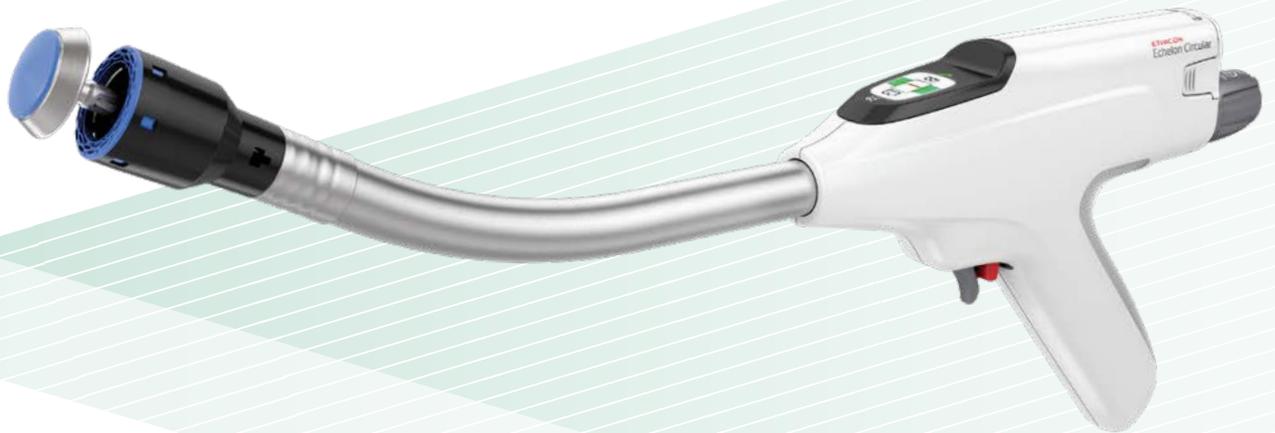


# Echelon Circular™

— B A C K E D B Y A —  
**BODY OF EVIDENCE**

# Optimized perfusion.<sup>1</sup> Reduced leaks at the staple line.<sup>1</sup>

## ECHELON CIRCULAR™ Powered Stapler



**ETHICON**  
PART OF THE *Johnson & Johnson* FAMILY OF COMPANIES

Shaping  
the future  
of surgery

<sup>1</sup> Benchtop testing in porcine tissue  $\leq 30$ mmHg (26mmHg average pressure experienced during intra-operative leak test), comparing Ethicon CDH29P to Medtronic EEA2835 ( $p < 0.001$ ) and preclinical perfusion model, in which perfusion was not significantly different between devices.

Claims compared to Medtronic DST Series™ EEA™ Stapler

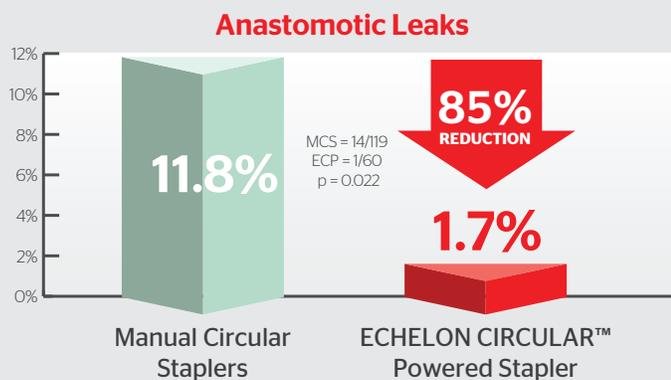
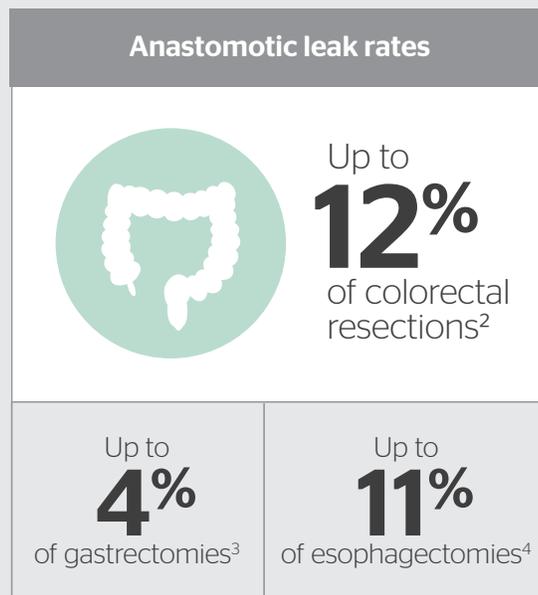
# Designed for creating a secure anastomosis

## Your goal: the best stapling outcomes even in the most challenging cases

Tissue tension, poor blood supply and variable tissue thickness can compromise the anastomosis and lead to significant complications. Among complications, **anastomotic leaks are a dominant surgical concern due to their high mortality risk.**

## ECHELON CIRCULAR™ Powered Stapler with two innovative stapling technologies

The cause of anastomotic leaks is multi-factorial, including both patient and surgical factors. With two technologies, the ECHELON CIRCULAR Powered Stapler addresses device-to-tissue interaction and device-to-user interaction to reduce leaks at the staple line without compromising perfusion.<sup>1</sup>



While leaks are multifactorial, this stapler demonstrated the following in two clinical studies:

- **1.8% anastomotic leak rate<sup>5</sup>** in a multi-site, multi-country clinical study
- **1.7% anastomotic leak rate** in a single institution clinical study, which represented an **85% reduction compared to manual circular staplers<sup>6</sup>** (1.7% v. 11.8%, p=0.02)

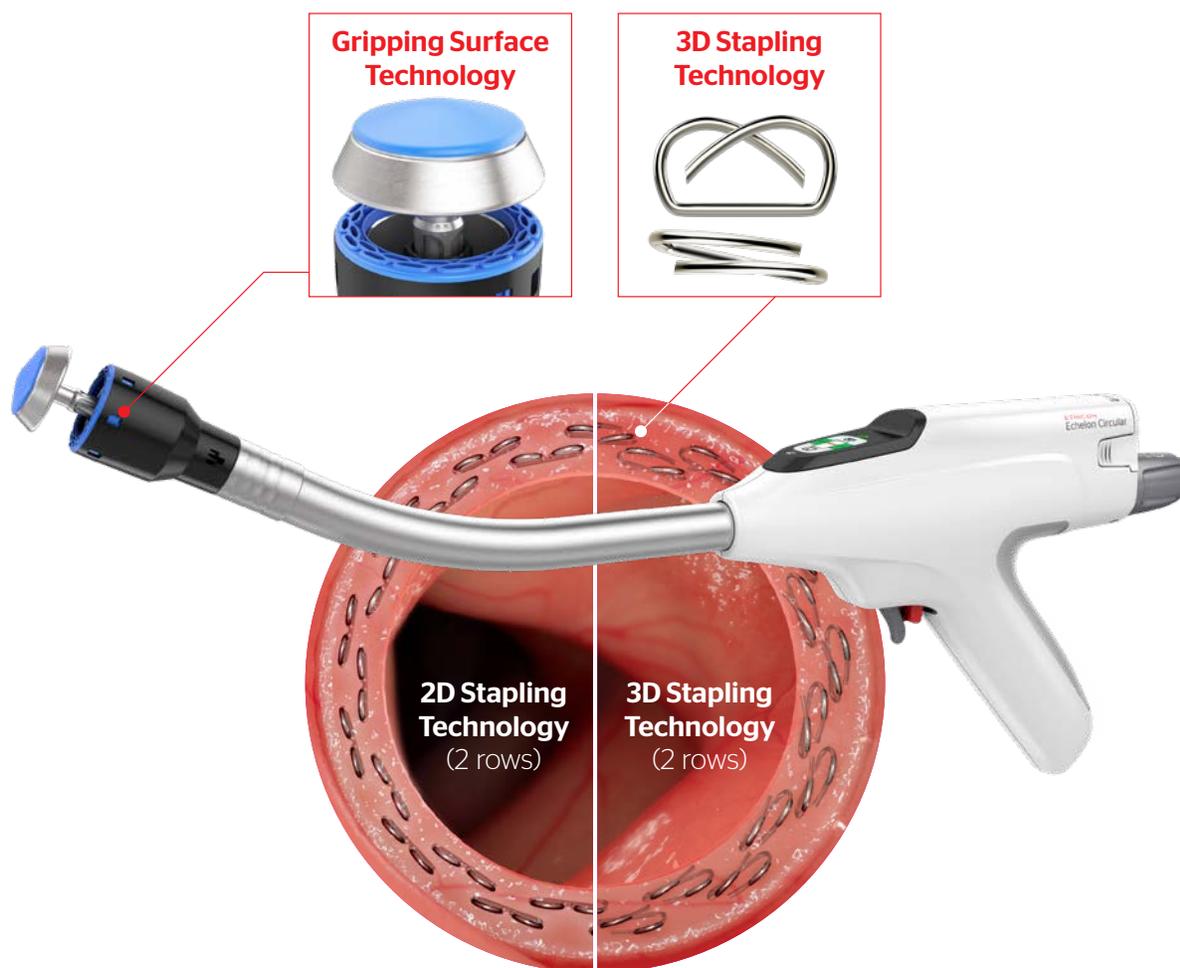
<sup>1</sup> Benchtop testing in porcine tissue  $\leq 30$ mmHg (26mmHg average pressure experienced during intra-operative leak test), comparing Ethicon CDH29P to Medtronic EEA2835 (p<0.001) and preclinical perfusion model, in which perfusion was not significantly different between devices. <sup>2</sup> Koianka T, Kevin M, Martin W, et al. Identifying Important Predictors for Anastomotic Leak After Colon and Rectal Resection. Annals of Surgery. 2013; 257: 108. <sup>3</sup> Oh SJ, Choi WB, Song J, et al. Complications requiring reoperation after gastrectomy for gastric cancer: 17 years experience in a single institute. J Gastrointest Surg. 2009; 13:239. <sup>4</sup> Kassis E, Kosinski A, Ross P, et al. Predictors of anastomotic leak after esophagectomy: an analysis of the society of thoracic surgeons general thoracic database. Ann Thorac Surg. 2013; 96:1919. <sup>5</sup> A Prospective, Multi Center Evaluation of the ECHELON CIRCULAR Powered Stapler in Left-Sided Colorectal Anastomoses, N=168. <sup>6</sup> Impact of the Novel Powered Circular Stapler on Risk of Anastomotic Leakage in Colorectal Anastomosis. A Propensity Score-Matched Study. [ECHELON CIRCULAR 17% (1/60) vs. manual circular 11.8% (14/119), p=0.022]

# A better way to staple

ECHELON CIRCULAR demonstrated a **1.8% anastomotic leak rate**<sup>1</sup> in a multi-site, multi-country clinical study. In a separate clinical study, it demonstrated a **1.7% anastomotic leak rate**, which was an **85% reduction** compared to manual circular staplers (1.7% v. 11.8%, p=0.02).<sup>2</sup>

- 3D Stapling Technology **evenly distributed compression**<sup>3</sup>
- Gripping Surface Technology provided **gentler handling** with a 33% reduction in compressive forces on tissue<sup>4</sup>
- The combination of 3D Stapling Technology and Gripping Surface Technology **optimized perfusion and reduced leaks at the staple line**<sup>5</sup>

Built on a powered firing platform, the ECHELON CIRCULAR Powered Stapler had 37% less movement at the distal tip for increased stability.<sup>6</sup>

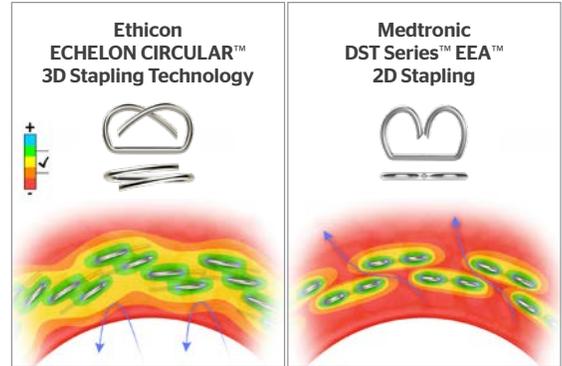


**1** A Prospective, Multi Center Evaluation of the ECHELON CIRCULAR Powered Stapler in Left-Sided Colorectal Anastomoses, N=168. **2** Impact of the Novel Powered Circular Stapler on Risk of Anastomotic Leakage in Colorectal Anastomosis. A Propensity Score-Matched Study. [ECHELON CIRCULAR 1.7% (1/60) vs. manual circular 11.8% (14/119), p=0.022]. **3** Staple line analysis in benchtop testing, comparing Ethicon CDH25P to Medtronic EEA2535. **4** Benchtop testing on porcine colon, comparing Ethicon CDH29P to Medtronic EEA2835, p<0.001. **5** Benchtop testing in porcine tissue  $\leq 30$ mmHg (26mmHg average pressure experienced during intra-operative leak test), comparing Ethicon CDH29P to Medtronic EEA2835 (p<0.001) and preclinical perfusion model, in which perfusion was not significantly different between devices. **6** Users firing in a porcine model, comparing Ethicon CDH29P to Medtronic EEA2835, p=0.003.

# Combining technologies to reduce leaks at the staple line

## 3D Stapling Technology

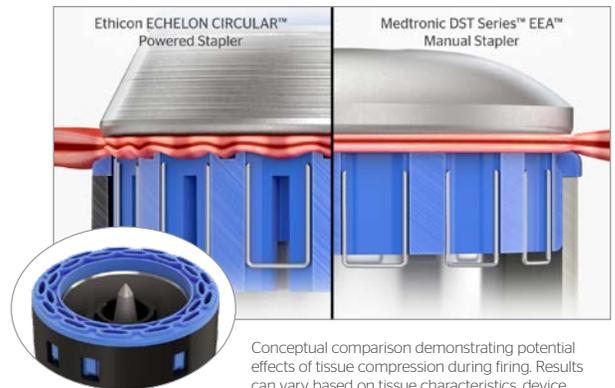
- Designed with offset closure of the staple legs, 3D Stapling Technology **evenly distributed compression throughout the anastomosis.**<sup>1</sup>
- Reduced potential leak paths.<sup>1</sup>



Conceptual comparison demonstrating potential effects of tissue compression during firing. Results can vary based on tissue characteristics, device design, techniques and other factors.

## Gripping Surface Technology

- Atraumatic Gripping Surface Technology **gives precise compression only where it is needed**<sup>2</sup> to prepare the tissue for staple formation.
- Provided gentler handling with a 33% reduction in compressive forces on tissue.<sup>2</sup>



Conceptual comparison demonstrating potential effects of tissue compression during firing. Results can vary based on tissue characteristics, device design, techniques and other factors.

## Powered firing platform

- Push button firing delivered 37% less movement at the distal tip for **increased stability**<sup>3</sup>
- Reduced force to fire by 97%<sup>4</sup>
- Is designed to help minimize variation in usage and standardize performance across users

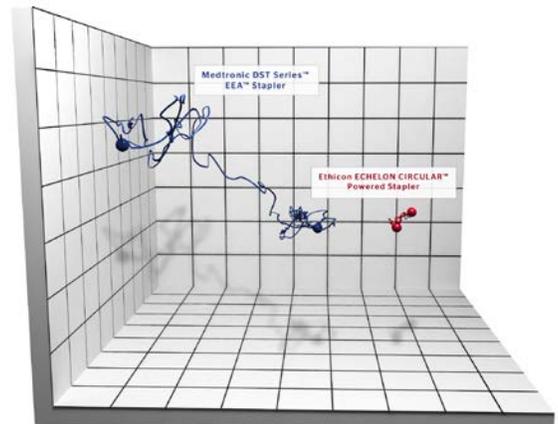
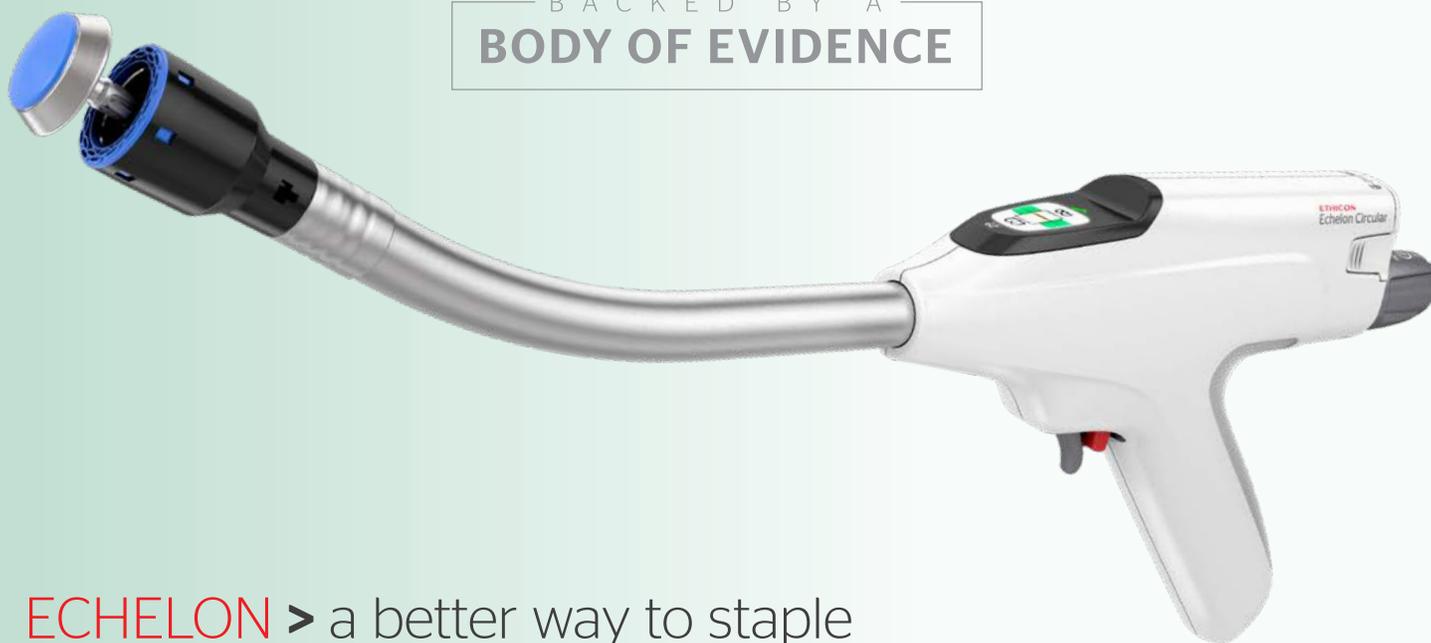


Illustration depicts actual paths of tip movement during testing—each cube represents a space measuring 5mm

# A stapling solution that **optimized perfusion and reduced leaks at the staple line**<sup>1</sup>

The ECHELON CIRCULAR Powered Stapler is designed for creating the anastomosis in colorectal, gastric and thoracic procedures. An innovative combination of technologies that reduced leaks without compromising perfusion.<sup>1</sup>

BACKED BY A  
**BODY OF EVIDENCE**



**ECHELON** > a better way to staple

**Visit [ethicon.com/FewerLeaks](https://ethicon.com/FewerLeaks) or contact  
your local Ethicon sales representative.**

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For complete indications, contraindications, warnings, precautions, and adverse reactions, please reference full package insert.

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Claims compared to Medtronic DST Series™ EEA™ Stapler

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