convatec
– forever caring –

Pioneered by surgeons in the battle against surgical site complications

Aquacel™ Surgical

Aquacel™ Ag Surgical

Hydrofiber® TECHNOLOGY

Post-operative dressings powered by Hydrofiber™ Technology

Surgical site complications are a battle worth fighting

Despite advances in surgical techniques and intraoperative practice, surgical site infections (SSI) and other surgical site complications (SSC) continue to be a challenge to clinicians and researchers across the globe.[1]

SSIs remain a substantial cause of morbidity, prolonged hospitalisation and death.[2] Microorganisms introduced during surgery can multiply in the wound after it has been closed and cause an SSI.[3] The microbial burden may be caused by contamination of the incision site: endogenous or exogenous infection.[1]

Preventing the proliferation of microorganisms reduces the overall bioburden and can have a positive impact on the healing process.[4]

Tackling SSI risk factors

Certain patient factors are known to increase the risk of surgical site complications[5]

- ASA* score
- Previous history of wound breakdown
- Smoking history
- Steroids or other adjunctive therapy
- Skin problems that will impact healing
- BMI, obesity or malnutrition
- Comorbidities

Patient factors are part of 3 core groups of factors that contribute to the risk of SSIs[5, 6]

* The American Society of Anesthesiologists physical classification system designed to assess the fitness of patients before surgery.

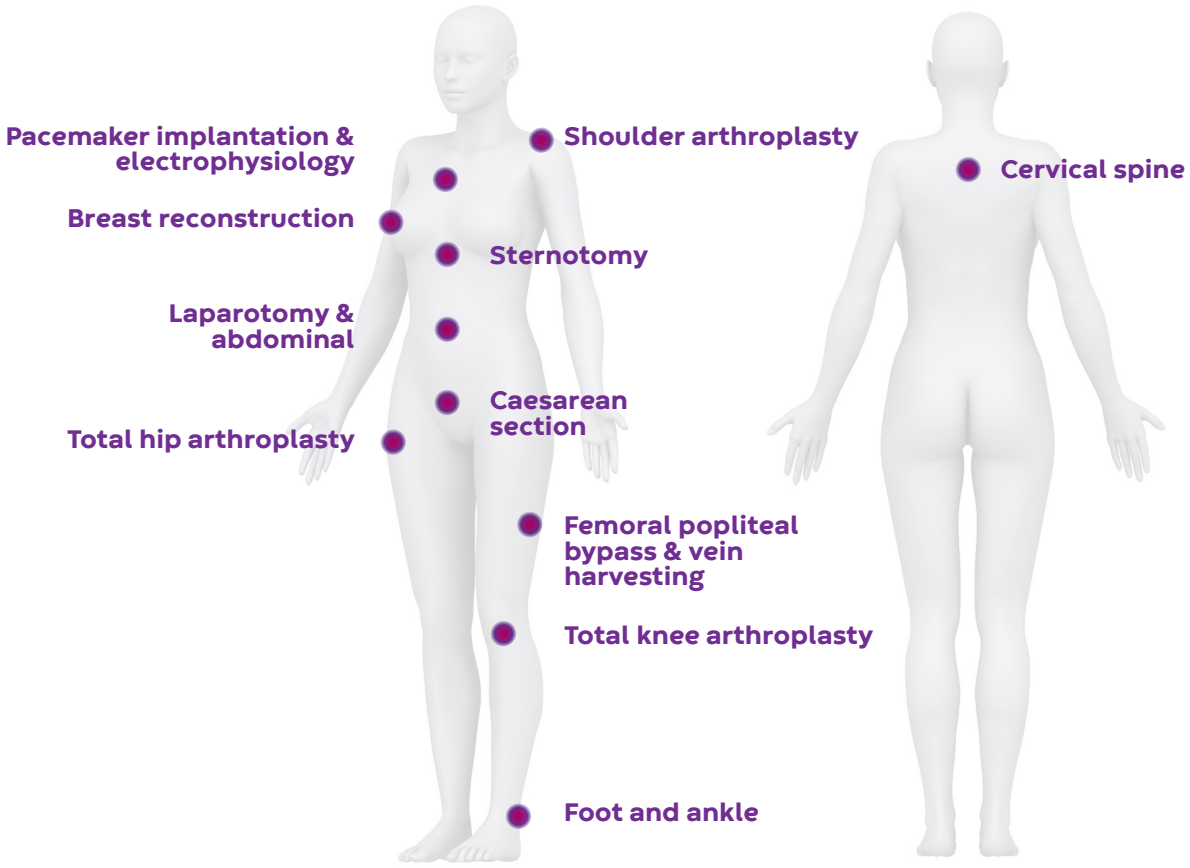
Developed to meet an unmet need in the prevention of SSCs

Originating from the Golden Jubilee National Hospital in Clydebank, Scotland, Physicians used 3 or 4 layers of an Aquacel™ dressings covered by a DuoDERM™ Extra Thin hydrocolloid dressing; a technique known as the Jubilee method.[7]

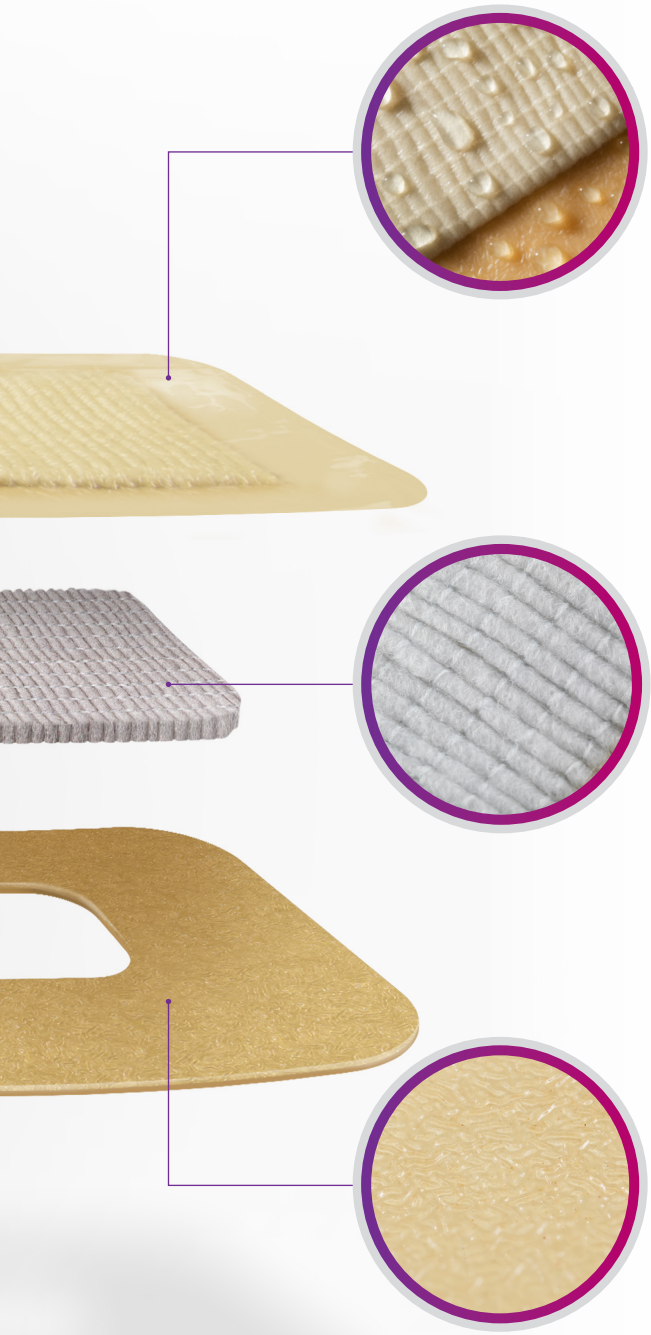
Inspired by the jubilee technique, Aquacel™ Surgical and Aquacel™ Ag Surgical dressings were developed to combine the trusted technologies of Aquacel™ Hydrofiber™ technology and DuoDERM™ hydrocolloid to address the post-op challenges of SSI, dehiscence and blistering.

Post-op incision care has many challenges - with Aquacel™ Surgical and Aquacel™ Ag Surgical we have your patient covered.

Aquacel™ Surgical and Aquacel™ Ag Surgical dressings can be adopted across a broad range of surgical specialties and procedures as part of your SSC prevention protocol.



SSCs pose a threat to outcomes across all surgical procedures however the right post-op dressing plays an integral role in a successful patient outcome.



Hydrocolloid coated polyurethane film - occlusive barrier

The hydrocolloid adhesive coated polyurethane film acts as a bacterial and viral barrier while being breathable and waterproof, allowing the patient to wash and shower without inconvenience.[8]

Extensible Aquacel™ Hydrofiber™ Technology

Hydrofiber® TECHNOLOGY

Two layers of Hydrofiber™ Technology form the wound contact layer and pad and are stitched with a stretched elastic thread to provide extensibility along the incision line.

Ag

Aquacel™ Ag Surgical is impregnated with 1.2% ionic silver within the Hydrofiber™ contact layer. Silver is microbicidal against a broad spectrum of common wound pathogens known to cause SSIs.[9]

DuoDERM™ hydrocolloid adhesive border

The DuoDERM™ hydrocolloid adhesive border provides a secure, skin-friendly adhesion whilst managing moisture from skin transpiration.[8]

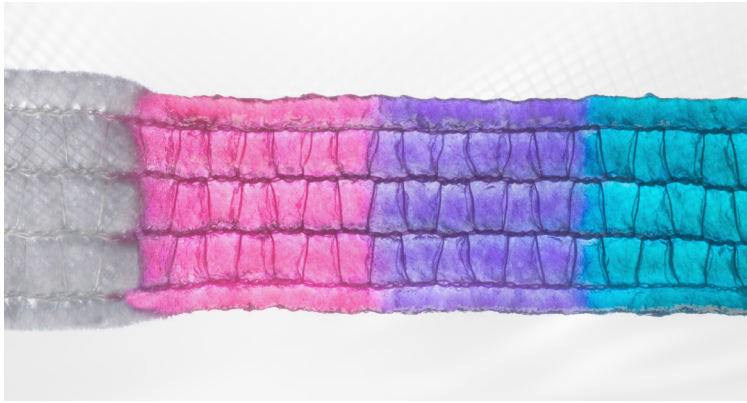
Aquacel™ Surgical and Aquacel™ Ag Surgical meet NICE SSI guidelines that state surgical incisions should be covered with an appropriate interactive dressing.[10]

Hydrofiber™ Technology: Optimising the incision environment

Responds to wound conditions by forming a cohesive gel

Absorbs exudate-containing bacteria, and retains it within its fibers.[11, 12]

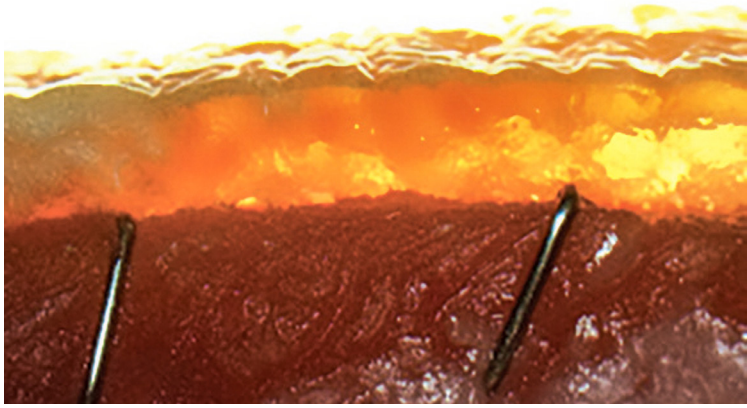
Maintains a moist wound environment that supports the body's healing process.[8]



Micro-contours to the wound bed

Minimises "dead space" where bacteria can thrive.[13, 14]

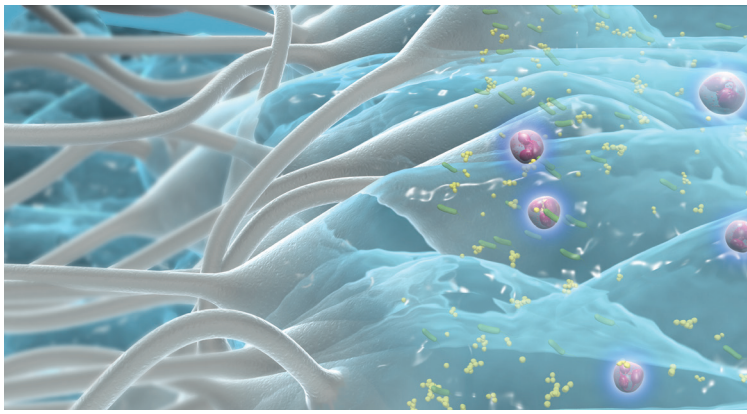
Conforms closely to the incision site.[8, 15]



Locks in wound exudate and traps bacteria

Helps protect peri-wound skin and reduce maceration.[14, 16]

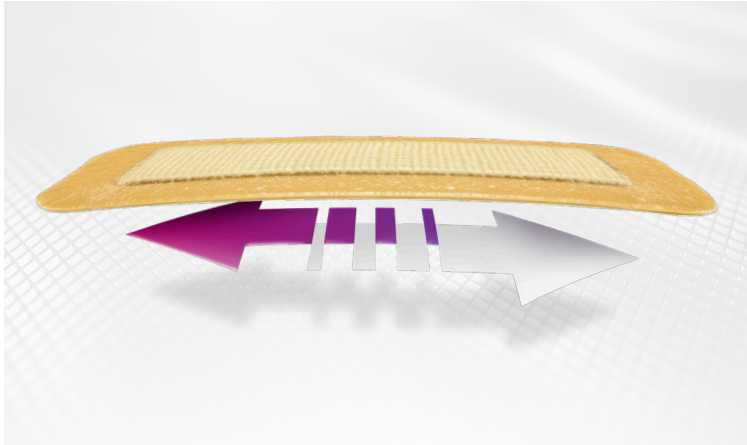
May help to minimise cross-infection and risk of wound infection during removal.[11, 12]



Extends along the incision line

Dressing design extends and flexes with body movement.[8]

Designed to reduce the risk of mechanically induced surgical wound dehiscence.[8]



Supporting your patient's post-op recovery

Aquacel™ Surgical and Aquacel™ Ag Surgical dressings are designed to offer a range of benefits to support your patient through the recovery process and help to facilitate a reduced length of stay.

Stays in place to promote undisturbed healing and easier self-care[7]

Aquacel™ Surgical and Aquacel™ Ag Surgical dressings stay in place for up to 7-days helping you to minimise unnecessary dressing changes[17] to keep the incision undisturbed.

Occlusive barrier protects against contamination

The occlusive dressing design keeps the incision protected from external contamination and is viral, bacterial and waterproof allowing your patient to shower.[8]

Hydrofiber™ Technology provides passive infection control

In-*vitro* studies show Hydrofiber™ Technology dressings retain up to 70% of *S. aureus* and *P. aeruginosa* resulting in bacterial immobilisation. The fibers form a cohesive gel encapsulating large populations of potentially pathogenic bacteria.[12]

Kills SSI-causing bacteria[15]

Aquacel™ Ag Surgical is highly effective in providing fast and sustained anti-microbial activity against the most common SSI-associated pathogens,[15] including:

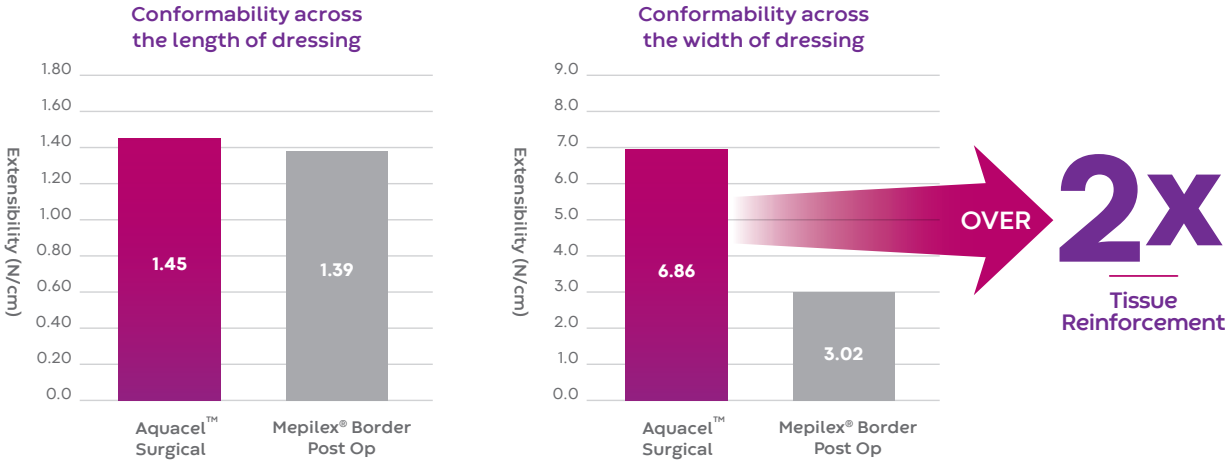
Aquacel™ Ag Surgical

- ***Staphylococcus aureus*** *(S. aureus)*
- Methicillin-resistant ***S. epidermidis*** (MRSE)
- Methicillin-resistant ***S. aureus*** (MRSA)
- ***Escherichia coli*** *(E. coli)*
- ***Staphylococcus epidermidis*** *(S. epidermidis)*
- ***Enterbacteriacae***
- ***Klebsiella pneumoniae*** *(K. pneumoniae)*

Engineered to reduce the risk of surgical wound dehiscence

The tissues of a healed surgical incision will never regain pre-surgery strength and are weakest immediately after surgery. Surgical Wound Dehiscence (SWD) can be caused by technical, mechanical or healing issues and can have a considerable patient impact.[18]

In an in-*vitro* study surgical dressing conformability was measured to assess the ability of the dressings to contour and conform to body surfaces and move with the natural movements of the body.[8]



The in-*vitro* dressing conformability test demonstrates:[8]

- Aquacel™ Surgical dressings require a low force to extend along the length of the dressing and a higher force to extend across the width of the dressing.
- The force required to stretch Aquacel™ Surgical dressings across the width is over double the force required to stretch Mepilex® Border Post-Op Dressings.

Aquacel™ Surgical dressings are designed to stretch in length direction only, reducing the risk of flex across the incision and therefore the risk of mechanically induced SWD.[8]

Designed for better patient outcomes

The Aquacel™ Surgical dressing portfolio has a strong clinical heritage in supporting physicians to reduce the harmful consequences of SSCs demonstrated across multiple surgical studies and specialties.

76%
Reduction
Incidence of Acute PJI

Rothman Institute comparative dressing study of 1778 patients undergoing Total Joint Arthroplasty.[19]

OrthoCarolina comparative dressing study of 262 patients undergoing Total Joint Arthroplasty.[17]

88%
Reduction
Frequency of Skin Blisters

95%
Reduction
Number of Dressing Changes

14%
Increase
Patient Hygiene Satisfaction

81%
Of Delegates Agree
Silver dressings help prevent SSIs[20]

Backed by the 2nd International Consensus on Periprosthetic Joint Infection, Philadelphia 2018.[20]

3 out of 4 clinical studies that support silver dressings were conducted with Aquacel™ Ag Surgical.

20
Clinical Publications

Supporting the efficacy of Aquacel™ Surgical, Aquacel™ Ag Surgical and the DuoDERM™ & Aquacel™ combination method in the reduction of SSI & SSCs.[7]

- Orthopaedics
- Cardiac
- Breast cancer surgery
- Colorectal
- Caesarean section
- Thigh lift

Not all post-op dressings are created equal

In-*vitro* studies have shown that Aquacel™ Surgical and Aquacel™ Ag Surgical dressings offers distinct advantages over other post-operative dressings.

	Aquacel™ Surgical Convatec	**Aquacel™ Ag Surgical** Convatec	**Mepilex® Border Post Op** Molnlycke	**Mepilex® Border Post Op Ag** Molnlycke
Antimicrobial wound contact layer	X	✓	X	✓
Wound contact layer	Interactive Hydrofiber™ technology	Interactive Hydrofiber™ technology	Safetac® technology silicone adhesive[25]	Safetac® technology silicone adhesive[26]
Antimicrobial	X	Ionic silver	X	Silver sulphate[26]
Kills SSI causing bacteria within 24 hours	X	✓[24]	X	X[24]
Sustains antimicrobial activity for up to 7-days	X	✓[24]	X	X[24]
Hydrofiber™ technology forms a gel to lock in exudate and bacteria	✓	✓	X	X
Waterproof	✓	✓	X	X
Occlusive	✓	✓	X	X
Hydrocolloid adhesive provides secure skin-friendly adhesion	✓	✓	X	X
Designed to minimise risk of mechanically induced SWD	✓[8]	✓[8]	X	X

Ordering Information

Aquacel™ Surgical

Hydrofiber® TECHNOLOGY

Aquacel™ Surgical	Max. Incision Length	Product Code	Pack Size	NHS Code
9 cm x 10 cm / 3.5 in x 4 in	4 cm / 1.5 in	412017	10	ELY323
9 cm x 15 cm / 3.5 in x 6 in	9 cm / 3.5 in	412018	10	ELY324
9 cm x 25 cm / 3.5 in x 10 in	17 cm / 6.5 in	412019	10	ELY325
9 cm x 30 cm / 3.5 in x 12 in	22 cm / 8.5 in	420669	10	ELY402
9 cm x 35 cm / 3.5 in x 14 in	27 cm / 10. 5in	412020	10	ELY326

Aquacel™ Ag Surgical

Hydrofiber® TECHNOLOGY

Aquacel™ Ag Surgical	Max. Incision Length	Product Code	Pack Size	NHS Code
9cm x 10cm / 3.5in x 4in	4 cm / 1.5 in	412009	10	ELY341
9cm x 15cm / 3.5in x 6in	9 cm / 3.5 in	42010	10	ELY342
9cm x 25cm / 3.5in x 10in	17 cm / 6.5 in	412011	10	ELY343
9cm x 30cm / 3.5in x 12in	22 cm / 8.5 in	420670	10	ELY403
9cm x 35cm / 3.5in x 14in	27 cm / 10.5 in	412012	10	ELY344

Scan to learn more about the Convatec advanced wound care portfolio

convatec.co.uk

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