Johnson & Johnson MEDICAL DEVICES COMPANIES

Plus Triclosan-Coated Sutures

Budget Impact Model

The petri dish image is for illustrative purposes only, zone of inhibition testing results can vary. Variance in testing results does not impact bacterial colonization.

SSI Prevention

- Surgical site infections (SSIs) are a common and costly problem, accounting for about 15% of all healthcare-associated infections[1]
- SSIs take a significant clinical and economic toll as patients are 5 times more likely to be readmitted, hospitalized for up to 10 additional days, and 2 times more likely to die[1, 2]

International Guidelines:

- National Institute for Health and Care Excellence (NICE)
- Centers for Disease Control and Prevention (CDC)
- World Health Organization (WHO)
- American College of Surgeons and Surgical Infecion Society (ACS & SIS)

HTA Report:

- European Network of Health Technology Assessment (EUnetHTA)

Guidelines on reducing the risk of surgical site infections are general to triclosan-coated sutures and are not specific to any one brand.

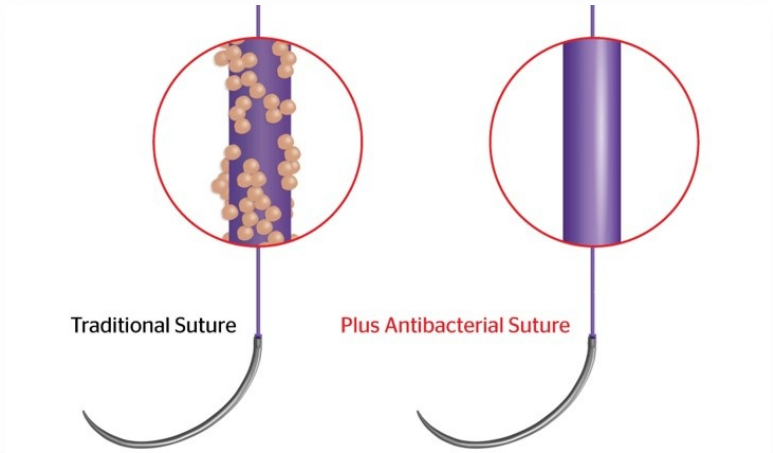
Triclosan-Coated Sutures

Plus Sutures –the only sutures with triclosan available worldwide with antibacterial protection offered by IRGACARE®* MP (Triclosan)†:

- Plus Sutures are made with high purity material of triclosan – IRGACARE® MP* – a broad-spectrum antimicrobial agent that has been widely used and extensively studied for over 30 years[8]
- Triclosan has been shown in vitro to inhibit bacterial colonization of the suture for 7 days or more, including bacteria commonly associated with SSI[9-11]

Ethicon's Plus Triclosan-Coated Sutures come in a range of polymers and sizes:

- Coated VICRYL™ Plus Antibacterial (polyglactin 910) Suture
- MONOCRYL™ Plus Antibacterial (poliglecaprone 25) Suture
- PDS™ Plus Antibacterial (polydioxanone) Suture
- STRATAFIX™ Knotless Tissue Control Devices with Plus Antibacterial



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

*Trademark of BASF SE

†There are no competitive triclosan coated sutures that have both FDA clearance and CE Marked as of January 2017

Leaper et al., 2017 Meta-analysis and Economic Model [25]

Objectives

- To estimate the potential financial impacts following wound closure with triclosan-coated sutures or uncoated sutures for National Health Service (England) as a healthcare provider.

Methods

- A systematic review of all evidence available from January 2005 to September 2016 with all identified publications reviewed manually for inclusion in the final list of studies.
- The results of the meta-analysis were used in a cost analysis, using the National Health Service (NHS England)-based cost of inpatient admissions for infections and differential costs of triclosan-coated sutures versus uncoated

Results

- A total of 34 studies were included. The mean number of patients was 493 per study; 252 patients in the triclosan-coated sutures group and 241 patients in the uncoated suture group.
- The primary analysis demonstrated a 39% reduction in the risk of SSI for the triclosan-coated sutures group compared to the uncoated suture group (Odds Ratio: 0.61, 95% CI: (27%, 48%), $p < 0.001$).
- Overall savings were estimated to be £91.25 per procedure. The cost analysis reported mean savings per procedure from £56.59 for clean wound procedures to £248.23 for contaminated/dirty wound procedures.

Conclusions

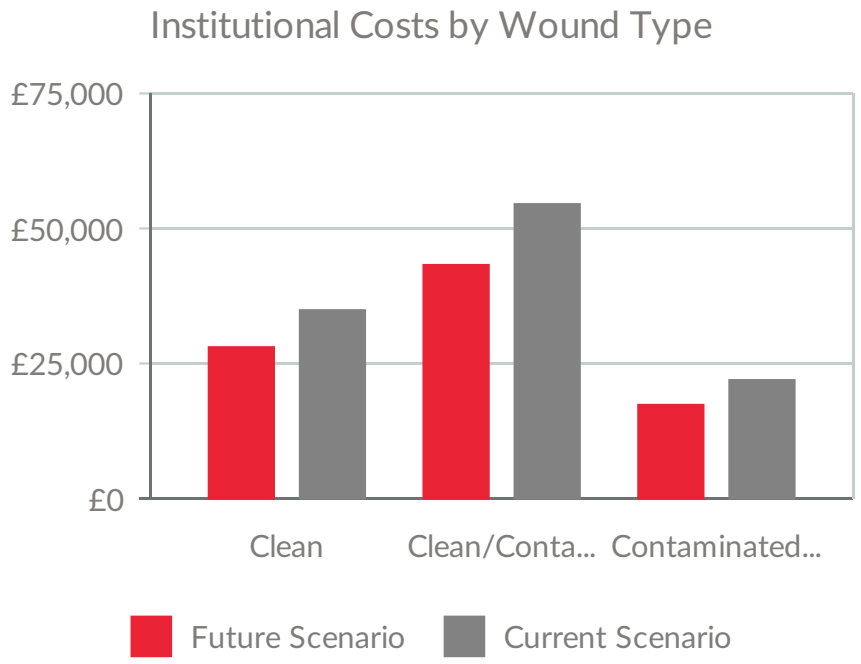
- Antimicrobial sutures may result in significant cost savings across various surgical wound types.

Model Inputs & Results

The results from the model are based on the following parameters, the default values of which can be edited by the user.
Use of future practice is anticipated to result in cost savings of: **£28,023**

Procedure Volume and SSI Rates

- Total annual procedures: 250
- SSI rates: by wound type
- Current use of 100 % and 0 % and future use of 20 % and 80 % of traditional sutures and triclosan-coated sutures, respectively.



Cost Inputs

- Sutures used per procedure: 3
- Cost per traditional suture strand: £3.87
- Cost per triclosan-coated suture strand: £5.03
- Cost per admission for SSI: £3,122.86

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