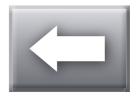
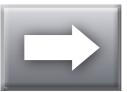


# Polysorb In-Service Presentation

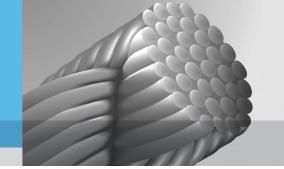








## **Polysorb**<sup>™</sup> **Suture**



## **Braided Synthetic Absorbable**

#### Composition

93% Polyglycolic7% Polylactic

#### Coating

Caprolactone
Glycolide and
Calcium Stearoyl
Lactylate

#### **Tensile Strength**

3 weeks

-80% 2 weeks

- 30% 3 weeks

## **Absorption Profile**

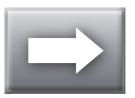
56-70 days











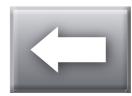


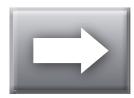
## What is similar?

MULTIFILAMENT				
	Composition	Coating	Absorption	Color
Polysorb™	Polyglycolic acid and Polylactic acid	Caprolactone Glycolide Copolymer and Calcium Stearoyl Lactylate	56-70 days	Purple / Undyed
Vicryl™*	Polyglycolic acid and Polylactic acid	Caprolactone	56-70 days	Purple / Undyed



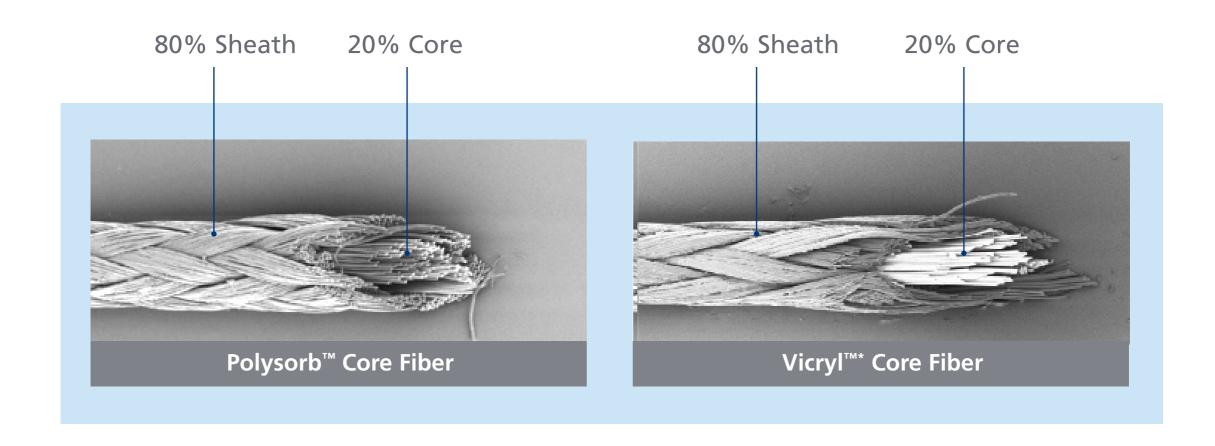








## What is similar?













#### What is different?

Tensile Strength.

#### **Polysorb™ Suture Tensile Strength**

Polysorb<sup>™</sup> suture tensile strength is measured as a percentage of the United States Pharmacopeia (USP).¹

#### Vicryl™\* Tensile Strength

Vicryl<sup>™\*</sup> tensile strength is measured as a percentage of its original strength.<sup>2</sup>

	Average Knot Pull Strength <sup>3</sup> (size 1 to 3-0)		
Out of package	Polysorb™ is 36% stronger than Vicryl™*		
After 1 week of implantation	Polysorb™ is 25% stronger than Vicryl™*		
After 2 week of implantation	Polysorb™ is 8% stronger than Vicryl™*		

Because the measurements are different, a knot pull test was used to compare the strength of both sutures. The knot pull strength test measured the maximum load in kilograms of force that the sutures can hold before breaking.<sup>3</sup>

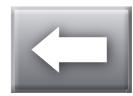
1 POLYSORB™ Instructions for Use (IFU)

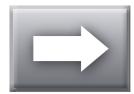
2 VICRYL<sup>™\*</sup> Instructions for Use (IFU)

3 Covidien R&D Testing Service Report CMP-5347), 2013











## When is the critical wound healing period?

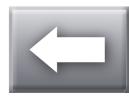
In a literature research, 4 clinical studies were found with a combined number of 15,404 patients; all papers concluded that wound dehiscence occurred during the first and second week after surgery.

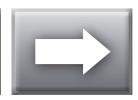
This first 2 weeks post operatively is the critical wound healing period and when strength is needed the most.

Factors influencing wound dehiscence. Riou JP, Cohen JR, Johnson H Jr. 1992
Abdominal Wound Dehiscence after Caesarean Section. James Mowat and John Bonnar. 1971
Risk factors in surgical wound dehiscence. Benavides. 2000
Abdominal wound closure. A randomized prospective study of 571 patients comparing continuous vs. interrupted suture techniques. Richards PC, Balch CM, Aldrete JS. 1982





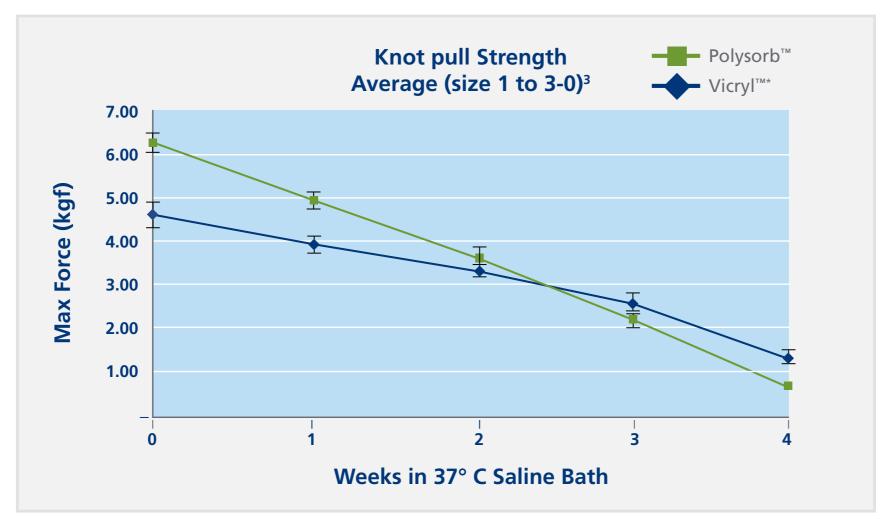






#### What is different?

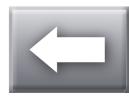
Polysorb<sup>™</sup> suture is stronger during the critical wound healing period.<sup>3</sup>

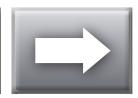


3 Covidien R&D Testing Service Report CMP-5347), 2013





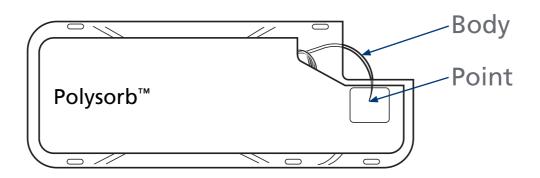




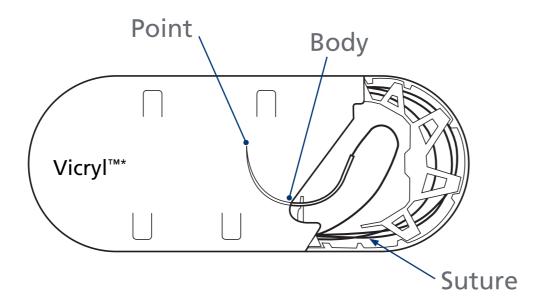


#### What is different?

Polysorb<sup>™</sup> suture needle orientation.

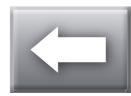


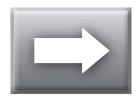
Advantage: Arm needle easily whether left or right handed













## What to do?

1

Tear package along arrow.



Rotate the package 90° and use the needle driver to extract suture.

2

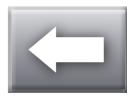
Open the package.

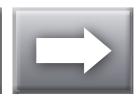














# Covidien has made the decision to ensure that all of its products are Triclosan-Free:

- Reviews are mixed on the efficacy of triclosan-impregnated sutures to reduce surgical site infections (SSI)4,5,6,7,8,9,10,11,12
- Scientific studies have raised potential concerns over the use of triclosan<sup>13,14,15,16</sup>

#### Mixed reviews on the efficacy to reduce surgical site infections by triclosan-impregnated sutures:

- Chang: Triclosan-Impregnated Sutures to Decrease Surgical Site Infections-Systematic Review and Meta-Analysis of Randomized Trial"; 2012
- 5. Deliaert: The effect of Triclosan-coated sutures in wound healing. A double blind randomised prospective pilot study; 2007
- 6. Turtiainen: Effect of Triclosan-Coated Sutures on the Incidence of Surgical Wound Infection After Lower Limb Revascularization Surgery: A Randomized Controlled Trial) 2012
- 7. Seim: Triclosan-coated sutures do not reduce leg wound infections after coronary artery bypass grafting; 2012
- 8. Isik: Efficiency of Antibacterial Suture Material in Cardiac Surgery: A Double-blind Randomized Prospective Study; 2012
- 9. Stopek: Bacterial Colonization of Suture Biomaterials with Varied Substrate Architecture and Chemistry; 2007
- 10. Jeppson: Triclosan-coated sutures reduce surgical site infection after open vein harvesting in coronary artery bypass grafting patients: a randomized controlled trial; 2013
- 11. Wang: Systematic review and meta-analysis of triclosan-coated sutures for the prevention of surgical-site infection; 2013
- 12. Edminson: Is Antimicrobial Closure Technology A Clinically Effective Strategy For Reducing the Risk of Surgical Site Infections A Meta-Analysis; 2012

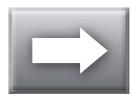
#### Scientific studies that raise potential concerns over the use of triclosan:

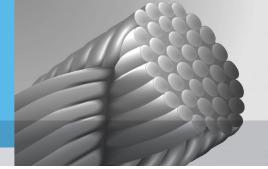
- 13. Schweizer, H: Triclosan: A Widely Used Biocide and Its Link to Antibiotics; 2001
- 14. Brenwald, N.P. and Fraise, A.P.: Triclosan Resistance in Methicillin-resistant Staphylococcus Aureus (MRSA); 2003
- 15. Levy, S.B.: Antibacterial Household Products: Cause for Concern; 2001
- 16. Aiello, A.E. et al.: Consumer Antibacterial Soaps: Effective or Just Risky?; 2007











#### What is different?

- Polysorb<sup>™</sup> is stronger than
   Vicryl<sup>™\*</sup> during the critical
   wound healing period<sup>3</sup>
- Polysorb<sup>™</sup> sutures are Triclosan-Free
- Covidien philosophy is based on delivering in three key areas:
  - Enhancing clinical value
  - lowering the cost of healthcare
  - Improving patient outcomes and quality of life.

