



SPY Fluorescence Imaging Technology



Changing the Way You See Your Patients

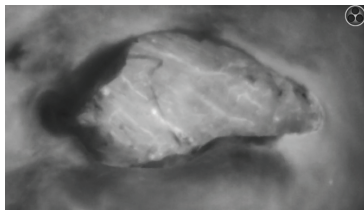
SPY-PHI utilizes SPY Fluorescence Imaging Technology to assist surgeons in the visual assessment of tissue perfusion.

No Fixed Distance

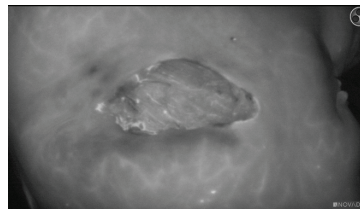
SPY-PHI allows clinicians to assess perfusion using a wide range of viewing distances without compromising the strength of signal.

Operate in the Light

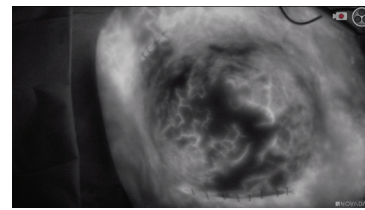
SPY-PHI's fluorescent signal is not affected by ambient room light, ensuring a fluid workflow.



Intraoperative visualization of ischemic breast tissue

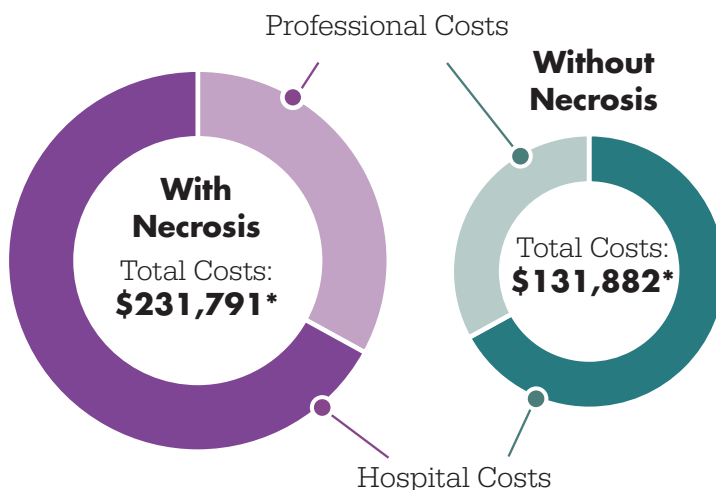


Fluorescence-guided debridement of ischemic breast tissue



Visualization of perfusion to the incision after prepectoral implant placement

Prepectoral implant-based breast reconstruction. Images courtesy of Dr. Charles Kays, Wilmington, NC and Dr. Mark Gaon, Newport Beach, CA §



Complications can increase hospital costs

Published literature has long demonstrated the significant costs associated with surgical complications.³

At a single institution, total hospital charges and professional fees were \$1,158,954 for the flap necrosis group and \$659,412 for the adequate healing group. The average excess associated with a single case of flap necrosis was \$99,908 per patient.³

*average cost per patient

See more. Do more.

Visualizing Tissue Perfusion in Breast Reconstruction



Clinical Impact

SPY-PHI allows surgeons to visualize blood flow as an adjunctive method for the evaluation of tissue perfusion, and related tissue-transfer circulation in tissue and free flaps during plastic, micro-, and reconstructive surgical procedures such as breast reconstruction.

Research has demonstrated that when combined with clinical judgment, use of SPY Fluorescence Imaging technology decreased the incidence of mastectomy skin necrosis.²

Economic Impact

A study by the Mayo Clinic estimated the potential avoidance of 59 episodes of skin necrosis over 5 years through the use of SPY technology.

- The same study estimated that avoiding skin necrosis through the use of SPY could result in potential savings of \$850,000 over 5 years.¹



\$26,295

Average reported cost per patient diagnosed with a necrosis related complication following breast reconstruction⁵

References:

1. Harless, CA. "Tailoring through Technology: A Retrospective Review of a Single Surgeon's Experience with Implant-Based Breast Reconstruction before and after.
2. Duggal CS. An Outcome Analysis of Intraoperative Angiography for Postmastectomy Breast Reconstruction. *Aesthetic Surgery Journal*. 2014; 34(1):61-5.
3. Newman MI, Mann RA, Samson MC, Jack MC. Economic benefits of laser-assisted indocyanine green angiography (LAICGA): charges associated with mastectomy flap necrosis. Poster session presented at: Southeastern Society of Plastic and Reconstructive Surgery; 2012 Jun2-6; Amelia Island, FL.
4. Gorai K. Prediction of Skin Necrosis after Mastectomy for Breast Cancer Using Indocyanine Green Angiography Imaging. *Plast Reconstr Surg Glob Open*. 2017; 5(4):1321.
5. Breast Reconstruction inpatient/outpatient volume is from 2017 Medicare cost reports using Inpatient (DRG 579-585 reported with certain ICD 10 CM codes to identify complications.

Copyright © Stryker 2018

Stryker Corporation or its affiliates own, use, or have applied for the following trademarks or service marks: Stryker, SPY and SPY-PHI
Literature Number: 1000902955 Rev. A

Stryker Endoscopy
5900 Optical Court
San Jose, CA 95138
t: 1 800 624 4422
www.stryker.com