

Fluorescence Imaging in Esophageal Surgery

with IMAGE1 S™ Rubina™

STORZ
KARL STORZ—ENDOSKOPE

SURGICAL APPLICATION BRIEF

Problem

Anastomotic Leaks



PREVALENCE
5-40%
OF PATIENTS¹

Problem & Challenge with Anastomotic Leaks

Esophagectomies are known for complexity and high morbidity and mortality associated with anastomotic leaks.

Financial Impact



\$119,822

MEAN COST PER PATIENT²

2.6x GREATER COST than for patients with no leak²

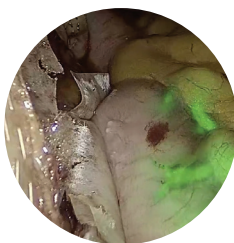
UP TO
73 DAYS
LONGER



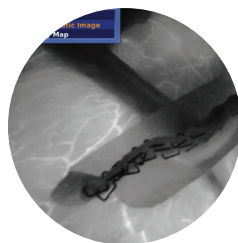
hospital stays than patients with no leak²



White
Light



Rubina™
Green Overlay



Rubina™
Monochromatic



Clinical Impact

Anastomotic
Leaks Down **22% → 5.7%¹**

Risk
Reduction **69%¹**

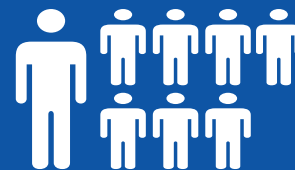


Optimized Outcome

NIR/ICG Offers Tangible Benefits for Patients

The use of NIR/ICG for perfusion assessment provides additional clinical information to aid the surgeon in determining a healthy, vascularized location for the anastomosis, thereby resulting in a decrease of esophagectomy complication rates and associated costs.

12.4%



Surgical plan changed in 12.4% of cases based on real-time assessment with ICG³

Fluorescence Imaging in Esophageal Surgery

with IMAGE1 S™ Rubina™

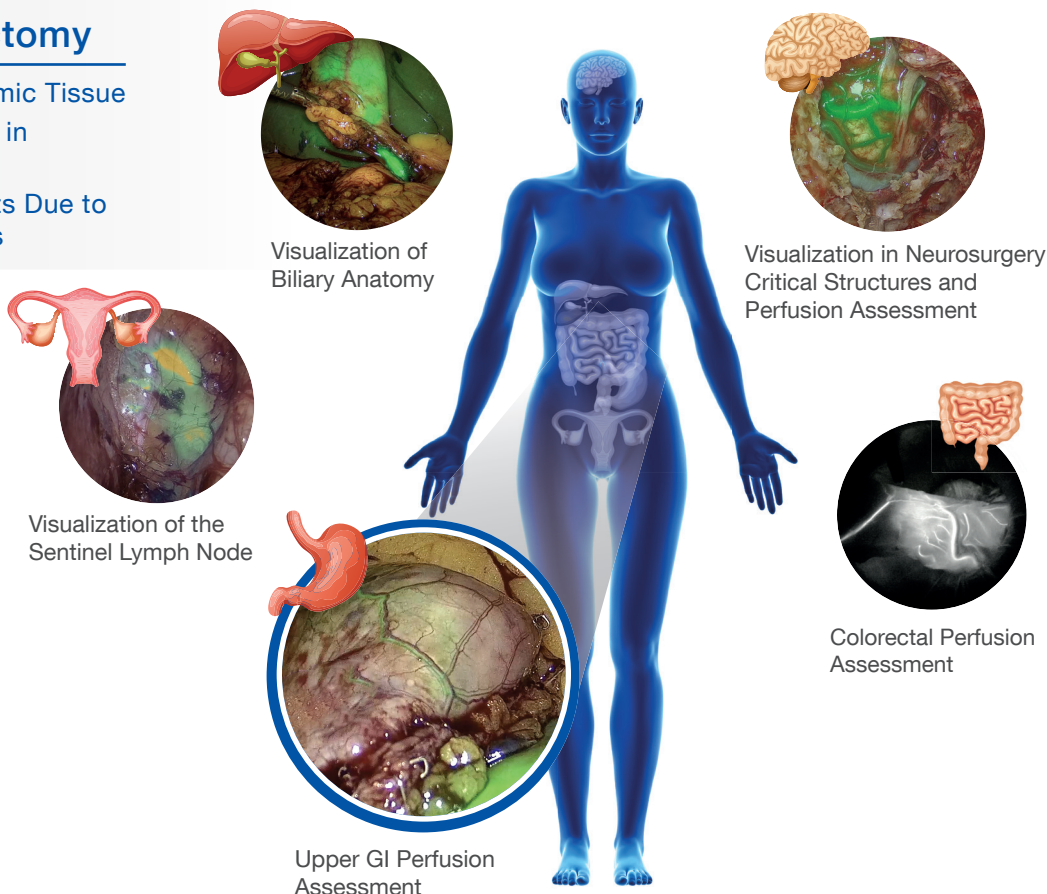
STORZ
KARL STORZ—ENDOSKOPE

SURGICAL APPLICATION BRIEF

Common Rubina™ Applications

Esophagectomy

- Identify Ischemic Tissue
- Verify Change in Surgical Plan
- Minimize Costs Due to Complications



1. Ladak F et al. Indocyanine green for the prevention of anastomotic leaks following esophagectomy: a meta-analysis, Surg Endosc 33, 384–394. <https://doi.org/10.1007/s00464-018-6503-7>.
2. Agzarian J et al. The cost burden of clinically significant esophageal anastomotic leaks—a steep price to pay, J Thorac Cardiovasc Surg 157, 2086–2092. <https://doi.org/10.1016/j.jtcvs.2018.10.137>.
3. Van Daele E et al. Near-infrared fluorescence guided esophageal reconstructive surgery: A systematic review, World J Gastrointest Oncol. 11, 250–263. <https://doi.org/10.4251/wjgo.v11.i3.250>.

Please contact your KARL STORZ sales representative for detailed information

FOR U.S. USE ONLY

It is recommended to check the suitability of the product for the intended procedure prior to use.
Please note that the described products in this medium may not be available yet in all countries due to different regulatory requirements.

KARL STORZ SE & Co. KG
Dr.-Karl-Storz-Straße 34, 78532 Tuttlingen/Germany
Postbox 230, 78503 Tuttlingen/Germany
Phone: +49 7461 708-0
Fax: +49 7461 708-105
E-Mail: info@karlstorz.com
www.karlstorz.com

KARL STORZ Endoscopy-America, Inc.
2151 East Grand Avenue
El Segundo, CA 90245-5017, USA
Phone: +1 424 218-8100
Phone toll free: 800 421-0837 (US only)
Fax: +1 424 218-8525
Fax toll free: 800 321-1304 (US only)
E-Mail: communications@karlstorz.com

STORZ
KARL STORZ—ENDOSKOPE
THE DIAMOND STANDARD