

EVIDENCE-BASED
TECHNOLOGY.
**DATA-BASED
DECISIONS.**

Our vision is to reduce the risks
of leaks in colorectal surgery

Signia™ stapling system



Tri-Staple™ technology



Visionsense™ VS3 iridium system

CRITICAL INFORMATION. WHEN YOU NEED IT.

Our advanced surgical technologies empower you

Anastomotic leaks are devastating in colorectal surgery. That's why we're focused on reducing known risk factors.

Two of the most common — perfusion abnormalities and anastomotic technique — can have a significant impact on the healing of an anastomosis.¹

We believe technology can help reduce the risk of these factors.

Visionsense™ VS3 iridium fluorescence imaging system enables real-time qualitative and quantitative fluorescence imaging to assess perfusion and blood flow — confirming or enhancing surgical judgement to optimize outcomes.

Tri-Staple™ technology generates less stress on tissue,^{2,†} allows greater perfusion into the staple line,^{3,†,‡} and delivers superior performance in variable tissue thicknesses.^{4-8,†}

Signia™ stapling system provides real-time information about clamped tissue and adjusts firing speed in variable tissue to optimize stapling performance.^{9-12,†}

Together, our technologies give you information to help reduce risk factors known to cause leaks.¹⁻¹²

ANASTOMOTIC LEAKS: THE EVIDENCE IS CLEAR.

Impact

UP TO **15%**
INCIDENCE¹

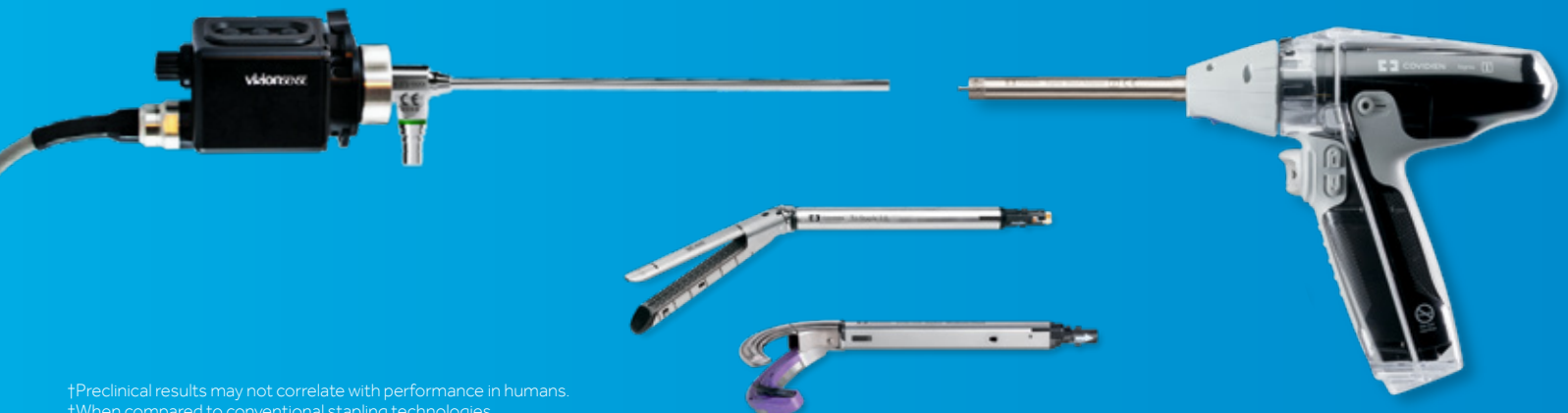
INCREASED LENGTH
OF STAY, COST, LOCAL
RECURRENCE,
AND MORTALITY
RATES¹

Risk factors

**ISCHEMIA TO THE
ANASTOMOSIS¹³**

**INADEQUATE
TISSUE
PERFUSION AND
OXYGENATION¹⁴**

**POOR STAPLE
FORMATION**



†Preclinical results may not correlate with performance in humans.
‡When compared to conventional stapling technologies.

MORE THAN VISUALIZATION. SEE PERFUSION IN REAL TIME.

The Visionsense™ VS3 iridium system combines high-definition visualization with real-time infrared fluorescence imaging. The use of fluorescence angiography to allow for visualization of microperfusion of the bowel may improve outcomes and decrease morbidity rates associated with anastomotic leaks^{1,15,†}.

One platform, five features

The Visionsense™ VS3 iridium system offers unparalleled functionality in visualization technology, with:

- High-definition (HD) for both fluorescence and visible light imaging
- Real-time overlay of IR fluorescence and visible light images
- Qualitative and quantitative measurement of IR intensity
- Dynamic focus camera with 2X zoom
- Lightweight scope that can be used by hand or with articulating arm

CLINICAL VALUE IN COLORECTAL SURGERY

In the Pillar II trial, a near infrared fluorescence system was found to provide an intraoperative assessment of perfusion of the bowel planned for primary anastomosis with fluorescence angiography may decrease the rate of anastomotic leak.^{1,†}



†Clinical trial involving the PINPOINT™ Endoscopic Fluorescence Imaging System (Novadaq-Stryker), which has fluorescence imaging capability comparable to the Visionsense™ VS3 Iridium system. Medtronic data on file.

SUPERIOR STAPLING TECHNOLOGY. RELIABLE RESULTS.

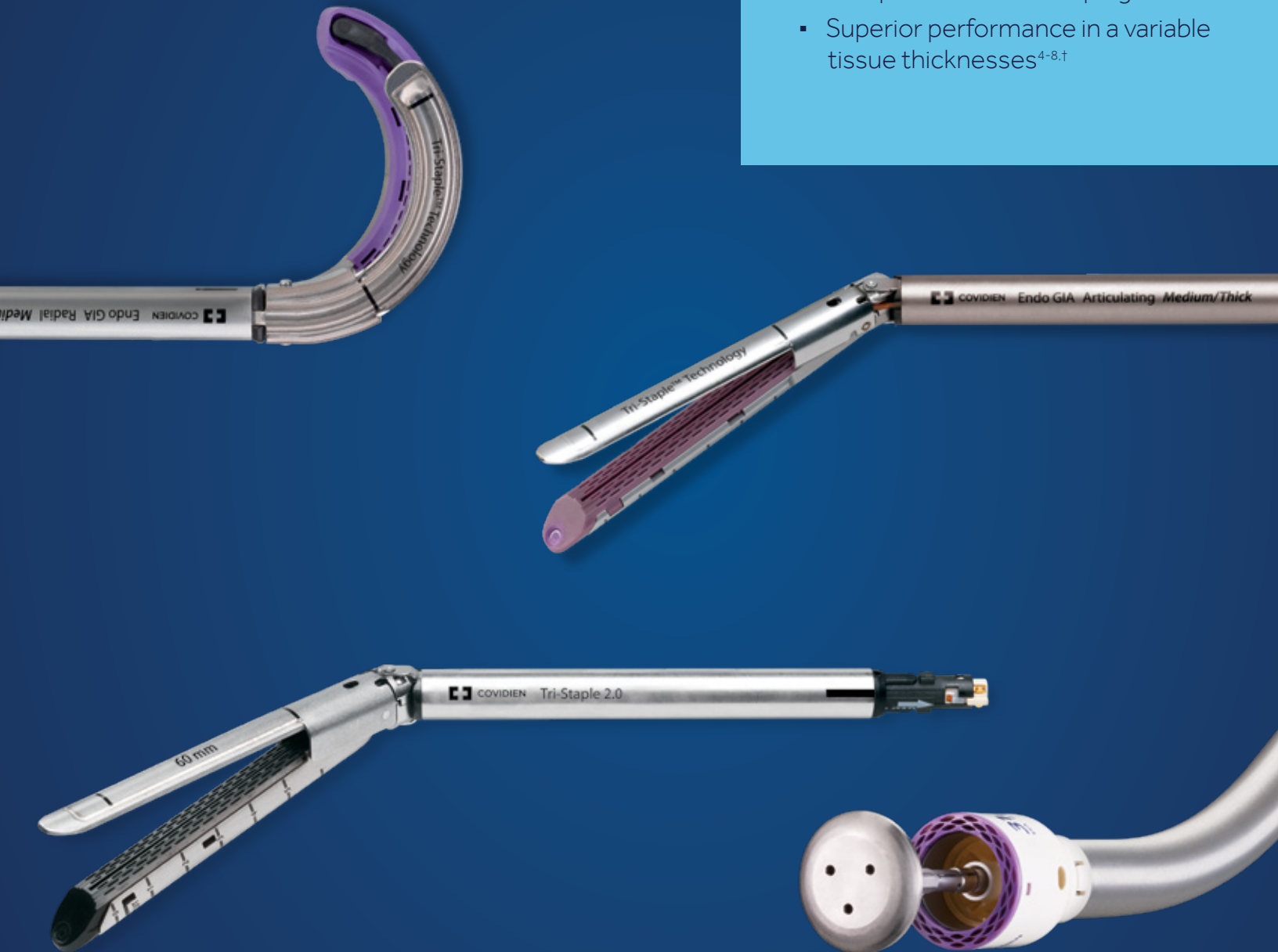
Tri-Staple™ technology is designed to help you overcome clinical challenges of colorectal surgery

Stapling that promotes proper perfusion is important for the tissue healing process.¹⁵ That's why every element of Tri-Staple™ technology — from its stepped cartridge face, graduated compression, and staggered staple heights — is designed to preserve tissue integrity.

CLINICAL VALUE IN COLORECTAL SURGERY

Tri-Staple™ technology — built into both linear and circular staplers — may provide greater perfusion into the staple line.^{2,†} And it delivers:

- Less stress on tissue during compression and clamping^{3,†}
- Superior performance in a variable tissue thicknesses^{4-8,†}



A POWERED STAPLER THAT EMPOWERS YOU.

The Signia™ stapling system provides real-time feedback — before and during firing^{9-12,†}



The world's first smart stapler, the Signia™ system‡:

- Delivers consistent staple lines^{10,11,†}
- Provides precision and maneuverability with fully powered articulation, rotation, and clamping^{12,16,17,†}
- Displays real-time feedback on an easy-to-understand LED screen^{12,†}
- Frees your other hand to focus on the surgical site^{12,†}

THE POWER OF SMART STAPLING TECHNOLOGY.



The Signia™ system's continuous clamp force measurements — displayed on the handle — give you real-time information about stapling conditions. Because higher clamp force measurements may indicate thicker tissues, more challenging tissue applications, or additional materials in the jaws.^{10-11,†}

The Signia™ system adapts to these changing surgical conditions, by appropriately adjusting firing speed based on force measurements to optimize staple formation.^{10-11,†} So you get consistent staple lines — with every firing.^{11,12,†}

CLINICAL VALUE IN COLORECTAL SURGERY

It's not always easy or possible to determine the thickness of the tissue intraoperatively.¹⁸

Poor staple formation is a risk in dense and variable tissues, especially in inflammatory bowel diseases or when the colon or rectum becomes fibrotic due to radiation.^{19,20}

†Preclinical results may not correlate with performance in humans.
‡Currently only compatible with linear staplers.

LET'S TRANSFORM COLORECTAL SURGERY, TOGETHER.

Call your local sales representative today or
get more information online at
[medtronic.com/covidien/en-gb/index.html](https://www.medtronic.com/covidien/en-gb/index.html)

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IMPORTANT: Please refer to the package insert for complete instructions, contraindications, warnings and precautions.

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