Extending the boundaries of the surgeon’s eye

Confidently visualize and assess tissue perfusion in real time.
Adequate tissue perfusion is vital to the success of surgery

Perfusion is a critical indicator of tissue health. It is crucial to surgical success and the body’s ability to heal. Even a few hours of impaired perfusion can cause irreversible damage and costly complications.

At present in the OR, clinical judgment is the most common method used for perfusion assessment. Despite excellent surgical techniques, perfusion-related complications still occur.

Complications can increase hospital costs

Published literature has long demonstrated the significant costs associated with surgical complications. The data on the left was taken from a study conducted at the Cleveland Clinic that compared the estimated average cost of care for patients that developed mastectomy flap necrosis (n=5) to patients with no wound healing issues (n=5). The results were estimated to be $22,659 in increased cost per patient in the group that developed mastectomy flap necrosis.\(^2\)


The SPY Elite System — assess perfusion with more confidence

The SPY Elite System provides surgeons with real-time visualization and analysis of tissue perfusion during a variety of surgical procedures.

The SPY Elite System:
• Helps plastic reconstruction, colorectal and limb salvage surgeons to confidently assess perfusion intraoperatively
• Enhances the surgeons ability to assess perfusion, which may improve patient outcomes
• Provides a reliable perfusion assessment technique that can be repeated multiple times, often within 30 minutes
Tissue perfusion — now in high definition

The SPY Elite System enables real-time visualization of tissue perfusion throughout the body.

Visualizing perfusion of mastectomy flap

Assessing perfusion to proximal end of colon post resection

Visualizing perfusion of the small bowel during ostomy creation

Identifying perforator perfusion zones for optimal ALT flap design

*NOVADAQ consultant.
Tissue perfusion — now in high definition

The SPY Elite System enables real-time visualization of tissue perfusion throughout the body.

Assessing forehead flap perfusion post inset

Assessing perfusion post nipple-sparing reconstruction

Assessing perfusion after the DIEP flap was raised

Assessing perfusion of the flap post inset

Image courtesy of Dr. Christopher Dress, FL.*

Image courtesy of Dr. Mark Gelfand, NY.

Image courtesy of Dr. Diana Yoon-Schwartz, NY.

Image courtesy of Dr. Geoffrey Gurtner, CA.*
The SPY Elite System — a window into real-time perfusion

Dual display monitors
- Dynamic perfusion mapping during surgery, in high definition

Maneuverable imaging head
- Simple imaging controls on camera head for convenient intraoperative use
- Precision laser camera stabilization for more accurate analysis
- Does not emit ionizing radiation
- Minimal interruption to surgical procedure

SPY Elite SPY-Q analysis toolkit
- Analyze and quantify perfusion in the operating room
- Videos and images are available during surgery and for later analysis
- Automatically generates a procedure report in accordance with medical record keeping and billing standards

SPY Elite kit
- Kit contains fluorescence agent, aqueous solvent, sterile drape
- Fluorescence agent excreted into the bile, non-nephrotoxic, 50-year safety record
Analyze perfusion intraoperatively

The SPY Elite System includes a software package that uses unique algorithms to enable the surgeon to objectively analyze perfusion. This objective information can complement the surgeon’s clinical perspective, providing a comprehensive view of perfusion.

See insights into perfusion

Contour mapping provides actionable information that you can use before and during the procedure.

Illuminate perfusion zones

Analyze and identify perforator perfusion zones before committing to flap design.

Quantify perfusion

Apply values to objectively analyze images and further assess tissue perfusion.

*NOVADAQ consultant.
Intraoperative Perfusion Assessment
Enhances surgeons ability to visualize and analyze perfusion intraoperatively and in real-time.

Increased Confidence
Offers surgeons a reliable and objective way to assess perfusion intraoperatively.

Repeatable Technique
Involves no ionizing radiation and utilizes a non-nephrotoxic fluorescence agent with a very short half-life thus allowing surgeons to repeat intraoperative perfusion assessment numerous times throughout the procedure.

Improved Outcomes
Enhances the surgeon’s ability to assess perfusion, which may improve patient outcomes.

Indications for Use
For complete safety information and complete instructions for proper use of the SPY Elite System, please refer to the Operator’s Manual and SPY Elite Kit Instructions for Use. For more information about indocyanine green (ICG), see the full Prescribing Information contained in the SPY Elite Kit. The SPY Elite System is intended for use as an adjunctive method of assessing tissue perfusion in plastic, reconstructive, micro, gastrointestinal and cardiovascular surgical procedures. The SPY Elite System is to be used under the direction of a physician.

NOVADAQ Technologies Inc.

Corporate Headquarters
5090 Explorer Drive, Suite 202
Mississauga, ON L4W 4T9
T: 1 844 NOVADAQ (668-2327)
customerservice@novadaq.com

R&D and Manufacturing Center
8329 Eastlake Dr. Unit 101
Burnaby, BC V5A 4W2
T: 1 800 665 2236

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