### Stratafix<sup>™</sup>

### **STRATAFIX<sup>™</sup>Symmetric PDS<sup>™</sup> Plus** Knotless Tissue Control Device

The only knotless tissue control device that is appropriate for fascial closure<sup>1,2,†</sup>

PART OF THE JOHNNON - JOHNNON FAMILY OF COMPANIES

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Shaping the future of surgery

# Get more with STRATAFIX<sup>™</sup>

· FFF

- More Security \*
- More Consistency \*
- More Efficiency \*

 † Refers to STRATAFIX™ Symmetric PDS™ Plus Knotless Tissue Control Device Only.
 \* Compared to traditional sutures.

### What is important in **fascial closure**?

### Strength

- After 14 to 28 days of healing, the fascia is selfsupportive but still weak<sup>8,18</sup>
- Fascia heals even slower in patients with co-morbidities such as diabetes-or due to other patient factors like smoking, poor nutrition, cancer, or AIDS<sup>8,18</sup>
- Patient movement and intra-abdominal swelling increase abdominal pressure, placing added tension on the incision, and pulling the wound edges apart<sup>4</sup>

Up to 3.5% of midline incisions result in dehiscence<sup>4,19</sup>

Up to **19%** 

of midline incisions develop surgical site infections (SSIs) 5-7,19

Up to **23%** of midline incisions result in

#### Address risk factors of infection

- Surgical site infection (SSI) increases the risk of dehiscence and incisional hernia.<sup>3,8,18</sup> SSIs can extend the inflammatory phase, during which the tissue has essentially no strength<sup>9</sup>
- Bacterial colonization of the suture is a known risk factor for SSI<sup>9</sup>



Bacterial colonization is a potential complication of suture knots and braided sutures?

#### **Technique**

- Continuous closure combines efficiency with more consistent distribution of tension<sup>10</sup>, but has greater risk of wound dehiscence and bacteria travelling along the suture
- Interrupted closure is more time consuming but less likely to be compromised by a single break in the suture<sup>7,11,12</sup>

The ideal choice for fascial closure would provide a high level of tension control, without compromising strength, security, and antibacterial protection.

### **STRATAFIX<sup>™</sup> Symmetric PDS<sup>™</sup> Plus** Knotless Tissue Control Device

#### Now achieve the efficiency and security of your wound closure without compromise.

### **Superior Strength**

- STRATAFIX<sup>™</sup> Symmetric PDS<sup>™</sup> Plus Device demonstrated superior tissue holding strength compared to interrupted technique with Coated VICRYL<sup>™</sup> (polyglactin 910) Suture, continuous technique with PDS<sup>™</sup> II (polydioxanone) Looped Suture and V-LOC<sup>™</sup> 180 Wound Closure Device<sup>1,13</sup>
- Initial breaking strength superior to Traditional PDS<sup>™</sup> Plus Antibacterial (polydioxanone) Suture<sup>14</sup>
- In ex-vivo studies, multiple cuts to the STRATAFIX™ Symmetric PDS™ Plus Device placed in fascia did not result in tissue separation<sup>15</sup>
- In pre-clinical animal studies, STRATAFIX<sup>™</sup> Spiral PGA-PCL Knotless Tissue Control Device,\*

#### Max Load Comparison for Tissue Holding in Fascia<sup>13</sup>



STRATAFIX<sup>™</sup> Spiral PDO Knotless Tissue Control Device,\*, and STRATAFIX<sup>™</sup> Symmetric PDS<sup>™</sup> Plus Knotless Tissue Control Device showed wound healing equivalent to traditional PDS<sup>™</sup> Plus Antibacterial (polydioxanone) Suture at 7 and 21 days postsurgery.<sup>1</sup>

### Address risk factors of infection

Provides antibacterial protection against pathogens commonly associated with SSIs<sup>14,16</sup>

- Creates a zone of inhibition around the device<sup>1,17</sup>
- Shown in vitro to inhibit bacterial colonization
   of the device for 11 to 23 days<sup>1,17</sup>
- The only commercially available knotless tissue control devices with antibacterial protection<sup>1</sup>



Demonstrated In vitro activity— *E coli*: 11 days *S aureus*: 23 days<sup>1,17</sup>

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

### **Technique**

STRATAFIX™ Symmetric PDS™ Plus Device combines the benefits of interrupted and continuous suturing techniques<sup>1</sup>



**Only Ethicon** offers a knotless tissue control device<sup>†</sup>, with Plus **antibacterial** technology, that is appropriate for closing high-tension areas, such as **fascia**.<sup>12,14</sup>

\* This study was performed with a device of similar material and anchor design to a STRATAFIX™ Spiral Device \*\* In Vivo. In an animal model.

† Refers to STRATAFIX™ Symmetric PDS™ Plus Device only.

## **STRATAFIX<sup>™</sup> Symmetric PDS<sup>™</sup> Plus** Knotless Tissue Control Device

| Needle   |            | Length | 3-0       | 2-0       | 0         | 1         |
|--|------------|--------|-----------|-----------|-----------|-----------|
| 19 mm, 3/8 Circle,<br>Reverse Cutting, PS-2                        | $\smile$   | 45 cm  | SXPP1A101 |           |           |           |
| 24 mm, 3/8 Circle,<br>Reverse Cutting, PS-1                        | $\bigvee$  | 45 cm  | SXPP1A100 |           |           |           |
| 36 mm, 1/2 Circle,<br>Reverse Cutting, OS-6                        |            | 45 cm  |           |           | SXPP1A200 | SXPP1A201 |
| 26 mm, 1/2 Circle,<br>Taper Point, SH                              | $\bigcirc$ | 45 cm  | SXPP1A410 | SXPP1A409 |           |           |
| 26 mm, 1/2 Circle,<br>Taper Point, CT-2                            |            | 45 cm  |           | SXPP1A408 | SXPP1A407 |           |
| 36 mm, 1/2 Circle,<br>Taper Point, CT-1                            |            | 45 cm  |           | SXPP1A4O3 | SXPP1A401 | SXPP1A404 |
| 40 mm, 1/2 Circle,<br>Taper Point, CT                              |            | 45 cm  |           |           | SXPP1A406 | SXPP1A405 |
| 48 mm, 1/2 Circle,<br>Taper Point, CTX                             |            | 45 cm  |           |           | SXPP1A402 | SXPP1A400 |
| 36 mm, 1/2 Circle,<br>Taper Point, Ethiguard® Safety Needle, CTB-1 |            | 45 cm  |           |           |           | SXPP1A301 |
| 48 mm, 1/2 Circle,<br>Taper Point, Ethiguard® Safety Needle, CTXB  |            | 45 cm  |           |           | SXPP1A3O2 | SXPP1A300 |

References: 1. Ethicon, STRATAFIX<sup>™</sup> Knotless Tissue Control Device Claims Matrix 060056-170214 EMEA, Data on File. 2. Ethicon Wound Closure Manual. 2007. Ethicon, Inc. 3. Franchi et al. Incisional Hernia in Gynecologic Oncology Patients: A 10-Year Study. Obstet Gynecol. 2001;97:696. 4. 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(1):2027. 5. Millbourn D, Cengiz Y, Israelsson LA. Effect of stitch length on wound complications after closure of midline incisions: a randomized controlled trial. *Arch Surg*. 2009;144(11):1056-1059. 6. Petrosillo N, Drapeau CM, Nicastri E, et al: ANPIO. Surgical site infections in Italian hospitals: a prospective multicenter study. *BMC Infect Dis*. 2008;8:34. 7. Selier CM, Bruckner T, Diener MK, et al. Interrupted or continuous slowly absorbable sutures for closure of primary elective midline abdominal incisions: a multicenter randomized trial (INSECT: ISRCTN24023541). *Ann Surg*. 2009;24(4):576-582.
8. Dubay DA, Franz MG. Acute wound healing: the biology of acute wound failure. *Surg Clin North Am*. 2003;83(3):463-481. 9. Edmiston CE, Seabrook GR, Goheen MP, et al. Bacterial adherence to surgical sutures: can antibacterial-coated sutures reduce the risk of microbial contamination? *J Am Col Surg*. 2006;203:481-489. 10. Poole GV Jr. Mechanical factors in abdominal wound closure: the prevention of fascial dehiscence. *Surgery*. 1985;97(6):631-640. 11. Boutros S, Weinfeld AB, Friedman JD. Continuous versus interrupted suturing of traumatic lacerations: a time, cost, and complication rate comparison. *J Trauma Injury Infect Crit Care*. 2000;48(3):495-497. 12. Wong NL. Review of continuous sutures in dermatologic surgery. *J Dermatol Surg Oncol*. 1993;19:923-931. 13. Data on file. Ethicon, Inc. Minitab for Claims Study 2015. 14. STRATAFIX<sup>™</sup> Symmetric PDS<sup>™</sup> Plus IFU. 15. Ethicon AST-2013-0056 Performance Testing of STRATAFIX<sup>™</sup> Symmetric PDS<sup>™</sup> Plus Sutures

Please always refer to the Instructions for Use / Package Insert that come with the device for the most current and complete instructions.

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