



SUPRASORB LIQUACEL PRO
SUPRASORB LIQUACEL AG

12
SEP
13:00



GELLING FIBRE TECHNOLOGY – THE WHY, THE WHAT, AND WHO?

PRESENTED BY
NICOLA FITZPATRICK & TIM FROST



SPONSORED BY:  People.Health.Care.

VIRTUAL LUNCH MEETING



SUPRASORB LIQUACEL PRO
SUPRASORB LIQUACEL AG

12
SEP
13:00



GELLING FIBRE
TECHNOLOGY –
THE WHY, THE
WHAT, AND WHO?

PRESENTED BY
NICOLA FITZPATRICK & TIM FROST

SPONSORED BY:  People Health Care

LIVE Q&A

Send in your
questions by
commenting on the
video

Agenda

- The role of exudate in wound healing
- Gelling Fibre Technology – The Why, the What and Who?
- Introducing a new gelling fibre: **Suprasorb® Liquacel Pro**
- Introducing **Suprasorb® Liquacel Ag** with silver nanotechnology
- Case study and questions.

Exudate

Exudate plays an essential role in the normal healing process by maintaining a moist wound bed – can be misconceived as **BAD**.

This is achieved by:

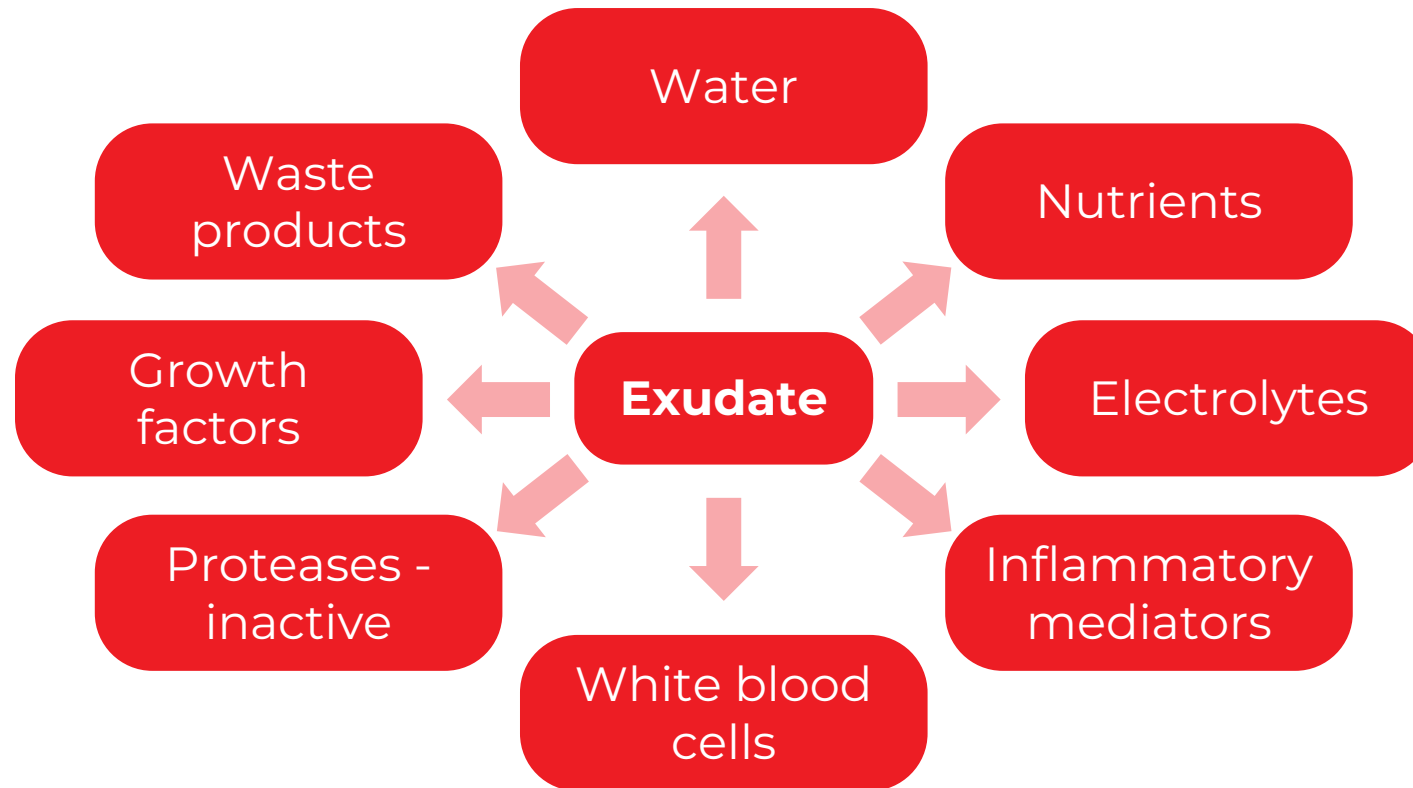
- Supplying the essential nutrients to allow cells to metabolise
- Helping tissue repairing cells to migrate where needed
- Allowing dead or damaged tissue to separate from good tissue (autolysis).

In normal wound healing, volume of exudate will decrease as healing occurs¹.



Exudate

'Exudate directly influences the process of wound healing'².



Factors influencing exudate production

Underlying contributory factors, which make patients prone to high exudate volume must be addressed to manage exudate effectively.³

Wound healing stage

- Inflammatory stage of healing
- Autolytic debridement.

Systemic factors

- Congestive cardiac, renal or liver failure.

Local factors

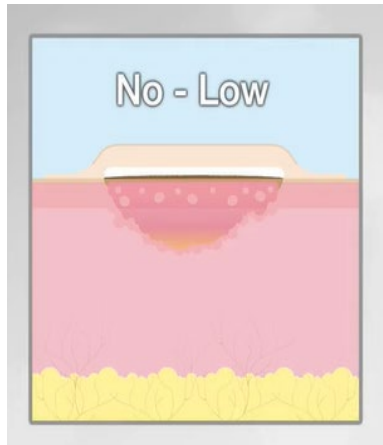
- Size of wound – surface area
- Level of bio-burden in the wound, oedema.

Practical factors

- Position of the wound, e.g. lower limb
- Inappropriate dressing/intervention.

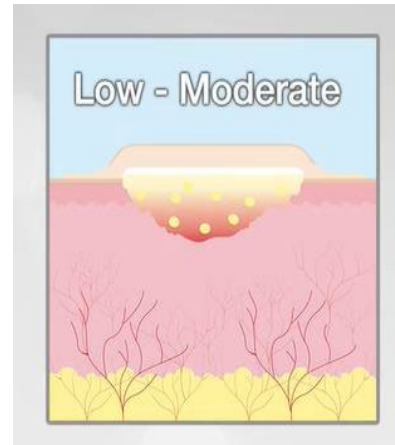


Volume of exudate



Too little exudate

- ✗ Impaired diffusion of critical factors
- ✗ Delayed wound healing.



Ideal/optimal exudate

- Allows for diffusion of:
- ✓ Growth factors
 - ✓ Cell signalling factors
 - ✓ Nutrients for epithelial cells
- ✓ Promotes a medium for autolysis to occur.



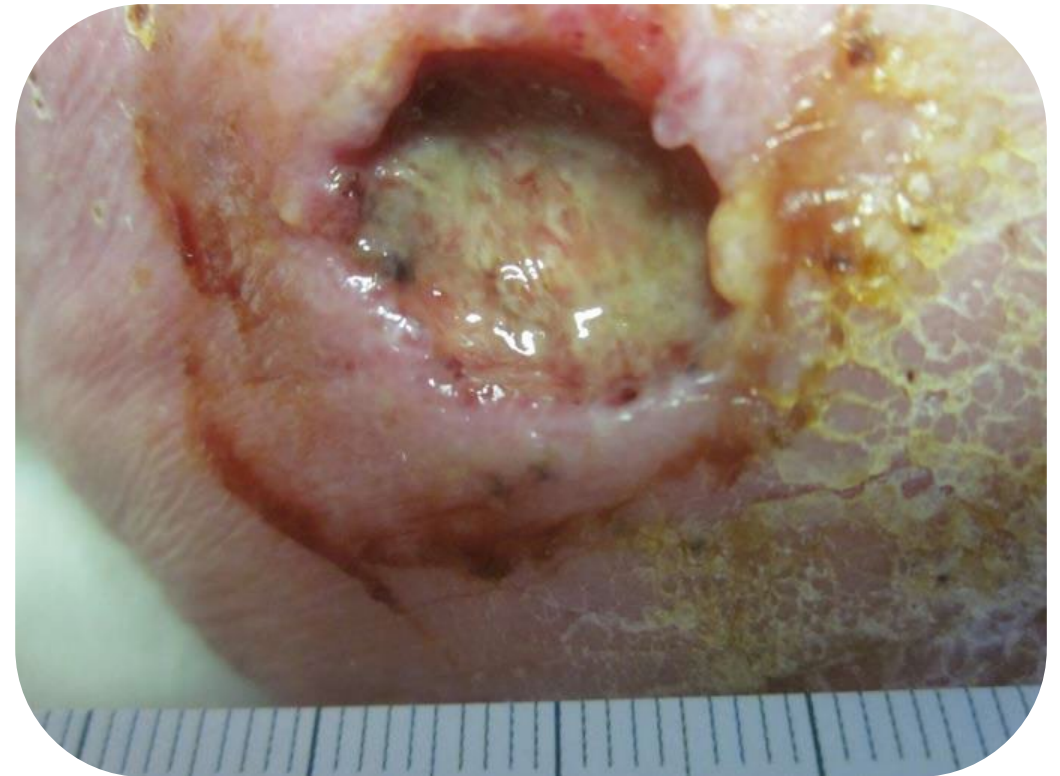
Too much exudate

- ✗ Maceration of periwound area
- ✗ Delayed wound healing
- ✗ Dressing saturated too quickly.

Problems associated with excessive exudate

Inappropriate management of exudate can lead to complexities including¹:

- Periwound skin damage
- Psychosocial effects/quality of life
- Leakage and soiling
- Frequent dressing change
- Discomfort/pain
- Odour
- Infection and biofilm
- Delayed healing
- Protein loss/fluid and electrolyte imbalance.



Biofilm – impairs wound healing

The presence of biofilm in wounds can significantly impact the healing process in several ways:

Delayed wound healing	Protecting bacteria from the immune system and antibiotics
Chronic inflammation	The immune response to biofilm can lead to a chronic inflammation which can cause continuous tissue damage and prevent the progression
Increased risk of infection	Biofilm contributes to the development of chronic infections
Resistance to treatment	Bacteria in biofilm exhibits increased resistance to antibiotics
Impaired cellular function	Biofilm can impair the function of fibroblasts, keratinocytes, and other cells involved in wound healing

Addressing requires a combination of strategies, including mechanical debridement and the use of antimicrobial dressings⁹.

Gelling fibres – a history⁴

This comfortable material can absorb a large amount of wound fluid, such as exudate with bacteria.

This is then transformed into a soft gel, which creates a moist environment to support the body's healing process.

The gel also aids the removal of non-viable tissue from the wound (autolytic debridement), without damaging newly formed tissue.

Gelling fibres are versatile and can be incorporated into a variety of dressing formats.

A modern gelling fibre dressing is neither a hydrocolloid nor an alginate, but a separate category incorporating the benefits of both, while also addressing their weaknesses.



Gelling fibres – a history⁴

1960s	Launch of early gelling technologies such as alginate dressings
1980s	Introduction of hydrocolloid dressings, combining CMC* with other materials to enhance wound healing and protection
1990s	Creation and launch of the first CMC gelling fibre dressings
2000s onward	Continued evolution of gelling fibres including: <ul style="list-style-type: none"> • Additions of strengthening and elastic fibres • Launch of new synthetic fibres • Addition of antimicrobial components such as silver • Use of gelling fibres in composite dressings

Patient benefits of gelling fibre dressings:

- Exudate management
- Moist wound healing
- Atraumatic removal
- Autolytic debridement
- Odour reduction
- Protection and cushioning
- Antimicrobial action (depending on components).

Introducing **NEW**
Suprasorb® Liquacel Pro

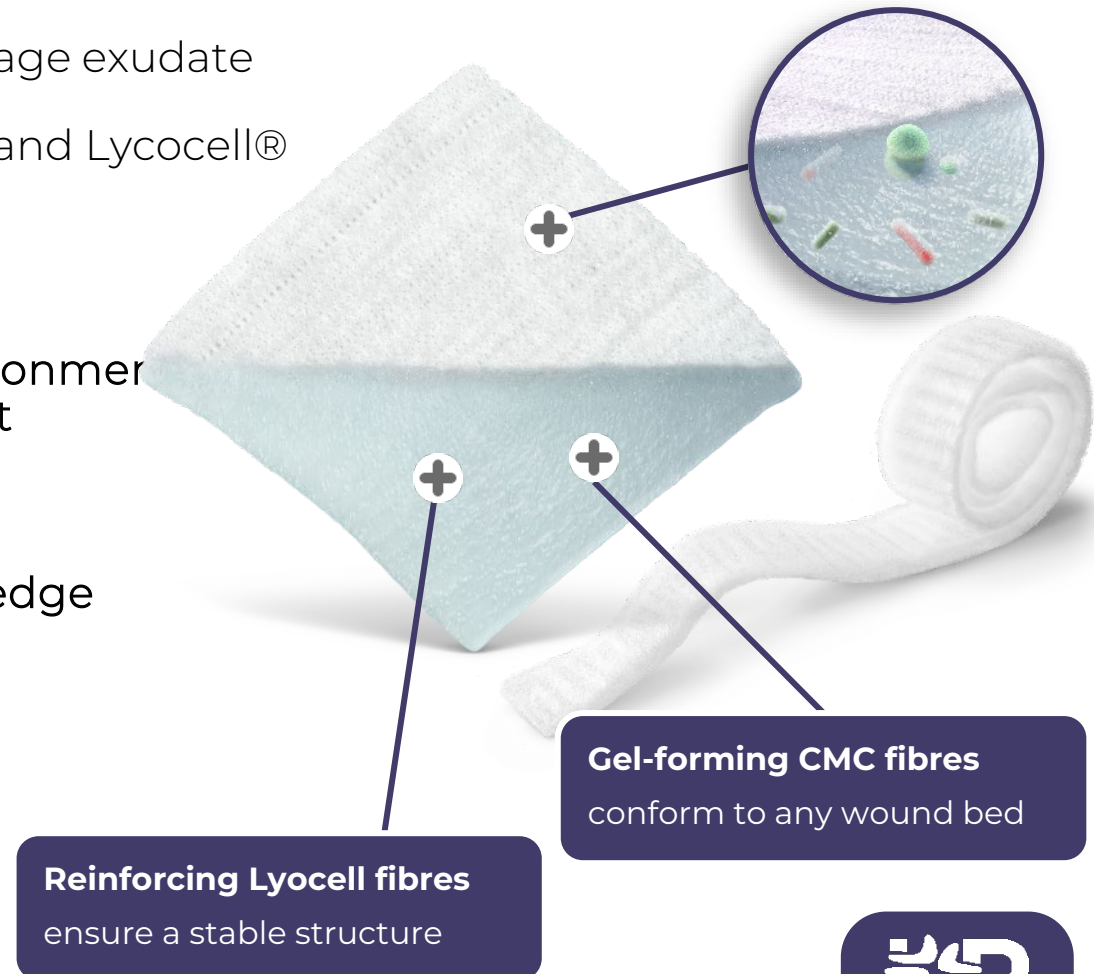
Gelling Fibre Dressing
Only the wound should shrink



Suprasorb® Liquacel Pro

With lock-in technology for effective exudate management

- A soft, absorbent primary wound dressing used to manage exudate
- Combination of sodium carboxymethylcellulose (CMC) and Lycocell® strengthening fibres
- When in contact with wound exudate, a **gel is formed**
- Retains its shape and maintains a moist wound environment supporting wound healing and autolytic debridement
- Closely conforms to the wound bed
- Exudate is **absorbed vertically**, protecting the wound edge and surrounding skin from **maceration**
- Exudate, cell debris and bacteria are absorbed into the dressing, even under compression.

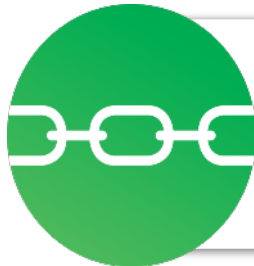


Key benefits for patients



Lock-in technology

- Locks away exudate, MMPs, bacteria and cell debris in the dressing⁵
- Efficient exudate management⁵
- Reduces the microbial burden⁵



Stable structure

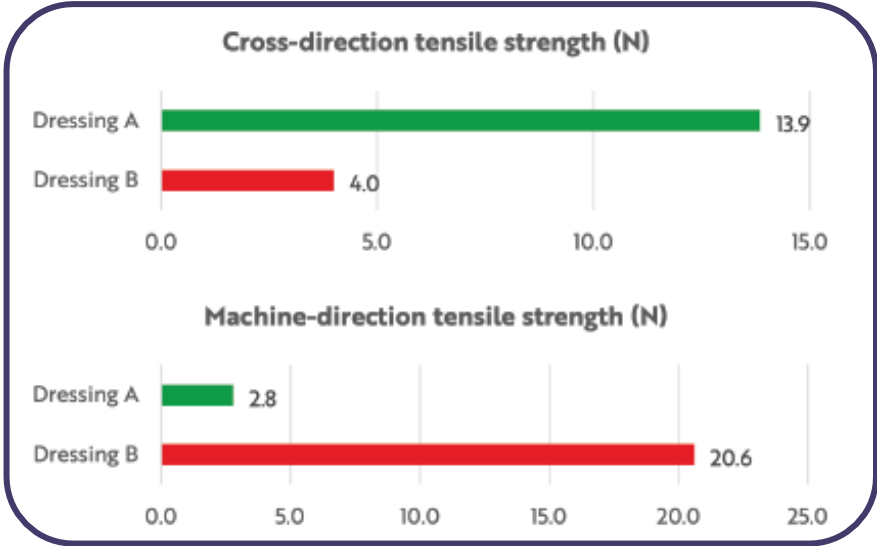
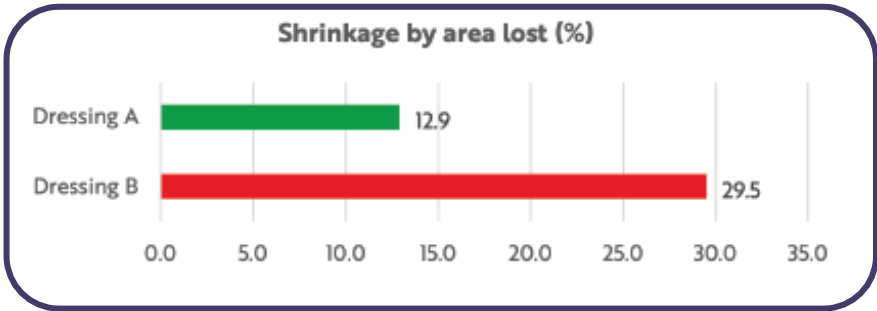
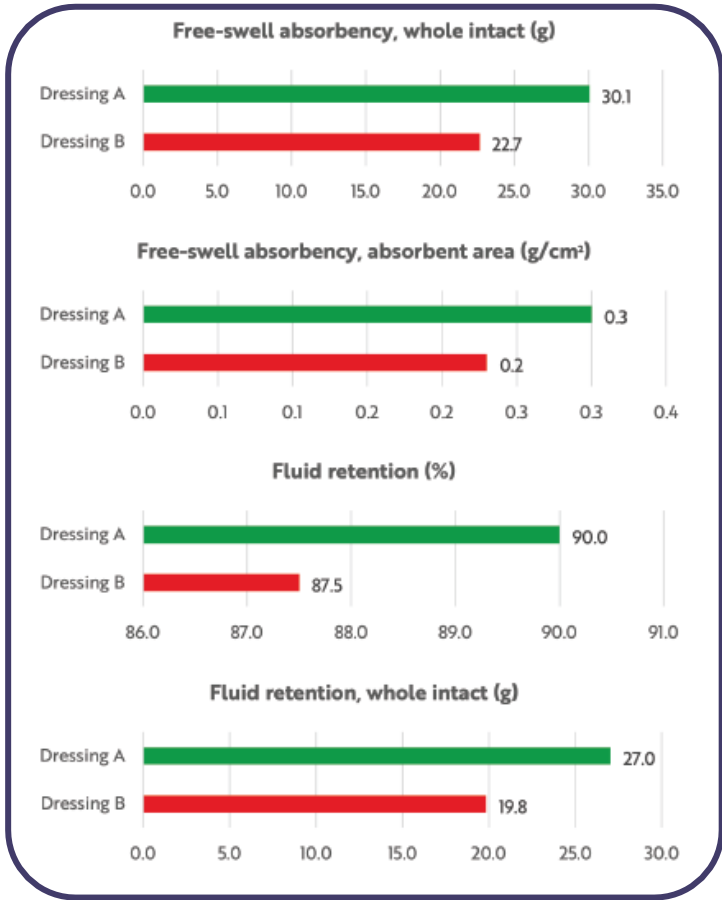
- Safe removal in one piece⁵
- No shrinkage after gel formation⁵
- Contours to the wound bed⁵



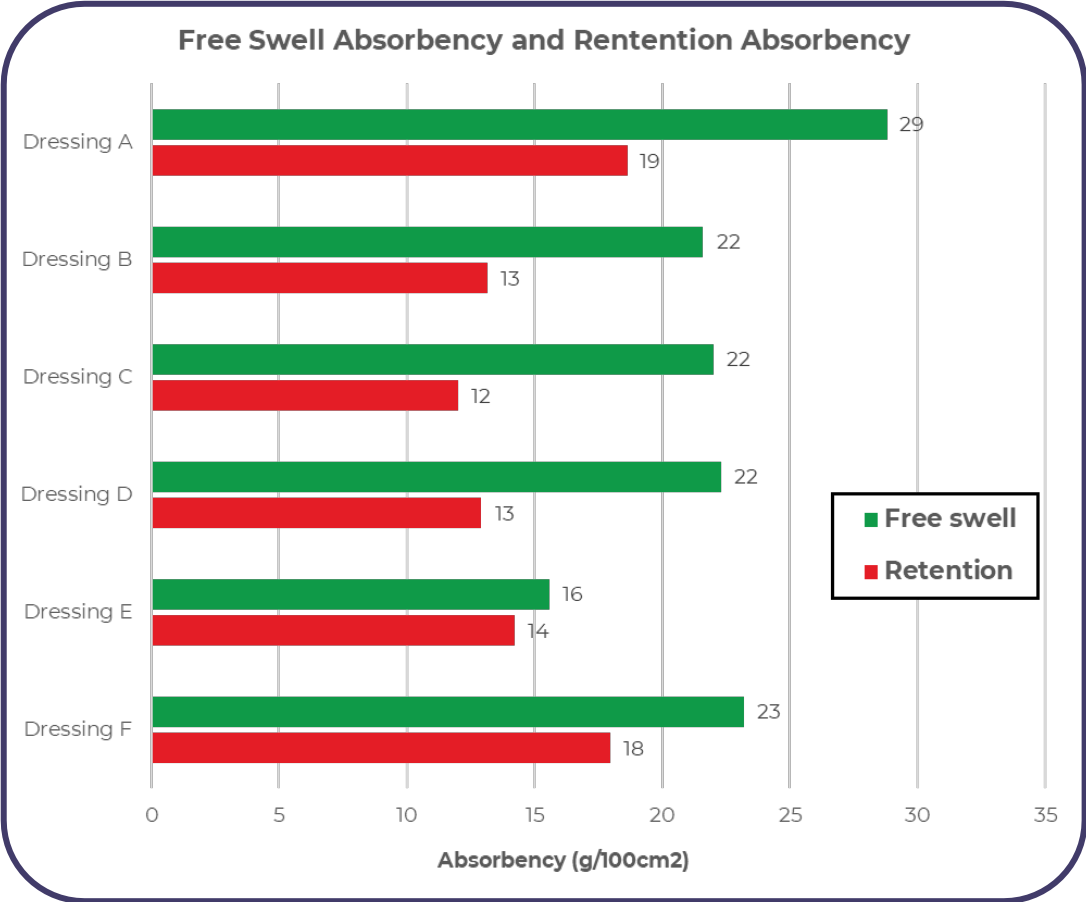
High vertical absorption

- Minimises the risk of maceration^{6,7}
- Prevents lateral spread^{6,7}
- Protects the wound edge^{6,7}

High performance vs market leader – *in vitro* assessment⁸



High performance vs market – *in vitro* assessment⁵



Speciality fibres and materials

Free Swell Absorbentive and Fluid Retention Capacity; Test consistent with BS EN 13726:2023

Dressing A=Suprasorb Liquacel Pro (L&R); Dressing B = CMC dressing with stitch-bonded strengthening fibres; Dressing C = non-woven dressing made from CMC and strengthening cellulose fibers; Dressing D = non-woven CES gelling fibre dressing; Dressing E = non-woven polyvinyl alcohol dressing; Dressing F = non-woven CMC gelling fibre dressing; Dressing G = non-woven CMC gelling fibre dressing

Introducing **NEW** Suprasorb[®] Liquacel Ag

Gelling Fibre with Silver Nanotechnology
Kills Bacteria and Destroys Biofilm



Suprasorb® Liquacel Ag

With lock-in technology for effective exudate management

Kills bacteria and destroys biofilm

- 1.1% silver nanoparticles incorporated into the cellulose fibres across the whole dressing
 - Sustained and consistent antimicrobial effect
 - Nanoparticles release silver ions into the dressing which activates their antimicrobial action, including against methicillin-resistant *Staphylococcus aureus* (MRSA)²
 - Continuous release resulting in low cytotoxicity
- Combination of CMC and strengthening fibres
- When the dressing is in contact with wound exudate a gel is formed, which maintains a moist wound environment and supports autolytic debridement
- Bacteria, exudate and cell debris are trapped in the dressing and removed during dressing changes.



Silver nanotechnology makes the difference



Silver nanotechnology

- Kills bacteria¹⁴ and destroys biofilm⁹
- Low cytotoxicity¹⁰
- Effective against a broad spectrum of pathogens, including MRSA¹¹



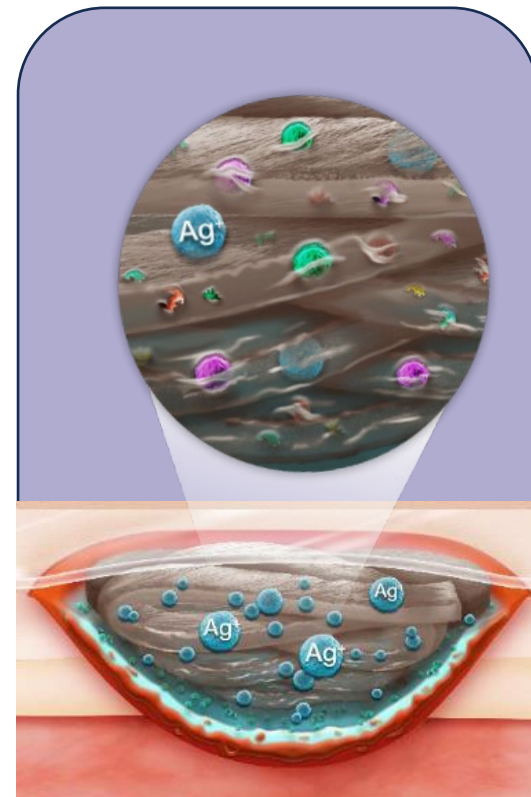
Stable structure

- Promotes removal in one piece¹²
- No shrinkage after gel formation¹³
- Patient safety








High vertical absorption

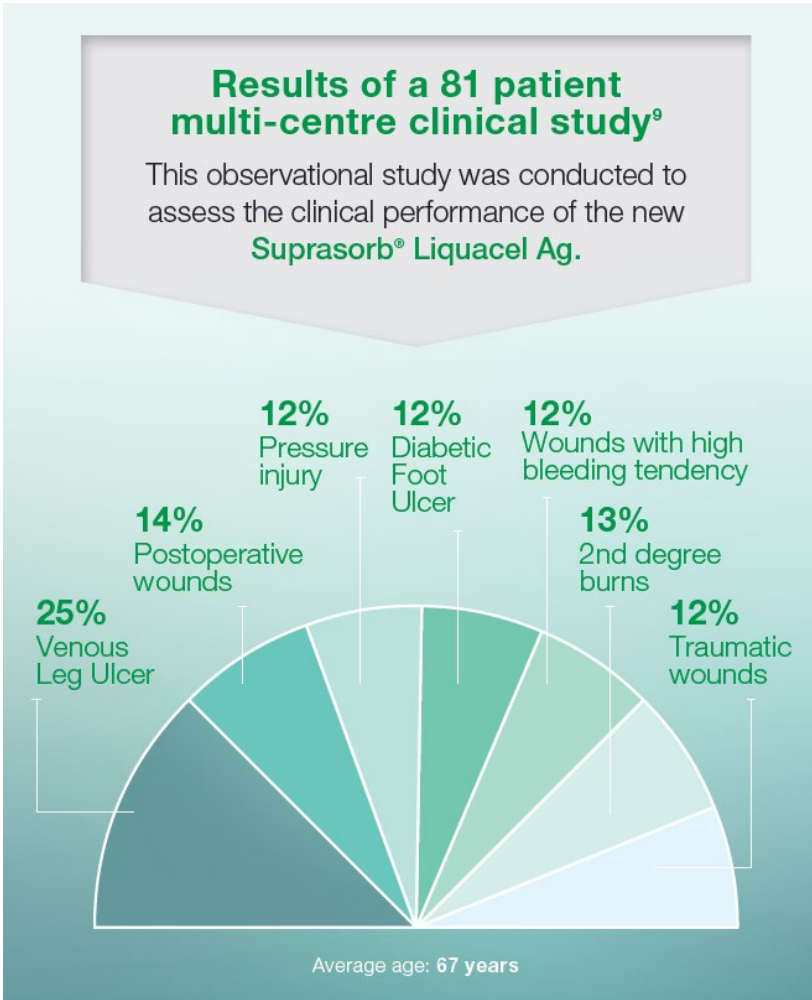
- Minimises the risk of maceration^{11, 14}
- Prevents lateral spread^{11, 14}
- Protects the wound edge^{11, 14}



Evidence-based care¹⁶

Achieving patient treatment aims

- 
100% Prevention of infection
- 
91% Reduction of biofilm full or partial removal* of visible signs
- 
97% Maintains a moist wound healing environment
- 
93% Prevents maceration
- 
100% Atraumatic removal



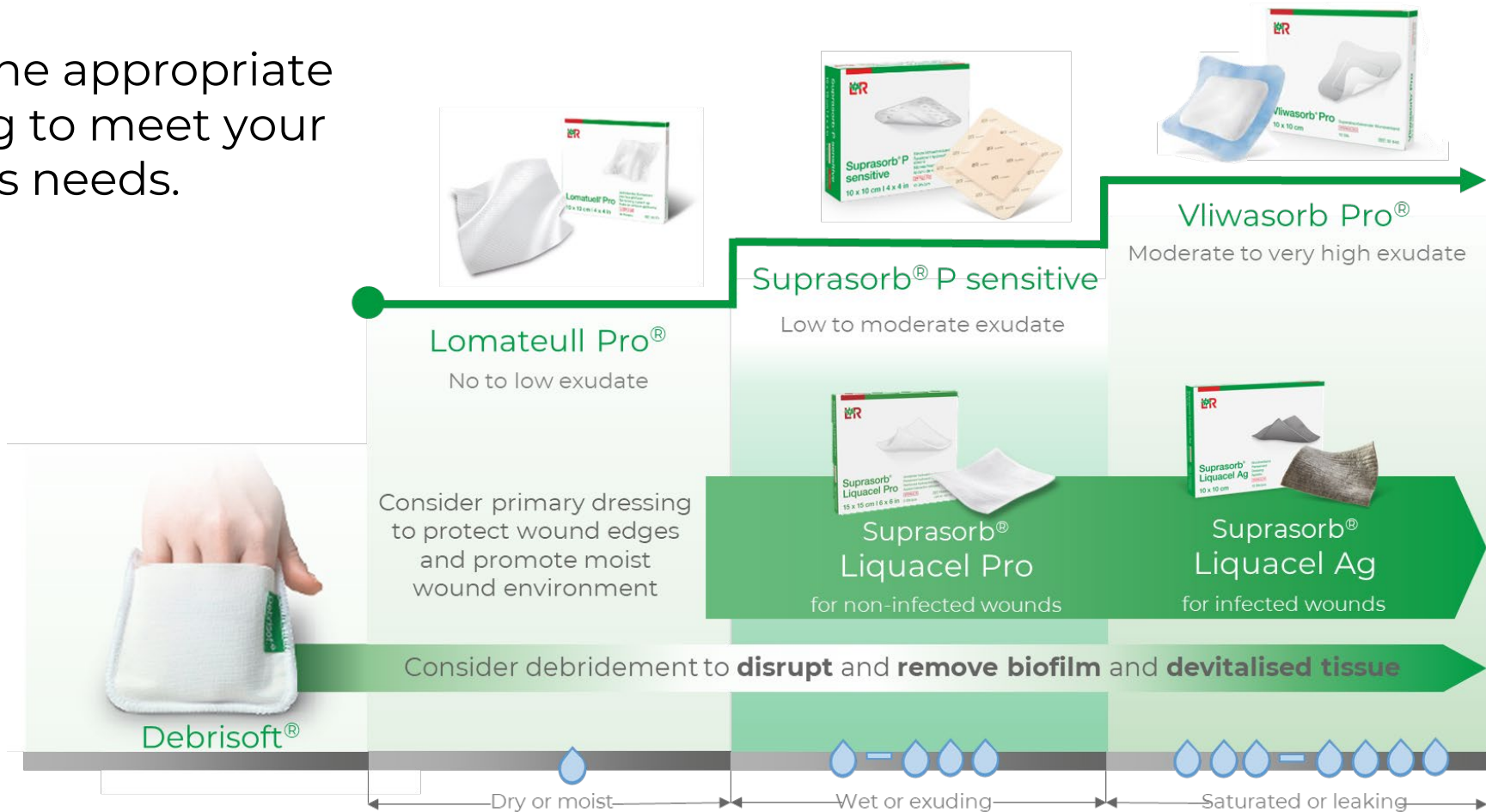
Prepare to heal with biofilm-based care¹⁵

- **Cleanse** the wound bed with surfactants, saline or water to minimise bioburden and eliminate surface contaminants
- **Debride** the wound with **Debrisoft**[®] to physically disrupt and remove the barriers to healing:
 - Devitalised tissue – slough or necrosis
 - Biofilm – a complex aggregate of bacteria protected by EPS*
- **Dress** the wound with **Suprasorb**[®] **Liquacel Ag** to destroy the biofilm¹⁴, kill bacteria⁹ and prevent reformation¹⁴.



Exudate Continuum

Select the appropriate dressing to meet your patient's needs.



CASE STUDY





05.07.24



15.07.24



23.07.24



05.07.24

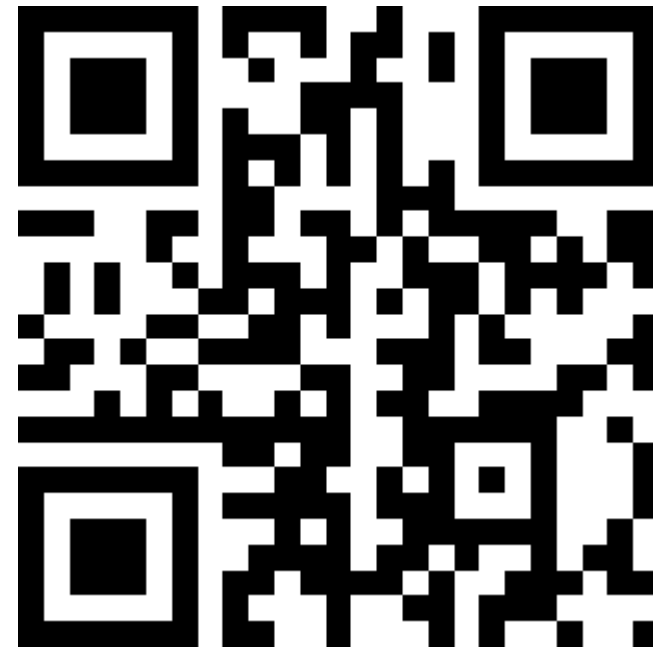


22.08.24

Further education to support you



LeaRn
on Demand



Scan here and
sign up today

Further education to support you



Exudate Management

A graphic featuring a central white square with a QR code and the text "Exudate Management". The square is set against a green background with white icons of medical supplies like syringes, band-aids, and stethoscopes. The entire graphic is framed by a red border with a white scalloped edge.



Biofilm Management

A graphic featuring a central white square with a QR code and the text "Biofilm Management". The square is set against a green background with white icons of medical supplies like syringes, band-aids, and stethoscopes. The entire graphic is framed by a red border with a white scalloped edge.

Transform your gelling fibres

Suprasorb® Liquacel Pro
Gelling fibre dressing 

Size dressing (cm)	LR codes	PIP codes	NHS SC codes	Pack size
5 x 5	149710	428-4543	-	10
10 x 10	149711	428-4535	-	10
15 x 15	149712	428-4550	-	5
2 x 45 Rope	149713	428-4568	-	5

Suprasorb® Liquacel Ag
Gelling fiber dressing with silver nanotechnology 

Size dressing (cm)	LR codes	PIP codes	NHS SC codes	Pack Size
5 x 5	142503	428-5805	ELY85044	10
10 x 10	142504	428-5797	ELY85045	10
15 x 15	142505	428-5789	ELY85046	5
2 x 45 Rope	142506	428-5813	ELY85047	5

Contact L&R to try it now!



DOWNLOAD

YOUR

CERTIFICATE



www.jcn-live.co.uk/virtual-lunch-meeting

References

1. Kerr A (2014) How best to record and describe wound exudate. *Wounds UK* **10(2)**: 50–7. Available online: https://wounds-uk.com/wp-content/uploads/sites/2/2023/02/content_11342.pdf
2. Flanagan M (2013) Principles of wound management. In: Flanagan M (ed) *Wound Healing and Skin Integrity: Principles and Practice*. Wiley-Blackwell, Chichester
3. Wounds UK Best Practice Statement (2013) *Effective exudate management*. Wounds UK, London. Available to download from: www.wounds-uk.com
4. WoundSource. Gelling fiber wound dressings 2024. www.woundsource.com/product-category/dressings/gelling-fiber-dressings (accessed July 2024)
5. Data on File - Comparison on the fluid handling properties of Suprasorb Liquacel Pro
6. Data on File - VENAGTR-6 ;
7. Data on File VENAGTR - 11
8. Data on File - SMTL Comparison on the fluid handling properties of Suprasorb Liquacel Pro
9. Data on File - VENAGTR-63
10. Data on File – VENAGTR-18

References

11. Data on File - VENAGTR-45
12. Data on File VENAGTR - 69
13. Data on File - VENAGTR-6
14. Data on File – VENAGTR-25
15. Mayer D, et al (2024) *International Consensus Document: Best practice for wound debridement*. Available online: www.magonlinelibrary.com/pb-assets/JOWC/Debridement_Consensus_24-05-01-1716559025990.pdf
16. Mete E, Westermann G, Rainer C, Roes C (2023) *Observational, international, multicentre, single-arm study to assess the performance, safety and handling of new antimicrobial hydroactive fibre dressing*. Poster presentation, European Wound Management Association (EWMA), 2024, London