower</strong></td>
<td><strong>10% Saved</strong></td>
<td></td>
</tr>
<tr>
<td><strong>39% Saved</strong></td>
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</tbody>
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**Procedural time**

**PER PATIENT IN MINUTES**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Manual methods</th>
<th>ACIST CVi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up &amp; arterial</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Fluoroscopy</td>
<td>11</td>
<td>6.3</td>
</tr>
</tbody>
</table>

- **Diagnostic & PCI**
  - 31% Saved
  - 25% Saved
The ACIST CVi Contrast Delivery System is intended to be used for controlled infusion of radiopaque contrast media for angiographic procedures.

ACIST CVi® Product Specifications

Flow Rates

<table>
<thead>
<tr>
<th>Flow Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast:</td>
<td>User-Responsive, pre-set Variable and Fixed rates from 0.8 to 40 ml/sec, in 0.10 ml/sec increments</td>
</tr>
<tr>
<td>Saline:</td>
<td>Fixed rate: 1.67 ml/sec</td>
</tr>
</tbody>
</table>

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*

Manifold Isolation on single-use, to-catheter tubing

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 minute timeout; maximum of 200 ml of saline dispensed

Control Panel

27 cm (10.5") Color Touch Screen

Flexible Mounting Configurations

Table Mount with adjustable arm or stationary stem

Pedestal Cart

Syringe Size

100 ml

Disposable Kit Configurations

Contrast Reservoir (5 patient):

Contrast Reservoir 5-patient cartridge manifold connection, and contrast tubing with spike

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 provided.

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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