SAFE.[1] SECURE.[2] **EFFECTIVE.[1]**

Made possible with the Endo GIA™ reinforced reload with Tri-Staple™ technology[1,2,†]

Study One Overview

A peer-reviewed paper compares Endo GIA™ reinforced reload with Tri-Staple™ technology to Endo GIA™ reload with Tri-Staple™ technology and no buttress.[‡]

Clinical Challenge

Incomplete staple formation due to variable tissue, displacement of tissue, and staples intersect may lead to factors related to anastomotic failure.[1,‡]

Technology Solution

Tri-Staple™ technology has been proven to provide superior burst strength.[1,§] When you add a preloaded buttress — the Endo GIA™ reinforced reload with Tri-Staple™ technology — you enhance this performance with improved hemostasis.[2,‡]

Conclusion

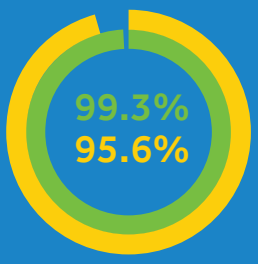
The preloaded buttress on the reinforced reload provides staple formation security when staple lines intersect compared to reloads with no buttress.[2,‡]

More Consistent Staple Formation

Appropriate formation of B-shape staples is essential for proper tissue apposition.[5]

Complete staple formation rate in colon tissue (thin)[2]

Complete staple formation rate in stomach tissue (thick)[2]



Endo GIA™ reinforced reload with Tri-Staple™ technology

Endo GIA™ reload with Tri-Staple™ technology

The rate of complete staple formation was significantly higher with the reinforced reload ($p < 0.05$).

High Rate Hypothesis

The authors of this preclinical study[2] attribute the higher rate of complete staple formation to:

- The combination of the Endo GIA™ reinforced reload with Tri-Staple™ technology 60 mm AMT reload with iDrive™ Ultra powered stapling system[2]
- The preloaded material compresses the tissue in the staple line evenly, and prevents tissue displacement when crossing intersecting staple lines[2]

You Target Tissue. Our Stapler Adjusts Firing Speed.[3,4]

Adaptive Firing™ technology — built into the iDrive™ Ultra powered stapler — responds to tissue characteristics to optimize staple formation.[3,4]

†As shown in both a clinical and preclinical study.
‡Preclinical results may not correlate with clinical performance in humans.
§Compared to uniform staple heights.

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Further, Together

Secure Staple Formation. Reliable Hemostasis.

The second study showed that the reinforced reload may contribute to reducing — and even eliminating — anastomosis complications when compared to a non-buttressed linear reload.[1]

17 PATIENTS
underwent laparoscopic surgery to treat colorectal cancer[1]

0 INCIDENCES
of postoperative bleeding or grade III or higher postoperative complications[1,Ω]

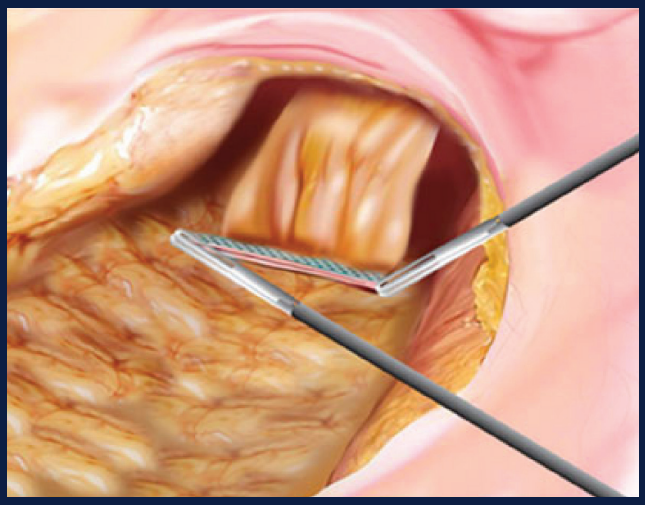
ΩBased on the Clavien-Dindo classification.

Study Two Overview

Facilitating a New Technique

According to the second study, when the sigmoid colon, rectosigmoid, or rectum was transected, holding the wings of the material allowed the surgeons to[1]:

- Use the buttressed staple line as a guide to position the trocar of the circular stapler
- Atraumatically grasp the buttress material, instead of the tissue, for circular staple insertion and removal
- Staple the resected rectum in a straight line



Solving Clinical Challenges

The findings of a careful technique demonstrated how the Endo GIA™ reinforced reload with Tri-Staple™ technology is safe and effective for colorectal resections and anastomoses.[1,2,††]

As the study showed, proper use of the device in gastrointestinal anastomosis can likely reduce complications.[2]

††Results indicate that no major safety issues were reported 30 days post procedure.

1. Naito M, Yamanashi T, Nakamura T, et al. Safety and efficacy of a novel linear staple device with bioabsorbable polyglicolic acid felt in laparoscopic colorectal surgery. *Asian J Endosc Surg.* 2017;10(1):35-39.
2. Naito M, Sato T, Nakamura T, et al. Secure overlap stapling using a linear stapler with bioabsorbable polyglycolic acid felt. *Asian J Endosc Surg.* Feb 22, 2017. [Epub ahead of print]
3. Based on internal test report #R2146-151-0, Powered stapling firing speed DOE analysis and ASA parameters. 2015.
4. Based on internal test report #R2146-173-0, ASA verification testing with slow speed force limit evaluation. 2015.
5. Baker RS, Foote J, Kemmeter P, Brady R, Vroegop T, Serveld M. The science of stapling and leaks. *Obes Surg.* 2004;14:1290–1298.

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