PINPOINT
Endoscopic Fluorescence Imaging System
Illumination beyond the limits of the human eye
Committed to improving outcomes through innovation and collaboration

NOVADAQ® technologies enable surgeons to go beyond the visual boundaries of the human eye. With an emphasis on innovation and collaboration with the medical community, NOVADAQ provides clinically relevant technologies that assist physicians in achieving improved patient outcomes and decreased healthcare costs.

The PINPOINT® Endoscopic Fluorescence Imaging System combines — into a single laparoscopy platform — the latest in high-definition white-light video with SPY® Fluorescence imaging, resulting in bright, clear images that evolve a surgeon’s operating room experience.
Visualize anatomical structures and tissue perfusion in a different light

SPY Fluorescence is the core technology that drives NOVADAQ’s suite of imaging products. In combination with high-definition white-light video, it provides the ability to visualize blood flow in vessels, tissues and organs throughout the body. The fluorescent imaging agent binds to protein in blood and is metabolized and excreted by the liver thereby providing laparoscopic visualization of the hepatic artery and bile ducts.

In colorectal and esophageal surgery, SPY Fluorescence enables a precise visual assessment of blood flow in vessels as well as the quality of tissue perfusion. In laparoscopic gall bladder surgery, bile duct misidentification and hepatic artery injury with white-light endoscopy alone is most commonly associated with early experience, aberrant anatomy and obesity. Intra-operative cholangiography may be used to navigate vessels and structures and avoid injury during minimally invasive surgery.
The PINPOINT Endoscopic Fluorescence Imaging System provides surgeons with actionable, real-time visualization of tissue perfusion and structural anatomy during a variety of surgical procedures. This capability is a result of two additional display modalities that go beyond HD white-light video alone: PINPOINT Fluorescence mode and SPY Fluorescence mode illuminates anatomical structures and tissue perfusion in a manner otherwise not visible by the human eye.

**Brilliant HD White-Light Image**
- Full HD resolution delivers bright, clear images

**Illuminated by SPY Fluorescence**
- Fluorescence imaging modalities may assist surgeons with critical decisions during surgery

**Operating Room Versatility**
- Enhanced control allows surgeons to select optimal display modes for each specialty
- Connectivity to a variety of digital devices and networks provides greater flexibility in the operating room

The complete laparoscopy solution for your surgical needs
PINPOINT offers brilliant, high-definition, white-light video with the added advantage of SPY Fluorescence imaging technology, which has been demonstrated as beneficial in a variety of surgical applications.

One technology, multiple minimally invasive applications

**Colon Resection**

Assessing tissue perfusion assists surgeons in making informed decisions that can positively impact outcomes.

*Left:* Distal colon prior to anastomosis

**Laparoscopic Cholecystectomy**

Identifying vital biliary anatomy, including the critical view of safety, may be easier in SPY Fluorescence or PINPOINT Fluorescence mode.

*Left:* Triangle of Calot

**Minimally Invasive Esophagectomy**

Visualizing micro-vascular blood flow of the distal esophagus and proximal gastric conduit may assist surgeons in improving patient outcomes.

*Left:* Distal esophagus and proximal gastric conduit post-anastomosis
Dedicated to improving outcomes

Published literature has long confirmed the significant social and economic burden associated with post-operative complications. More than 85 peer reviewed medical journals have demonstrated an improvement in patient outcomes and a reduction in hospital costs as a result of SPY Fluorescence technology. NOVADAQ’s suite of imaging products, including PINPOINT, uphold a strong track record of assisting surgeons in making critical decisions that may reduce the occurrence of costly complications.

PILLAR II Study Results

139 Patients

1.4% of Low Anterior Resections resulted in an anastomotic leak when using PINPOINT

8% change in operative plan due to PINPOINT, resulting in a 0% anastomotic leak rate among those patients


Low Anterior Resection Anastomotic Leak Rate

12.6% of Low Anterior Resections resulted in an anastomotic leak, as shown by the BSLR study


Cost of Colorectal Surgery by Complication Grade

Cost of colorectal surgery complications are grade II or higher

$26,420 Without complication

$29,166 Grade I

$43,370 Grade II

$59,822 Grade IIa

$95,550 Grade IIb

Indications For Use
The PINPOINT system is intended to provide real-time endoscopic visible and near-infrared fluorescence imaging. PINPOINT enables surgeons to perform routine visible light endoscopic procedures as well as further visually assess vessels, blood flow and related tissue perfusion with near-infrared imaging during minimally invasive surgery.

11.5 days average hospital stay as a result of laparoscopic cholecystectomy complication

$587,491 average cost of common bile duct injury including litigation


30% of minimally invasive esophagectomies encounter complications


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