

GORE® SEAMGUARD®

Bioabsorbable Staple
Line Reinforcement

SEE THE DIFFERENCE IN STAPLE LINE REINFORCEMENT PRODUCTS

There are many properties of staple line reinforcement products to understand and evaluate when making a product choice. See the comparison below.

Staple line reinforcement product comparison

	GORE® SEAMGUARD® Bioabsorbable Staple Line Reinforcement	ETHICON ECHELON FLEX Powered ENDOPATH® Stapler	MEDTRONIC ENDO GIA Reinforced Reload with TRI-STAPLE Technology	BAXTER PERI-STRIPS DRY® with VERITAS® Collagen Matrix Staple Line Reinforcement
Manufacturer	W. L. Gore & Associates	Ethicon	Medtronic	Baxter Healthcare Corporation
Material	GORE® BIO-A® Tissue Reinforcement 67% polyglycolic acid (PGA)/ 33% trimethylene carbonate (TMC)	Two layers of polydioxanone film surround a layer of VICRYL material (copolymer of 90 percent glycolide and 10 percent L-lactide). The adhesive is composed of a mixture of water soluble alkylene oxide copolymers. ¹	100% PGA	Non-crosslinked bovine pericardium
Complete absorption	6–7 months ²	4 months ¹	3.5 months ³	Degrades via inflammatory response followed by host collagen deposition, patient dependent ^{4–7}
Stapler attachment	Sleeve design held on by sutures	Adhesive composed of a mixture of water soluble alkylene oxide copolymers ¹	Preloaded on stapler, held by suture ⁸	Hydrogel attachment material ⁹
Inflammatory response	Slower degradation creates minimal inflammatory response, especially during early post-op time points which is the critical healing period: mild to moderate ^{8,9}	No data available	Creates significantly higher inflammatory response at early post-op time points ⁸	Extensive inflammation at early post-op time point ⁹
Bariatric staple line reinforcement studies	> 35 ¹⁰	None	None	10*
Leak rate per systematic review completed of 148 articles with 40,653 patients¹¹	0.7% ¹¹ worldwide	Product not included due to insufficient data ¹¹	Product not included due to insufficient data ¹¹	2.7% ¹¹ worldwide

* A literature search was performed by an Information Specialist in May, 2020 using the MEDLINE® database, BIOSIS Previews® database and Embase® database. Limiters were: 10 years, English language, humans. Key words/phrases are on file.

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