

# AUREFLO AND OPTIMA

## PRODUCT GUIDE



Coronary artery bypass grafting (CABG) is one of the most commonly performed cardiac procedures in the United States, and cardiac surgeons are constantly seeking to improve outcomes for their patients.

Using intraoperative transittime flowmetry can help you determine graft patency and make necessary changes before closing the patient, which helps improve outcomes and reduce costs and repeat surgeries.

**This product guide** will give you an in-depth look at Transonic's AureFlo and Optima devices, and shows you how they can save your hospital money.



# 4 Benefits Flow-based Intraoperative Graft Patency Assurance Can Provide Your Hospital

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*Beyond providing benefits to the patient, using flow-based intraoperative graft patency assurance lets your hospital:*

## Reduce Re-Operations

Re-operations are costly and frequently are not reimbursed by a patient's insurer. Intraoperative flow measurement alerts the surgeon to a flow-limiting problem that can be corrected immediately during surgery, avoiding a potential re-operation and saving the hospital money.

## Reduce Readmissions

In its continuing effort to improve hospital performance and quality of care, the Centers for Medicare & Medicaid Services (CMS) began examining hospital readmission rates and penalizing hospitals whose readmission rates rose above the national average. The Hospital Readmissions Reduction Program (HRRP), mandated by the Affordable Care Act, Section 3025, was formally instituted on October 1, 2012 for three conditions: heart attack, heart failure and pneumonia. In 2017, 30-day readmissions for post-op CABG patients has also come under the CMS purview. Individual hospital rates for CABG readmissions will be compared to the national 30-day observed unplanned readmission rate or 30-day observed death rate.

## Avoid Litigation

In our increasingly litigious society, hospitals are more aware that juries are inclined to award large damages that fault institutions and surgeons. If a graft has failed, it would be reasonable for a lawyer to ask if graft flow had been measured before closing or what the graft flow was before closing. Providing quantitative documentation that graft flows were good when the patient was closed can protect a surgeon and the hospital.

## Improve Reputation

With Healthgrades and other readily available sources, patients will shop around for hospitals and doctors that provide the best care. Hospitals must therefore stay on the forefront of medical innovation and quality assurance to meet their patient's demands. To stay competitive, hospitals must set themselves apart by ensuring they are instituting and adhering to best practices. Intraoperative flow measurement is one of these best practices.

# About Transonic's AureFlo

The AureFlo takes Transonic's gold standard transit-time ultrasound volume flow measurement to the next level with a fully integrated measurement system. It provides real-time waveforms and calculated parameters and allows you to:

- Visualize live flow waveforms on a touch screen display to verify adequate blood flow before closing your patient.
- Record and save flow data for later analysis, teaching or documentation.

## Why Use the AureFlo?

FEATURES	DESCRIPTION
Simple probe application	Quick, easy, non-invasive
Non-Constrictive Probe	Doesn't constrict vessels
Optima Meter	<ul style="list-style-type: none"> <li>• Fastest Meter</li> <li>• Highest accuracy</li> <li>• Works with all Transonic Probe lines</li> </ul>
Largest Variety of Probes	Probes tailored to many applications, surgical sites, vessels
Plug & Play Operation	Patient/Surgery information can be input before or after procedure
Choice of D/S or DF	You can choose either parameter
Waveform Quality	Highest waveform accuracy

# Cost-Saving Benefits of the AureFlo

Repeat surgeries are not only riskier for patients, they are also expensive for your hospital and damaging to your health grade scores, which is why confirming a graft's patency before you close the patient is increasingly critical.

An average CABG surgery in the United States costs over \$38,000. As the Affordable Care Act's pay-for-performance measures seek to reduce healthcare (Medicare) costs by relating the cost of a procedure to the value received, any new measure must be scrutinized for its clinical value and costs. Intraoperative blood flow measurement to assess the patency of newly sewn anastomoses during CABG surgery is one such measure.

A conservative mean cost of \$20,000 for a CABG procedure exclusive of professional fees including surgeon's and anesthesiologist's fees and related costs (such as salaried physician's compensation, indirect teaching cost and malpractice insurance) was used for calculating the cost savings of measuring flow to confirm the patency of a bypass.

# CABG PROCEDURES PER YEAR	FLOW-QC COST AT \$180 PER CASE	3% REOPS DUE TO EARLY GRAFT FAILURE	REOPERATION COST AT ~\$20,000	COST SAVINGS	
				HOSPITAL COST SAVINGS YEAR 1	HOSPITAL COST SAVINGS YEAR 3
150	\$27,000	4.5	\$90,000	\$63,000	\$189,000
200	\$36,000	6	\$120,000	\$84,000	\$252,000
300	\$54,000	9	\$180,000	\$126,000	\$378,000
500	\$90,000	15	\$300,000	\$210,000	\$630,000
750	\$117,000	22.5	\$450,000	\$333,000	\$999,000
1000	\$180,000	30	\$600,000	\$420,000	\$1,260,000
1500	\$270,000	45	\$900,000	\$630,000	\$1,890,000

*The cost of the AureFlo is calculated at a cost base of \$180.00 per procedure*

# About Transonic's Optima Flow QC Meters

Optima Meters are the next generation of surgical flow meters and are compatible with all of Transonic's extensive surgical flowprobe and flowsensor lines. The Optima:

- Provides unsurpassed accuracy and resolution
- Provides immediate, quantitative flow measurements
- Ensures vessel patency & flow integrity
- Can be used between departments or surgical suites without compatibility concerns

## Benefits of Using the Optima

**OPERATIONAL SIMPLICITY:** Flow measurements are fully automated. In a busy OR where staff turnover is common, an operator's learning curve is minimal. There are no keyboards or menus to learn. A touch of a button generates a printout of the flow measurements for the patient's record or for the surgeon to show the flow improvements to the patient's cardiologist.

**PORTABILITY:** The Optima's footprint is small. It can be conveniently positioned within the surgeon's view, out of the way of the OR staff. A 4-meter flowprobe/extension cable provides ample length to connect the probe to the flowmeter. When the Flowmeter is mounted on a rolling stand, it is easy to maneuver between ORs. Flowprobes and accessories can be stored in the attached basket for easy access

**QUICK MEASUREMENTS:** You can measure flow < 10 sec.

**INSTANTANEOUS FLOWSOUND® AUDIO FEEDBACK:** FlowSound® translates the volume flow into an audio pitch so a surgeon does not have to take their eyes off the surgical field.

**ACCURACY VALIDATION:** Transonic Flowmeters and Flowprobes have been extensively validated over a wide range of conditions. There are more than 4,000 citations in the scientific literature.

**ECONOMICAL:** The streamlined Optima Flowmeter provides all the essential features for assessing intraoperative blood flow and documenting the results as a quality check — at an affordable price.

## Ready to see how the AureFlo and Optima work?

We're ready to answer any questions. Contact us today for a hands-on demo.

Contact Now





Transonic Systems Inc. is a global manufacturer of innovative biomedical measurement equipment. Founded in 1983, Transonic sells “gold standard” transit-time ultrasound Flowmeters and Monitors for surgical, hemodialysis, pediatric critical care, perfusion, interventional radiology and research applications. Transonic® also provides pressure and pressure volume systems, laser Doppler Flowmeters and telemetry systems.

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