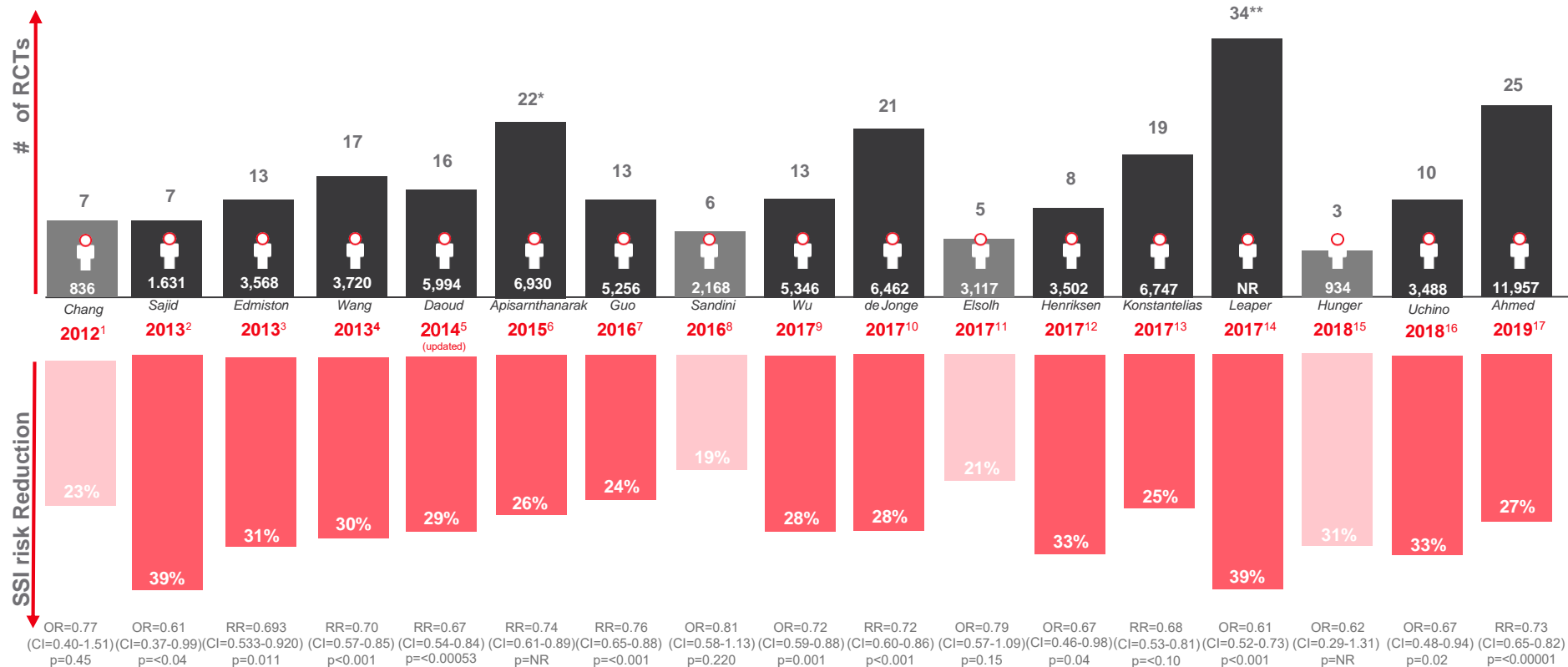


ETHICON Plus Antibacterial Sutures have been shown to significantly reduce the risk of Surgical Site Infection (SSI) in multiple meta-analyses.

The results of 17 meta-analyses to date differ based on the studies included.



■ Non statistically significant
■ Statistically significant

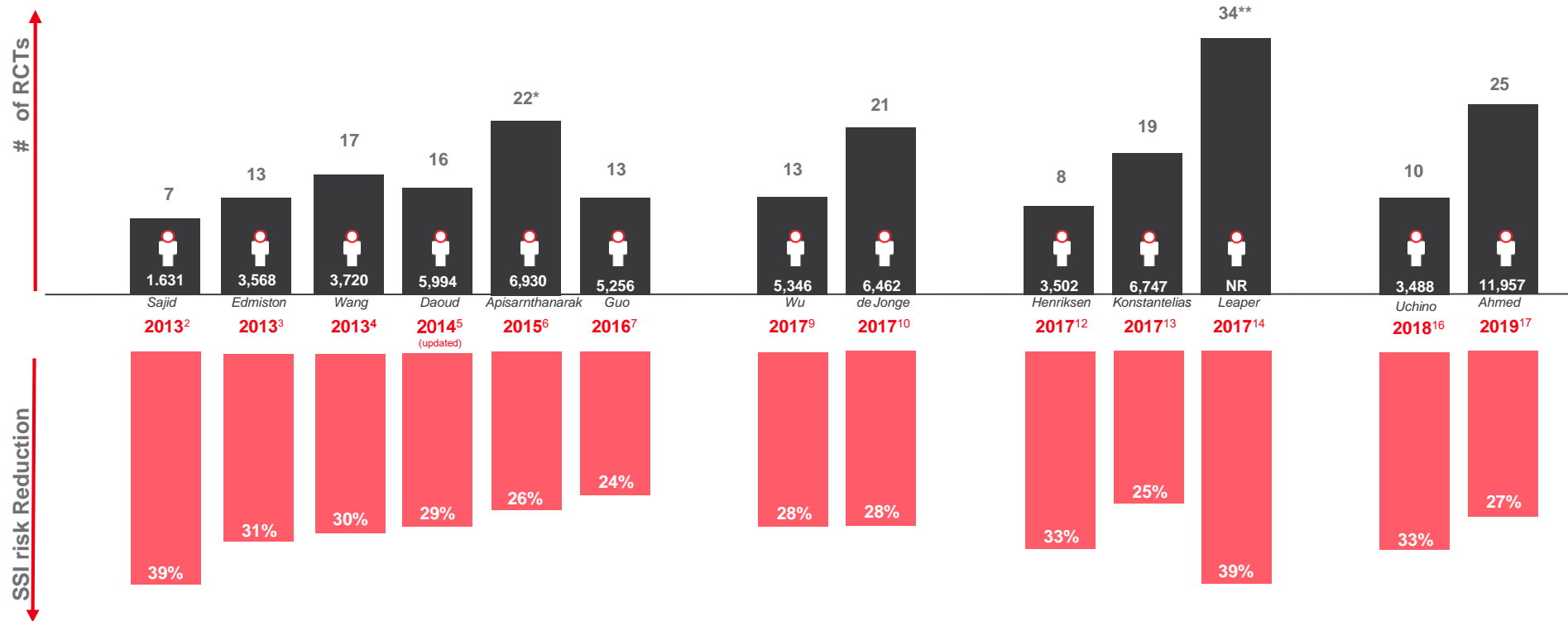
* One publication is duplicated

** Leaper's meta-analysis include both Observational studies and RCTs

- Chang WK, Srinivasa S, Morton R, Hill AG. Triclosan-impregnated sutures to decrease surgical site infections: systematic review and meta-analysis of randomized trials. *Ann Surg*. 2012;255(5):854-859.
- Sajid MS, Cracunas L, Sains P, Singh KK, Baig MK. Use of antibacterial sutures for skin closure in controlling surgical site infections: a systematic review of published randomized, controlled trials. *Gastroenterol Rep (Oxf)*. 2013; 1(1): 42-50.
- Edmiston C, Daoud F, Leaper D. Is there an evidence-based argument for embracing an antimicrobial (triclosan)-coated suture technology to reduce the risk for surgical-site infections? A meta-analysis. *Surgery*. 2013; 154: 89-100.
- Wang ZX, Jiang CP, Cao Y, Ding YT. Systematic review and meta-analysis of triclosan-coated sutures for the prevention of surgical-site infection. *Br J Surg*. 2013; 100(4): 465-73.
- Daoud FC, Edmiston CE Jr, Leaper D. Meta-analysis of prevention of surgical site infections following incision closure with triclosan-coated sutures: robustness to new evidence. *Surg Infect (Larchmt)*. 2014;15(3):165-181.
- Apisarnthanarak A, Singh N, Bandon AN, Madriaga G. Triclosan-coated sutures reduce the risk of surgical site infections: a systematic review and meta-analysis. *Infect Control Hosp Epidemiol*. 2015;36(2):169-179.
- Guo J, Pan LH, Li YX, et al. Efficacy of triclosan-coated sutures for reducing risk of surgical site infection in adults: a meta-analysis of randomized clinical trials. *J Surg Res*. 2016;201(1):105-117.
- Sandini M, Mattavelli I, Nespoli L, Uggeri F, Gianotti L. Systematic review and meta-analysis of sutures coated with triclosan for the prevention of surgical site infection after elective colorectal surgery according to the PRISMA statement. *Medicine (Baltimore)*. 2016;95(35):e4057.
- Wu X, Kubilay NZ, Ren J, et al. Antimicrobial-coated sutures to decrease surgical site infections: a systematic review and meta-analysis [published correction appears in *Eur J Clin Microbiol Infect Dis*. 2018 Oct;37(10):2031-2034]. *Eur J Clin Microbiol Infect Dis*. 2017;36(1):19-32.
- de Jonge SW, Atema JJ, Solomkin JS, Boermeester MA. Meta-analysis and trial sequential analysis of triclosan-coated sutures for the prevention of surgical-site infection. *Br J Surg*. 2017; 104: e118-e133.
- Elsolh B, Zhang L, Patel SV. The Effect of Antibiotic-Coated Sutures on the Incidence of Surgical Site Infections in Abdominal Closures: a Meta-Analysis. *J Gastrointest Surg*. 2017;21(5):896-903.
- Henriksen NA, Deerenberg EB, Venclouskas L, et al. Triclosan-coated sutures and surgical site infection in abdominal surgery: the TRISTAN review, meta-analysis and trial sequential analysis. *Hernia*. 2017;21(6):833-841.
- Konstantelias AA, Andriakopoulou CS, Mourgela S. Triclosan-coated sutures for the prevention of surgical-site infections: a meta-analysis. *Acta Chir Belg*. 2017;117(3):137-148.
- Leaper DJ, Edmiston CE Jr, Holy CE. Meta-analysis of the potential economic impact following introduction of absorbable antimicrobial sutures. *Br J Surg*. 2017;104(2):e134-e144.
- Hunger R, Mantke A, Herrmann C, Mantke R. Triclosan-beschichtete Nahtmaterialien in der kolorektalen Chirurgie: Bewertung und Metaanalyse zu den Empfehlungen der WHO-Richtlinie [Triclosan-coated sutures in colorectal surgery: Assessment and meta-analysis of the recommendations of the WHO guideline]. *Chirurg*. 2019;90(1):37-46.
- Uchino M, Mizuguchi T, Onge H, et al. The Efficacy of Antimicrobial-Coated Sutures for Preventing Incisional Surgical Site Infections in Digestive Surgery: a Systematic Review and Meta-analysis. *J Gastrointest Surg*. 2018;22(10):1832-1841.
- Ahmed I, Boulton AJ, Rizvi S, et al. The use of triclosan-coated sutures to prevent surgical site infections: a systematic review and meta-analysis of the literature. *BMJ Open*. 2019;9(9):e029727.

These are the meta-analyses that are 'statistically significant'.

The results differ based on the studies included.



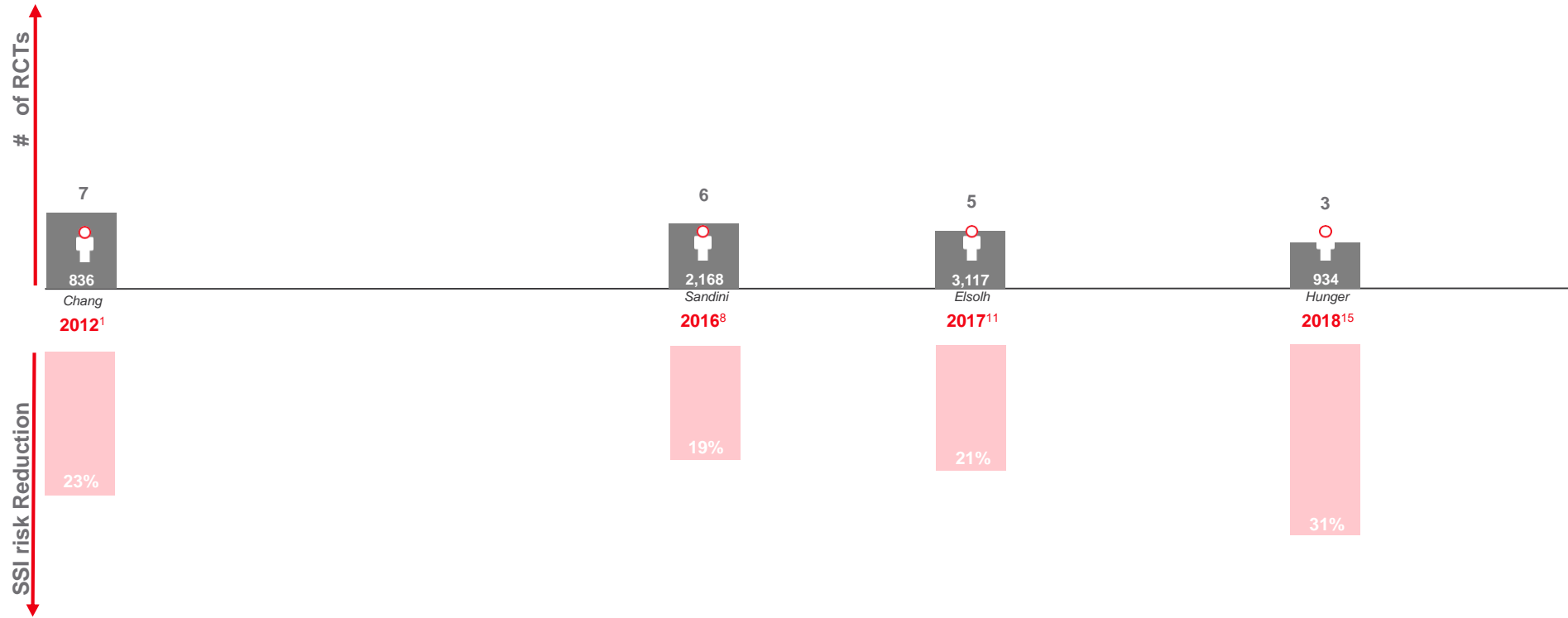
* One publication is duplicated

** Leaper's meta-analysis include both Observational studies and RCTs

- Sajid MS, Craciunas L, Sains P, Singh KK, Baig MK. Use of antibacterial sutures for skin closure in controlling surgical site infections: a systematic review of published randomized, controlled trials. *Gastroenterol Rep (Oxf)*. 2013; 1(1): 42-50.
- Edmiston C, Daoud F, Leaper D. Is there an evidence-based argument for embracing an antimicrobial (triclosan)-coated suture technology to reduce the risk for surgical-site infections? A meta-analysis. *Surgery*. 2013; 154: 89-100.
- Wang ZX, Jiang CP, Cao Y, Ding YT. Systematic review and meta-analysis of triclosan-coated sutures for the prevention of surgical-site infection. *Br J Surg*. 2013; 100(4): 465-73.
- Daoud FO, Edmiston CE Jr, Leaper D. Meta-analysis of prevention of surgical site infections following incision closure with triclosan-coated sutures: robustness to new evidence. *Surg Infect (Larchmt)*. 2014;15(3):165-181.
- Apisarnthanarak A, Singh N, Bandong AN, Madriaga G. Triclosan-coated sutures reduce the risk of surgical site infections: a systematic review and meta-analysis. *Infect Control Hosp Epidemiol*. 2015;36(2):169-179.
- Guo J, Pan LH, Li YX, et al. Efficacy of triclosan-coated sutures for reducing risk of surgical site infection in adults: a meta-analysis of randomized clinical trials. *J Surg Res*. 2016;201(1):105-117.
- Wu X, Kubilay NZ, Ren J, et al. Antimicrobial-coated sutures to decrease surgical site infections: a systematic review and meta-analysis [published correction appears in *Eur J Clin Microbiol Infect Dis*. 2018 Oct;37(10):2031-2034]. *Eur J Clin Microbiol Infect Dis*. 2017;36(1):19-32.
- de Jonge SW, Atema JJ, Solomkin JS, Boermeester MA. Meta-analysis and trial sequential analysis of triclosan-coated sutures for the prevention of surgical-site infection. *Br J Surg*. 2017; 104: e118-e133.
- Henriksen NA, Deerenberg EB, Venclauskas L, et al. Triclosan-coated sutures and surgical site infection in abdominal surgery: the TRISTAN review, meta-analysis and trial sequential analysis. *Hemia*. 2017;21(6):833-841.
- Konstantelias AA, Andriakopoulou CS, Mourgela S. Triclosan-coated sutures for the prevention of surgical-site infections: a meta-analysis. *Acta Chir Belg*. 2017;117(3):137-148.
- Leaper DJ, Edmiston CE Jr, Holy CE. Meta-analysis of the potential economic impact following introduction of absorbable antimicrobial sutures. *Br J Surg*. 2017;104(2):e134-e144.
- Uchino M, Mizuguchi T, Ohge H, et al. The Efficacy of Antimicrobial-Coated Sutures for Preventing Incisional Surgical Site Infections in Digestive Surgery: a Systematic Review and Meta-analysis. *J Gastrointest Surg*. 2018;22(10):1832-1841.
- Ahmed I, Boulton AJ, Rizvi S, et al. The use of triclosan-coated sutures to prevent surgical site infections: a systematic review and meta-analysis of the literature. *BMJ Open*. 2019;9(9):e029727.

Some meta-analyses are in favor, but not 'statistically significant'.

The results differ based on the studies included.



1.Chang WK, Srinivasa S, Morton R, Hill AG. Triclosan-impregnated sutures to decrease surgical site infections: systematic review and meta-analysis of randomized trials. Ann Surg. 2012;255(5):854-859.

8. Sandini M, Mattavelli I, Nespoli L, Uggeri F, Gianotti L. Systematic review and meta-analysis of sutures coated with triclosan for the prevention of surgical site infection after elective colorectal surgery according to the PRISMA statement. Medicine (Baltimore). 2016;95(35):e4057.

11. Elsolh B, Zhang L, Patel SV. The Effect of Antibiotic-Coated Sutures on the Incidence of Surgical Site Infections in Abdominal Closures: a Meta-Analysis. J Gastrointest Surg. 2017;21(5):896-903.

15.Hunger R, Mantke A, Herrmann C, Mantke R. Triclosan-beschichtete Nahtmaterialien in der kolorektalen Chirurgie : Bewertung und Metaanalyse zu den Empfehlungen der WHO-Richtlinie [Triclosan-coated sutures in colorectal surgery : Assessment and meta-analysis of the recommendations of the WHO guideline]. Chirurg. 2019;90(1):37-46.

References

1. Chang WK, Srinivasa S, Morton R, Hill AG. Triclosan-impregnated sutures to decrease surgical site infections: systematic review and meta-analysis of randomized trials. *Ann Surg.* 2012;255(5):854-859.
2. Sajid MS, Craciunas L, Sains P, Singh KK, Baig MK. Use of antibacterial sutures for skin closure in controlling surgical site infections: a systematic review of published randomized, controlled trials. *Gastroenterol Rep (Oxf).* 2013; 1(1): 42-50.
3. Edmiston C, Daoud F, Leaper D. Is there an evidence-based argument for embracing an antimicrobial (triclosan)-coated suture technology to reduce the risk for surgical-site infections? A meta-analysis. *Surgery.* 2013; 154: 89-100.
4. Wang ZX, Jiang CP, Cao Y, Ding YT. Systematic review and meta-analysis of triclosan-coated sutures for the prevention of surgical-site infection. *Br J Surg.* 2013; 100(4): 465-73.
5. Daoud FC, Edmiston CE Jr, Leaper D. Meta-analysis of prevention of surgical site infections following incision closure with triclosan-coated sutures: robustness to new evidence. *Surg Infect (Larchmt).* 2014;15(3):165-181.
6. Apisarnthanarak A, Singh N, Bandong AN, Madriaga G. Triclosan-coated sutures reduce the risk of surgical site infections: a systematic review and meta-analysis. *Infect Control Hosp Epidemiol.* 2015;36(2):169-179.
7. Guo J, Pan LH, Li YX, et al. Efficacy of triclosan-coated sutures for reducing risk of surgical site infection in adults: a meta-analysis of randomized clinical trials. *J Surg Res.* 2016;201(1):105-117.
8. Sandini M, Mattavelli I, Nespoli L, Uggeri F, Gianotti L. Systematic review and meta-analysis of sutures coated with triclosan for the prevention of surgical site infection after elective colorectal surgery according to the PRISMA statement. *Medicine (Baltimore).* 2016;95(35):e4057.
9. Wu X, Kubilay NZ, Ren J, et al. Antimicrobial-coated sutures to decrease surgical site infections: a systematic review and meta-analysis [published correction appears in *Eur J Clin Microbiol Infect Dis.* 2018 Oct;37(10):2031-2034]. *Eur J Clin Microbiol Infect Dis.* 2017;36(1):19-32.
10. de Jonge SW, Atema JJ, Solomkin JS, Boermeester MA. Meta-analysis and trial sequential analysis of triclosan-coated sutures for the prevention of surgical-site infection. *Br J Surg.* 2017; 104: e118-e133.
11. Elsoh B, Zhang L, Patel SV. The Effect of Antibiotic-Coated Sutures on the Incidence of Surgical Site Infections in Abdominal Closures: a Meta-Analysis. *J Gastrointest Surg.* 2017;21(5):896-903.
12. Henriksen NA, Deerenberg EB, Venclauskas L, et al. Triclosan-coated sutures and surgical site infection in abdominal surgery: the TRISTAN review, meta-analysis and trial sequential analysis. *Hernia.* 2017;21(6):833-841.
13. Konstantelias AA, Andriakopoulou CS, Mourgela S. Triclosan-coated sutures for the prevention of surgical-site infections: a meta-analysis. *Acta Chir Belg.* 2017;117(3):137-148.
14. Leaper DJ, Edmiston CE Jr, Holy CE. Meta-analysis of the potential economic impact following introduction of absorbable antimicrobial sutures. *Br J Surg.* 2017;104(2):e134-e144.
15. Hunger R, Mantke A, Herrmann C, Mantke R. Triclosan-beschichtete Nahtmaterialien in der kolorektalen Chirurgie : Bewertung und Metaanalyse zu den Empfehlungen der WHO-Richtlinie [Triclosan-coated sutures in colorectal surgery : Assessment and meta-analysis of the recommendations of the WHO guideline]. *Chirurg.* 2019;90(1):37-46.
16. Uchino M, Mizuguchi T, Ohge H, et al. The Efficacy of Antimicrobial-Coated Sutures for Preventing Incisional Surgical Site Infections in Digestive Surgery: a Systematic Review and Meta-analysis. *J Gastrointest Surg.* 2018;22(10):1832-1841.
17. Ahmed I, Boulton AJ, Rizvi S, et al. The use of triclosan-coated sutures to prevent surgical site infections: a systematic review and meta-analysis of the literature. *BMJ Open.* 2019;9(9):e029727.