

Ethicon is committed to partnering with colorectal surgeons to realize better patient outcomes by reducing the risk of surgical site infection (SSI)



## Take greater control of a key risk factor related to SSI

**The Centers for Disease Control and Prevention (CDC) has revised its Guideline for the Prevention of Surgical Site Infection to include a recommendation for using antimicrobial sutures:**

*"Consider the use of triclosan-coated sutures for the prevention of SSI."<sup>1\*</sup>*

**Triclosan-coated sutures are now also supported by:**

**World Health Organization (WHO)**

Global Guidelines for the Prevention of Surgical Site Infection

*"The panel suggests the use of triclosan-coated sutures for the purpose of reducing the risk of SSI, independent of the type of surgery."<sup>2\*</sup>*

**American College of Surgeons & Surgical Infection Society (ACS & SIS)**

Surgical Site Infection Guidelines

*"Triclosan antibacterial suture use is recommended for wound closure in clean and clean-contaminated abdominal cases when available."<sup>3\*</sup>*

\*CDC, WHO, and ACS/SIS guidelines on reducing the risk of surgical site infections are general to triclosan-coated sutures and are not specific to any one brand.

**SSIs are a common and costly problem following colorectal surgery**

**Up to 20%**

of colorectal surgery patients will develop an SSI<sup>4</sup>

A single SSI can lead to as many as

**10 additional**

hospital days<sup>5</sup>

SSI-related readmission rates for colorectal surgery are

**up to 5x higher**

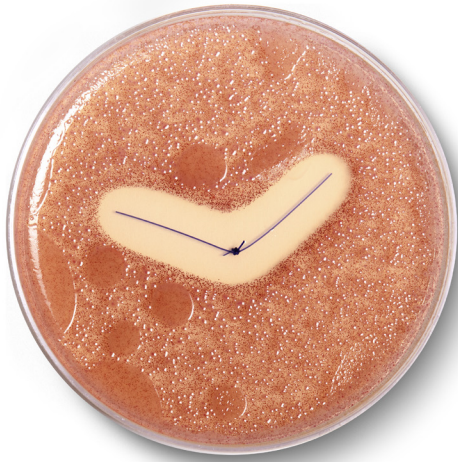
than gynecologic, orthopedic, spinal, or cardiovascular procedures<sup>5</sup>

**SSIs increase the risk of other wound complications**

- Patients with SSI are 2.2x more likely to develop incisional hernia<sup>6</sup>
- Patients with SSI are 6x more likely to suffer wound dehiscence following abdominal surgery<sup>7</sup>



# Plus Antibacterial Sutures have been shown in vitro to inhibit colonization of the suture for 7 days or more, including bacteria commonly associated with SSI<sup>8-10</sup>



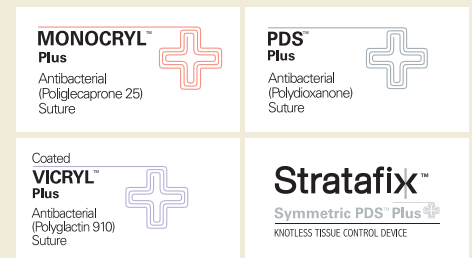
The petri dish image is for illustrative purposes only, zone of inhibition testing results can vary.

## PROVEN EFFECTIVE AGAINST:

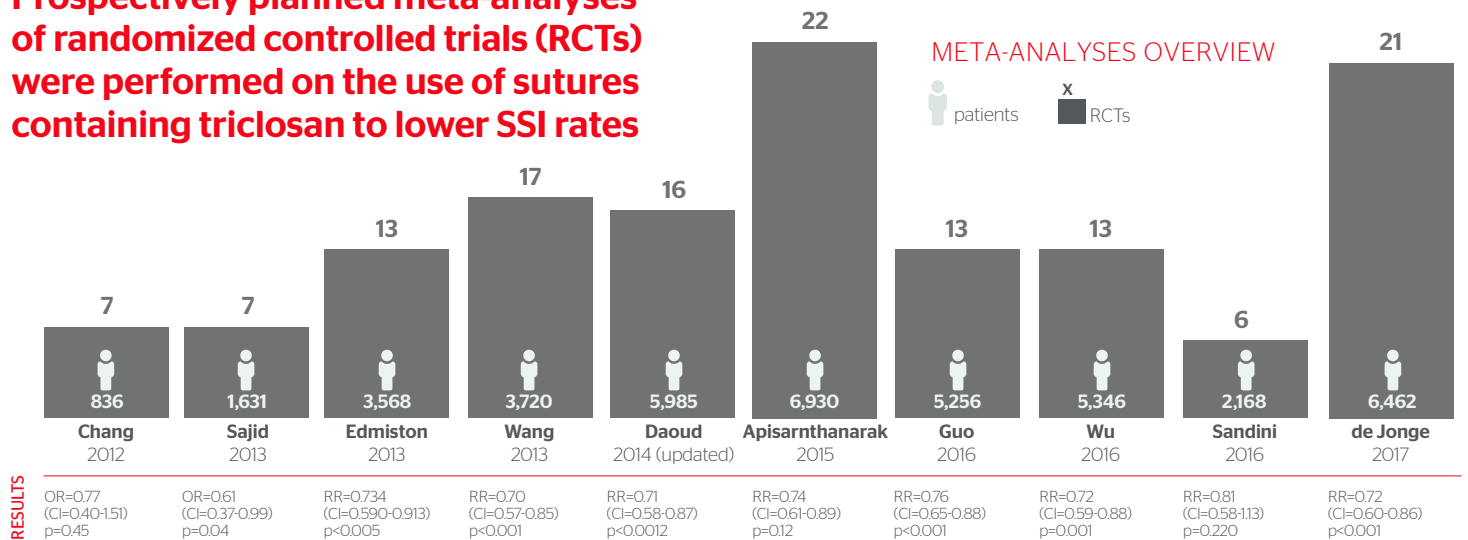
<i>Staphylococcus aureus</i>	✓
<i>Staphylococcus epidermidis</i>	✓
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)	✓
Methicillin-resistant <i>Staphylococcus epidermidis</i> (MRSE)	✓
<i>Escherichia coli</i> *	✓
<i>Klebsiella pneumoniae</i> *	✓

## Facts about triclosan - the antibacterial agent used in Plus Sutures

- Plus Sutures are made with the purest form of triclosan - IRGACARE<sup>®</sup> MP<sup>†</sup> - a broad-spectrum antimicrobial agent that has been widely used and extensively studied for over 40 years<sup>11</sup>



## Prospectively planned meta-analyses of randomized controlled trials (RCTs) were performed on the use of sutures containing triclosan to lower SSI rates



## Ethicon Plus Suture Technology – Helping Optimize Patient Care in Colorectal Surgery

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

\*PDS Plus Suture and MONOCRYL Plus Suture only †Trademark of BASF SE  
**References:** 1. Berrios-Torres SI, Umscheid CA, Bratzler DW, et al. Centers for Disease Control and Prevention Guideline for the Prevention of Surgical Site Infection, 2017. *JAMA Surg.* doi:10.1001/jamasurg.2017.0904. 2. World Health Organization website. <http://www.who.int/gpsc/en/>. Accessed November 3, 2016. 3. Ban KA, Minei JP, Laronga C, et al. American College of Surgeons and Surgical Infection Society. Surgical Site Infection Guidelines, 2016 Update. *J Am Coll Surg.* 2016;224:59-74. 4. Nakamura T, Kashimura N, Noji T, et al. Triclosan-coated sutures reduce the incidence of wound infections and the costs after colorectal surgery: A randomized controlled trial. *Surgery.* 2013;153:576-84. 5. de Lissovoy G, Pan F, Patkar AD, Edmiston CE Jr, Peng S. Surgical site infection incidence and burden assessment using multi-institutional real-world data. Poster presented at: International Society for Pharmacoeconomics and Outcomes Research 11th Annual European Congress, November 5-8, 2011; Madrid, Spain. 6. Israelsson LA, Jonsson T. Incisional Hernia After Midline Laparotomy: A Prospective Study. *Eur J Surg.* 1996;162:125-132. 7. Van Ramshorst GH, Nieuwenhuizen J, Hop WC, et al. Abdominal Wound Dehiscence in Adults: Development and Validation of a Risk Model. *World J Surg.* 2010;34:20-27. 8. Rothenburger S, Spangler D, Bhende S, Burkley D. In vitro antimicrobial evaluation of coated Vicryl Plus Antibacterial Suture (coated polyglactin 910 with triclosan) using zone of inhibition assays. *Surg Infect (Larchmt).* 2002;3(suppl):S79-S87. 9. Ming X, Rothenburger S, Yang D. In vitro antibacterial efficacy of Monocryl Plus Antibacterial Suture (poliglecaprone 25 with triclosan). *Surg Infect (Larchmt).* 2007;8(2):201-207. 10. Ming X, Rothenburger S, Nichols MM. In vivo and in vitro antibacterial efficacy of PDS Plus (polydioxanone with triclosan) suture. *Surg Infect (Larchmt).* 2008;9(4):451-457. 11. Barbolt TA. Chemistry and safety of triclosan, and its use as an antimicrobial coating on Coated Vicryl Plus Antibacterial Suture (coated polyglactin 910 suture with triclosan). *Surg Infect (Larchmt).* 2002;3(suppl):S45-S53.

