



# Ready for the challenge

Antimicrobial dressings uniquely designed for challenging wounds

Antimicrobial dressing range

  
Mölnlycke®



# The antimicrobial advantage

Did you know that antimicrobial dressings have an important role to play in antimicrobial stewardship? Here's why:

As we know, antibiotic resistance is a global problem. That's why many clinicians today advocate for antimicrobial stewardship<sup>1</sup> – a strategy of promoting proper use of antibiotics that includes finding safe, effective alternative methods for managing wound infection.

Evidence shows that antiseptics such as antimicrobial dressings are both potent and rapidly effective<sup>1</sup> – and that the risk of resistance to antimicrobial dressings is less of a threat than the overuse of antibiotics<sup>1</sup>.

The evidence base for silver in wound management is significantly better than commonly perceived<sup>2</sup>. If used selectively, silver not only has antimicrobial effects but is also characterised by an improvement in quality of life and good cost-effectiveness<sup>2</sup>.



'Silver remains an important, safe and effective antiseptic for use on appropriate wounds, at appropriate concentrations, at the appropriate time.'<sup>1</sup>

# When to use our silver dressings

## We believe that the major roles for our antimicrobial dressings are to:

- 1** Act as an antimicrobial barrier for acute or chronic wounds at high risk of infection or re-infection. This may include burns, surgical wounds or wounds in patients who are immunocompromised or have poor circulation<sup>3</sup>.
- 2** To reduce bioburden in chronic or acute wounds that are infected or are being prevented from healing by microorganisms<sup>3</sup>.

For those wounds that are being prevented from healing by microorganisms, we know that a challenge for you as a caregiver is to determine when to intervene with antimicrobial dressings. The following approach could be used<sup>a,3</sup>:

Status	Definition	Consequences	Antimicrobial therapy
Uninfected	No classical <b>b</b> or secondary <b>c</b> clinical evidence of infection	None	None
Uncertain	Only secondary clinical evidence of infection, or quantitative culture with $\geq 10^5$ cfu/g of tissue	Possibly slowed or absent wound healing, malodour, wound discomfort	Consider short-term topical antiseptic therapy
Infected	Classical <b>c</b> clinical signs or symptoms of inflammation	Progression of infection, failure of wound healing, wound discomfort	Systemic <b>d</b> antibiotic therapy (with or without topical antiseptic)

<sup>a</sup> Please note this in addition to the usual required wound care (e.g. debridement, off-loading, proper dressings, and correcting critical limb ischaemia, malnutrition, hyperglycaemia or other metabolic problems). <sup>b</sup> Purulent discharge, or erythema, warmth, pain or tenderness, or induration. <sup>c</sup> Non-purulent (serous or sanguineous) exudate, discoloured or friable (easily bleeding) granulation tissue, breakdown or 'pocketing' at the base of the wound, or abnormally foul odour. <sup>d</sup> Oral or parenteral, depending on the severity of the infection and the agent(s) required.

# Mepilex® Ag

Antimicrobial  
UP TO 7 days<sup>8</sup>

Mepilex® Ag is a versatile antimicrobial foam dressing, designed for low to medium exuding burns and wounds. For the burn patient, dressing changes can be an extremely painful and traumatic experience. Comparative clinical studies have shown that Mepilex Ag can improve healing times; reduce costs and improve patient outcomes for partial thickness burn patients<sup>4-7</sup>. Mepilex Ag adheres gently with Safetac® for less painful dressing changes.



SafetaC  
TECHNOLOGY

## For a range of burns and wounds such as:



- Partial thickness burns
- Leg and foot ulcers

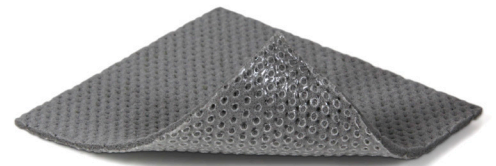
40%

lower total costs vs. using Silvadene® per patient, shown in a randomised controlled trial on partial thickness burns<sup>6</sup>

# Mepilex® Transfer Ag

Antimicrobial  
UP TO 14 days<sup>11</sup>

Mepilex® Transfer Ag is a flexible antimicrobial exudate transfer dressing, designed for large and/or difficult to dress burns and wounds. As the Safetac layer seals around the wound, the foam structure channels exudate vertically into a secondary absorbent dressing. Studies have shown Mepilex Transfer Ag to provide antimicrobial action on hard to dress areas such as larger burns as well as diabetic foot ulcers<sup>9,10</sup>. Mepilex Transfer Ag adheres gently with Safetac for less painful dressing changes.



SafetaC  
TECHNOLOGY

## For large and/or difficult-to-dress wounds such as:



- Partial thickness burns
- Diabetic foot ulcers

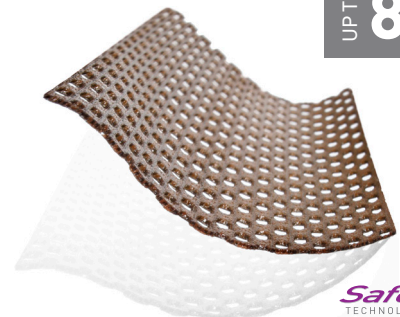
96%

reduction of signs and symptoms of local wound infection, shown in a clinical investigation on diabetic foot ulcers<sup>10</sup>

# Mepitel® Ag

Antimicrobial  
UP TO 8 days<sup>20,21</sup>

Mepitel® Ag is a flexible antimicrobial wound contact layer, designed for a range of exuding burns and wounds such as skin tears, abrasions, partial thickness burns, partial and full thickness grafts. Studies have shown Mepitel Ag to be beneficial as a primary dressing on top of skin grafts, providing antimicrobial protection as well as enabling high rate of skin graft take<sup>12</sup>. Mepitel Ag adheres gently with Safetac for less painful dressing changes.



SafetaC  
TECHNOLOGY

## For a range of burns and wounds such as:



- Split thickness skin grafts
- Partial thickness burns

91.7%

percentage of patients with skin graft take at day 14, when using Mepitel Ag on top of skin grafts, shown in a clinical investigation on thermal burn injuries<sup>12</sup>

# Exufiber® Ag+

Antimicrobial  
UP TO 7 days<sup>18,19</sup>

Exufiber® Ag+ with Hydrolock® technology is an antimicrobial gelling fibre dressing with rapid and sustained antimicrobial action against a broad range of bacteria, including biofilms<sup>15</sup>. On contact with exudate, Exufiber Ag+ transforms into a gel to support a moist wound healing environment. It locks in exudate for less leakage and risk of maceration while staying intact for easy one-piece removal.



## For deep and/or highly exuding wounds such as:



- Diabetic foot ulcers
- Venous leg ulcers

99.9%

reduction *Pseudomonas aeruginosa* over seven days in an *in vivo* biofilm model<sup>15</sup>

# Mepilex® Border Ag

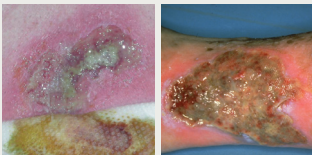
Antimicrobial  
UP TO 7 days<sup>16,17</sup>

Mepilex® Border Ag is an all-in-one antimicrobial foam dressing, designed for both chronic and acute wounds. The multipurpose design, including Mepilex® Border Sacrum Ag, customised for sacral pressure injuries and also oblong sizes for surgical wounds means versatility in use. Studies have shown that surgical wounds treated with Mepilex Border Ag were found to have less SSI rates than control<sup>14</sup>. Mepilex Border Ag adheres gently with SafetaC® for less painful dressing changes.



SafetaC  
TECHNOLOGY

## For a range of acute and chronic wounds such as:



- Traumatic wounds
- Pressure ulcers
- Surgical wounds

71.4%

significant reduction in SSI incidence on CABG surgery when using Mepilex Border Ag compared to not using Mepilex Border Ag (historical control)<sup>14</sup>

# Melgisorb® Ag

Antimicrobial  
UP TO 14 days<sup>22</sup>

Melgisorb® Ag is an antimicrobial alginate dressing, designed for deep and/or high exuding wounds when you need antimicrobial action to reduce bioburden. The alginate fibres of Melgisorb Ag absorb large amounts of exudate, forming a soft gel which creates a moist environment and promotes wound healing. As the dressing contains alginate, it may assist in supporting the control of minor bleeding in superficial wounds.



## For a range of deep and/or highly exuding wounds such as:



- Graft and donor sites
- Leg and foot ulcers
- Cavity wounds
- Pressure ulcers
- Trauma wounds

UP TO 45%

higher absorption compared to a silver Hydrofiber® dressing<sup>23</sup>

# Less pain, anxiety and faster healing

Several studies show faster healing with Mepilex® Ag<sup>4,5</sup>. One RCT\* showed significantly faster healing with Mepilex Ag in paediatric partial thickness burns<sup>4</sup>. After eight days, 75% of the children treated with Mepilex Ag had healed while it took two weeks to heal 75% of the children with Acticoat®. Patients receiving Acticoat® significantly increased the expected days to full re-epithelialisation by 40% (p<0.01) compared to Mepilex Ag\*\*.

Why incur unnecessary pain and anxiety? Several studies show that you can increase the quality of life for patients with Mepilex Ag<sup>4,6</sup>. An RCT showed significantly less patient pain, anxiety and lower pulse rates when using Mepilex Ag versus Acticoat<sup>4</sup>. In two other RCTs, Mepilex Ag was associated with less pain and anxiety compared to silver sulfadiazine<sup>6,13</sup>.

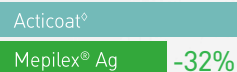
\*Randomised controlled trial

\*\*After adjustment for burn depth

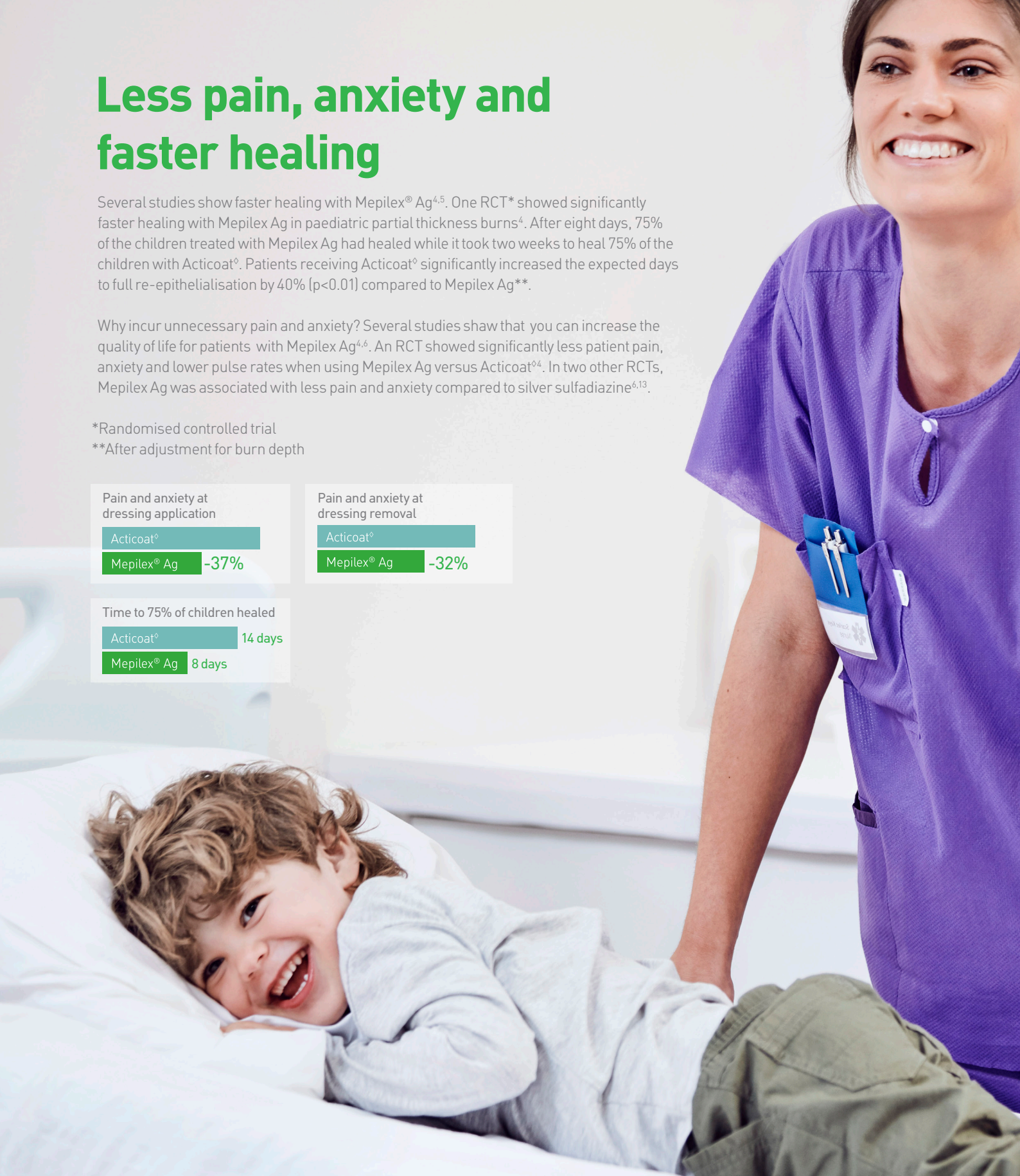
Pain and anxiety at dressing application



Pain and anxiety at dressing removal



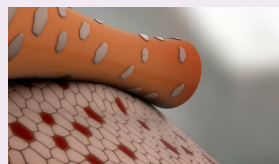
Time to 75% of children healed



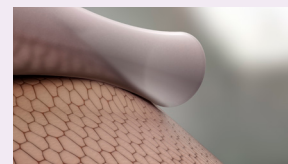
## Proven choice for a better outcome

**Safetac® technology. Less damage. Less pain.**

Dressings with Safetac® are clinically demonstrated to minimise damage to the wound and skin at removal<sup>4,24</sup>. By sealing the wound margins, they help prevent maceration<sup>25,26</sup>. With less damage to the wound and skin, pain at dressing change is minimised<sup>4,6</sup>.



Skin stripping occurs with traditional adhesive<sup>27</sup>



No skin stripping occurs with Safetac technology<sup>27</sup>

**Safetac**  
TECHNOLOGY

Why Mölnlycke® antimicrobial dressings with Safetac®?

## Top 3 reasons

### 1 Proven to protect against infection and reduce bioburden

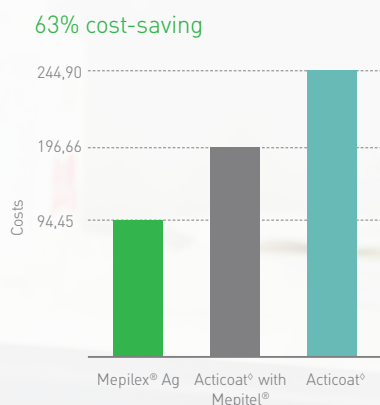
We know that when it comes to challenging wounds, you can't leave anything to chance. That's why our silver dressings are always supported by high-quality evidence. In fact, numerous clinical studies show that foam dressings with silver and Safetac® were used to manage wound bioburden effectively and resolve signs of localised infection in both acute and chronic wounds.

### 2 Less pain and trauma – not only at dressing changes

Only Mölnlycke® dressings combine the power of silver with Safetac, a technology proven to minimise pain to patients and trauma to wounds. A randomised clinical trial on children with burn injuries showed that Mepilex® Ag significantly reduced pulse rates, pain and anxiety compared to using Acticoat®, both during dressing removal and application<sup>4</sup>. Two additional randomised clinical trials show that pain and anxiety scores were lower in the Mepilex Ag groups than the control groups at dressing application, wear and upon removal<sup>4,6</sup>.

### 3 Cost-effective treatment

Shorter healing times, shorter hospital stays, fewer dressing changes, a reduced need for analgesia during dressing changes and reduced bioburden: antimicrobial dressings really do improve patient and economic outcomes. In a randomised clinical trial, Mepilex Ag was shown to be superior in terms of cost efficiency versus silver sulfadiazine cream<sup>5</sup>. Another randomised clinical trial showed that Mepilex Ag was a cheaper and more effective dressing choice over both Acticoat® and Acticoat® with Mepitel® and was recommended for treatment of paediatric partial thickness burns  $\leq 10\%$  TBSA<sup>7</sup>.



Costs (dressing, labour, analgesics, scar management) were considerably lower in the Mepilex Ag group compared to the Acticoat® and Acticoat® with Mepitel interventions.

Evidence on foam dressings with silver and Safetac:

**19** | peer-reviewed  
journal articles

**43** | conference poster  
presentations

# Proving it every day

At Mölnlycke®, we deliver innovative solutions for managing wounds, improving surgical safety and efficiency, and preventing pressure ulcers. Solutions that help achieve better outcomes and are backed by clinical and health-economics evidence.

In everything we do, we are guided by a single purpose: to help healthcare professionals perform at their best. And we're committed to proving it every day.

## References:

1 Roberts C, Leaper J. Antiseptic resistance: antimicrobial stewardship and silver dressings. *Wounds International* 2017, Vol 8 Issue 2. 2. Dissemond J et al. Evidence for silver in wound care, meta-analysis of clinical studies from 2000–2015. *J Dtsch Dermatol Ges*. 2017 May;15(5):524-535. 3. Lipsky B et al. Antimicrobial stewardship in wound care: a Position Paper from the British Society for Antimicrobial Chemotherapy and European Wound Management Association. *J Antimicrob Chemother*. 2016 Nov;71(11):3026-3035. 4. Gee Kee E et al. Randomized controlled trial of three burns dressings for partial thickness burns in children. *Burns*. 2015 Aug;41(5):946-55. 5. Karlsson K et al. Superiority of silver-foam over porcine xenograft dressings for treatment of scalds in children: A prospective randomised controlled trial. *Burns*. 2019.04.004. 6. Silverstein P et al. An open, parallel, randomized, comparative, multicenter study to evaluate the cost-effectiveness, performance, tolerance, and safety of a silver-containing soft silicone foam dressing vs silver sulfadiazine cream. *J Burn Care Res*. 2011 Nov-Dec;32(6):617-26. 7. Gee Kee E et al. Cost-effectiveness of silver dressings for paediatric partial thickness burns: An economic evaluation from a randomized controlled trial. *Burns*. 2017 Jun;43(4):724-732. 8. Chadwick P, Taherinejad F, Hamberg K, Waring M. Clinical and scientific data on a silver-containing soft-silicone foam dressing: an overview. *Journal of Wound Care* 2009;18(11):483-491. 9. Schweiger H et al. An open, non-controlled, single-center, clinical investigation to evaluate efficacy when using a soft silicone wound contact layer containing silver. Poster presentation at SAWC, April 2014. 10. Dhatariya K et al. An open, non-comparative, multicentre evaluation of performance and safety using an antimicrobial exudate transfer dressing on diabetic foot ulcers: a case series. *J Wound Care* 2016; 25(5): 256–265. 11. Data on file. Report no: 20120220-007. 12. Glat P et al. Clinical investigation of the performance and safety of a soft silicone wound contact layer containing silver in the treatment of skin grafts and a soft silicone transfer dressing containing silver in the treatment of donor sites in surgical burn patients. Poster presentation at SAWC Spring 2017, San Diego, California, United States of America. 13. Tang H et al. An open, parallel, randomized, comparative, multicenter investigation evaluating the efficacy and tolerability of Mepilex Ag versus silver sulfadiazine in the treatment of deep partial-thickness burn injuries. *J Trauma Acute Care Surg*. 2015 May;78(5):1000-7. 14. Zurcher S, Krapfl L, Burds A. Reducing postoperative surgical site infections in coronary artery bypass graft patients. Poster presentation at the 45th Annual Conference of the Wound Ostomy and Continence Nurses Society, Seattle, WA, US 2013. 15. Davis S et al. Preclinical evaluation of a novel silver gelling fiber dressing on *Pseudomonas aeruginosa* in a porcine wound infection model. *Wound Rep Reg* [2019]27360–365. 16. Data on file. Report no: 20100924-001. 17. Data on file. Report no: 20090528-004. 18. Hamberg K et al. Antimicrobial effect of a new silver-containing gelling fibre dressing against common wound pathogens. Poster presented at the Symposium on Advanced Wound Care Spring meeting/Wound Healing Society (WHS) Annual Meeting 2017, Apr 05 - 09, 2017, San Diego, CA, USA. 19. Hamberg K et al. In vitro evaluation of the antimicrobial effect of silver-containing fibre dressings. Poster presented at the Symposium on Advanced Wound Care Spring meeting/Wound Healing Society (WHS) Annual Meeting 2017, Apr 05 - 09, 2017, San Diego, CA, USA. 20. Data on file. Report no. 20120625-001. 21. Data on file. Report no. 20131107-002. 22. Data on file. Report no. 2009-0240. 23. Data on file. Report no 2008-0256. 24. White R. et al. Evidence for atraumatic soft silicone wound dressing use. *Wounds UK*, 2005. 25. Meaume S. et al. A study to compare a new self adherent soft silicone dressing with a self adherent polymer dressing in stage II pressure ulcers. *Ostomy Wound Management*, 2003. 26. Wiberg A.B. et al. Preventing maceration with a soft silicone dressing: in-vitro evaluations. Poster presented at the 3rd Congress of the WUWHS, Toronto, Canada, 2008. 27. Waring, M., Biefeldt, S., Matzold, K.P., Butcher, M. An evaluation of the skin stripping of wound dressing adhesives. *J Wound Care* 2011;20:412-22.

Find out more at [www.molnlycke.com](http://www.molnlycke.com)

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