

S solventum



Proven protection,
Powered by CHG

3M™ Ioban™ CHG Chlorhexidine
Gluconate Incise Drape

(contains 2% w/w CHG)

Building on 40 years of innovation

From the makers of 3M™ loban™ 2 Antimicrobial Incise Drape

For more than four decades, loban 2 Incise Drapes have proven to be a robust tool in helping reduce skin flora contamination and surgical site infections (SSIs) to protect patients in the OR.

loban 2 Incise Drape is supported by over 40 peer-reviewed studies, showcasing its effectiveness as a cost-efficient intervention that enhances clinical outcomes. As a result, loban 2 has built a trusted reputation in surgical care.

Building on this heritage, the 3M™ loban™ CHG Chlorhexidine Gluconate Incise Drape (contains 2% w/w CHG) is our latest advancement in antimicrobial incise drapes.

12+ million patients protected annually
with 3M™ loban™ 2 Incise Drapes

The use of antimicrobial incise drapes is backed by strong clinical evidence

With more than 40 years of strong clinical evidence, loban 2 Incise Drapes have gathered over 40 pieces of published evidence. The extensive evidence includes:

- Poster presentations
- Controlled clinical trials
- Comprehensive global meta-analysis

 **68%** reduction in SSIs

Karapinar et al. demonstrated in a retrospective analysis of 654 patients undergoing a thoracotomy resection a **68% reduction** ($p=0.001$) in surgical site infections when using loban 2 Incise Drape compared to no surgical incise drape.¹

 **Cost savings due to fewer complications**

Bejko et al. conducted a retrospective study with 5,100 cardiac surgery patients comparing efficacy and cost of loban 2 Incise drape and a non-antimicrobial incise drape. The authors revealed a **71% SSI reduction** ($p=0.001$) and a **cost-savings of \$812k[†]** related to treatment of complications.²

 **55%** reduction in bacterial contamination

In a prospective, randomized clinical trial with 101 patients undergoing hip arthroplasty, Rezapoor et al., showed a **55% reduction** ($p=0.031$) in bacterial contamination at the incision site when loban 2 Incise Drape was used compared to no surgical incise drape.³

[†]Converted from EUR 773,495 to USD



Six international guidelines are recommending **using antimicrobial drapes over non-antimicrobial drapes**.

ACORN (2023) Adhesive drapes with antimicrobial properties can be used in the critical aseptic field unless contraindicated (i.e. patient allergy). These include but are not limited to iodophor-impregnated adhesive drapes.⁴

ICM (2018) states that evidence indicates antimicrobial-impregnated incise drapes result in reduction in bacterial colonization of the surgical site.⁵

A cost-effective solution for comprehensive patient protection

The 3M™ loban™ CHG Chlorhexidine Gluconate Incise Drape* is a cost-effective solution to help reduce the risk of surgical site infections, making it a prudent choice for your surgical procedures. Because of the trusted loban legacy, our latest addition to the incise drape portfolio will represent the same high standards that have been built on years of clinical evidence, real-world experiences and impact on reducing the risk of surgical site infections.

Cost of drape when compared to the average cost of an SSI.

The average cost of a 3M™ loban™ Antimicrobial Incise Drape is .009% of the cost of an SSI.⁶



The power of CHG⁷

The chlorhexidine gluconate (2% w/w CHG) contained in the adhesive provides broad-spectrum antimicrobial activity that persists throughout the surgical procedure.



Transparent⁷

Ensures visibility of previous scars and surgical markings.



Conformable and easy to use⁷

Securely stays in place on a variety of body contours and allows for limb manipulation. It is easy to apply and remove.



High adhesion⁷

The breathable film encourages strong adhesion to reduce lift from the incision edge. Maintaining adhesion throughout the surgical procedure prevents drape shift, protects skin preps from getting washed off during surgery and it inhibits bacterial migration into the incision.



*loban CHG Incise Drape does not contain iodine.

“Building on the performance
of 40 years with loban.”

Orthopedic Surgeon, Indianapolis, Indiana



Mechanism of action

Creating a sterile surface with loban CHG Incise Drape

Skin prep only

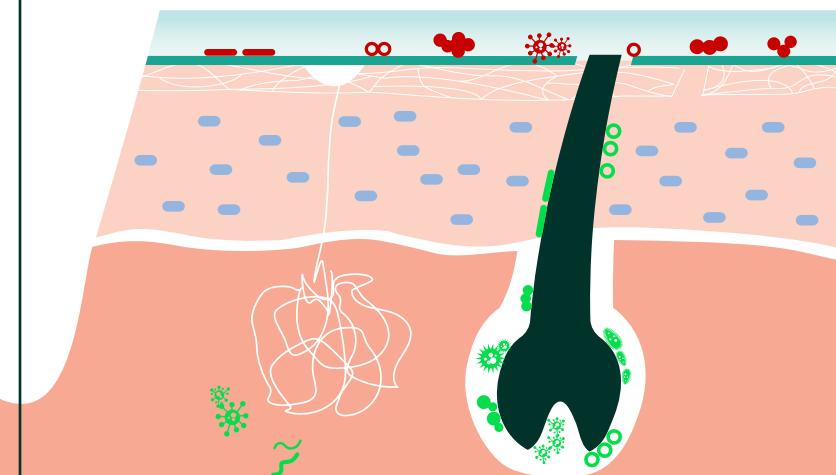
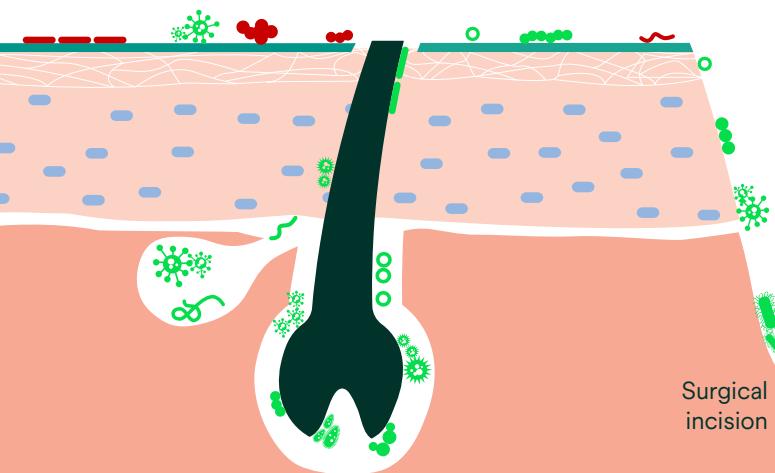
Skin prep: The first step to reduce bacterial count

Properly prepping the skin with an antiseptic solution helps reduce a patient's bacterial load. However, surgical skin preps need to stay on the skin to remain effective. Often during surgery, preps can be removed by saline irrigation, dabbing with sponges or contact with bodily fluids which can increase the risk of infection.⁸

Skin prep + antimicrobial incise drape

loban CHG Incise Drape: The next step to create a sterile surface

Even with optimal skin prep, total sterilization of the skin is impossible. By utilizing loban CHG Incise Drape, it creates a sterile operative surface that protects skin prep from being removed by surgical challenges.⁷ Additionally, it inhibits residual microbe regrowth and migration into the incision site.⁷



■ Active microbes
■ Immobilized microbes

■ Skin prep
■ Antimicrobial incise drape

Supporting evidence

Early research demonstrates antimicrobial efficacy

Pre-clinical studies on loban CHG Incise Drapes have demonstrated its ability to immobilize bacteria and offer continuous broad-spectrum antimicrobial activity, while withstanding challenges such as saline, blood and tissue manipulation at the surgical site.

Bacterial immobilization

In a comparative ex vivo porcine study, the skin was seeded with *Serratia marcescens* (*S. marcescens*), and 6cm incisions were made on areas where loban CHG Incise Drape was placed as well as undraped areas as a control. loban CHG Incise Drape significantly decreased the bacterial contamination in the incision compared to no incise drape ($p<0.0001$). This study demonstrated that loban CHG Incise Drape immobilized bacteria on the skin at the adhesive interface to help prevent migration of bacteria into the surgical incision.⁷

Continuous, broad-spectrum activity

In an in vitro study where 13 bacterial organisms relevant to surgical infections sites were tested, including *S. aureus*, *S. epidermidis* and *C. acnes*, loban CHG Incise Drape killed 99.99% at 30 minutes and demonstrated effectiveness for up to 6 hours. (Continuous, broad-spectrum activity section).^{†,7}

In other in vitro studies, both loban™ 2 Antimicrobial Incise Drape and loban™ CHG Chlorhexidine Gluconate Incise Drape killed >99.99% (>4 log reduction) of a variety of gram-positive and gram-negative bacteria at 90 minutes, including *S. aureus* (MRSA) and *S. epidermidis* (MRSE).^{**7}

† In vitro data. Clinical significance of in vitro data is unknown.

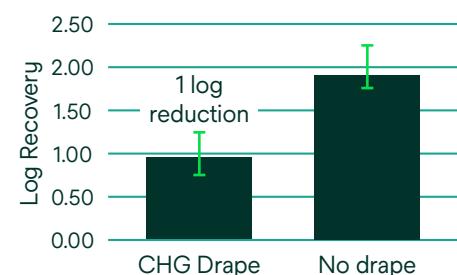
** The products were studied separately pursuant to the same test method, under slightly different test conditions allowable within the test method.

Withstands surgical challenges

In a prospective, comparative healthy human study where the knee was prepped, strips of loban CHG Incise Drape and loban 2 Incise Drape were laid side-by-side and subjected to saline soaked gauze for 5 minutes, 10 knee flexions and a 250mL saline lavage. loban CHG Incise Drape demonstrated comparable adhesion to loban 2 Incise Drape after wet flexion and after saline lavage. This was true for all lift measurements: lift frequency, area lift and lift when it occurs ($p\leq0.012$ overall).⁷

During an ex vivo porcine study, 6 cm incisions were made where loban CHG Incise Drape was placed. Under typical surgical conditions involving retraction, tissue manipulation and exposure to blood, saline and fatty tissue, the study demonstrated that loban CHG Incise Drape maintained adherence to the skin with minimal lift.⁷

Average \log_{10} CFU *S. marcescens* recovered from incisions



Kills

99.99%

of bacterial organisms with continuous broad-spectrum activity



Minimal lift from the skin after simulated surgical challenges*

*Wet flexion and saline lavage

“.. it allowed me to have the feel I like to have, and I was able to cut through it and see the skin throughout the entire procedure.”

Plastic Surgeon, Boca Raton, Florida





Ordering information

Catalog No.	Description	Packaging
8840EZ	3M™ loban™ CHG Chlorhexidine Gluconate Incise Drape (2% w/w CHG), 13 in x 13 in (34 cm x 35 cm)	10/CAR, 4 CAR/CS
8850EZ	3M™ loban™ CHG Chlorhexidine Gluconate Incise Drape (2% w/w CHG), 22 in x 17 in (56 cm x 45 cm)	10/CAR, 4 CAR/CS
8851EZ	3M™ loban™ CHG Chlorhexidine Gluconate Incise Drape (2% w/w CHG), 22 in x 33 in (56 cm x 85 cm)	10/CAR, 4 CAR/CS

Discover how loban CHG Incise Drape can help reduce the risk of SSIs by providing a transparent, conformable, antimicrobial barrier, optimizing the surgical site. It's proven protection. Powered by CHG.

Learn more at go.solventum.com/loban

References

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3. Maryam Rezapoor, Timothy Tan, Mitchell Maltenfort, Javad Parvizi. Incise Draping Reduces the Rate of Contamination of the Surgical Site During Hip Surgery: A Prospective, Randomized Trial. *J Arthroplasty* 2018, 33:1891-5.
4. Australian College of Perioperative Nurses Ltd (ACORN) The New ACORN Standards. Volume-1-2023 Standards for safe and Quality Care in the Perioperative Environment (SSQCPE) for Individuals. Asepsis Standard, Critical Aseptic Field Maintenance. Australian College of Perioperative Nurses Ltd (ACORN) The New ACORN Standards. Volume-3-2023 Standards for safe and Quality Care in the Perioperative Environment (SSQCPE) for Organisations. Adelaide, South Australia: ACORN; 2023. Asepsis Standard, Critical Aseptic Field Maintenance.
5. Gerald Atkins, Maria Alberdi, Andrew Beswick, et al. *J Arthroplasty*. 2019;34(2S):S85-S92
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7. Solventum internal data on file.
8. Rhee Y, Palmer LJ, Okamoto K. Differential effects of chlorhexidine skin cleaning methods on residual chlorhexidine skin concentrations and bacterial recovery. *Infect Control Hosp Epidemiol.* Apr 2018;39(4):405-411. Data on File (Sterile surface)