KytoCel

Gelling fibre dressings

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Gelling fibre dressing

KytoCel harnesses the natural properties of chitosan to uniquely manage moderately to heavily exuding wounds

Chitosan is an abundant, renewable, naturally occurring polymer.[1]

Chitosan's positive charge allows it to interact with negatively charged molecules such as gram-positive bacteria, blood cells, proteins, metals and lipids.

This ability can be put to good use in biomedicine[1], and in particular, in wound management.
Chitosan has many proven and unique properties that are beneficial at every stage of wound healing.[2]

Chitosan:

- Accelerates healing[1,3,4,5]
- Stimulates immune response[1]
- Is antimicrobial (bacteriostatic and fungistatic)[3,4,5,6]
- Is haemostatic[3,4,5,6]
- Is non-toxic[4,5,7]
- Is absorptive[3,4,5]
- Is biocompatible and biodegradable[3,4,5,6,7]

KytoCel gelling fibre dressing: the natural choice for managing moderately to heavily exuding wounds

KytoCel is a highly absorbent, conformable, gelling dressing composed of natural, biodegradable, acylated chitosan fibres that give the dressing many valuable features:

Highly absorbent for optimal wound exudate management

- Unique chitosan dressing fibres bond with wound exudate, transforming to form a clear gel that locks fluid away
- Greater or comparable absorbency to other gelling fibre dressings[8]

Excellent fluid retention for longer wear times

- KytoCel can retain a large volume of wound exudate[9], leading to longer wear times and associated cost savings

Sequestration: effectively locks away wound pathogens

- KytoCel has an outstanding ability to bind and lock away commonly encountered wound pathogens, such as E. coli and S. aureus[8], reducing wound bioburden and the risk of cross contamination at dressing change
- KytoCel is more effective at reducing organism numbers within and under the dressing than the leading alginate and hydrofiber®[8]

	% Reduction in bacteria*	
	E. coli	S. aureus
KytoCel	96.17	94.13
Alginate	49.78	4.4
Hydrofibre®	36.13	23.2

*after 18 hours incubation at room temperature

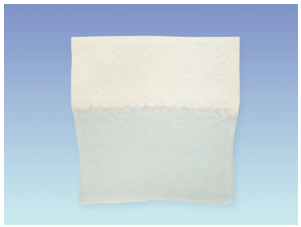
Minimal lateral wicking reduces the risk of peri-wound skin damage

- The minimal lateral wicking demonstrated by KytoCel[9] prevents the spread of wound exudate to the edges of the dressing, protecting the peri-wound skin from the risk of maceration

There is no parallel to wound management with KytoCel

High wet strength allows simple one-piece removal

- KytoCel remains intact, even when fully saturated[8,9] allowing clean, simple, one-piece dressing removal that does not leave behind dressing fibres or residue[8,9]



Gelled KytoCel dressing

Natural haemostatic ability stops wound bleeding

- The unique positive charge of chitosan fibres enable them to stop bleeding by binding to negatively charged red blood cells, resulting in blood coagulation
- Chitosan also polymerizes with blood to form a net-like structure, which further captures red blood cells, leading to clotting[3,4,5,6]

Natural antimicrobial action

- KytoCel is effective against commonly encountered wound pathogens including C. albicans, P. aeruginosa and MRSA[11]
- Its antimicrobial mode of action is not confined to a single target molecule but results from a sequence of untargeted molecular events that take place simultaneously or successively[10]
- KytoCel's antimicrobial action offers protection to wounds at risk of infection, and reduces bioburden in infected wounds

Accelerates wound healing

- Chitosan has an accelerating effect on wound healing[7]
- It activates immune cells, cytokine production, giant cell migration and stimulation of type IV collagen synthesis[12], making it useful at all stages of tissue repair[2]

Ordering Information

Size	Product code	Qty	PiP code
KytoCel			
5cm x 5cm	3050	10	386-5482
10cm x 10cm	3051	10	386-5490
15cm x 15cm	3052	10	386-5508
4cm x 10cm	5053	10	386-5516
4cm x 20cm	5054	10	386-5524
4cm x 30cm	5055	10	386-5532
KytoCel Ribbon			
2.5cm x 45cm	3056	10	386-5540

References

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12. Mezzana P. Acta Chir Plast 2008; 50:81–4

For orders please contact sales@creedmed.com

www.creedmed.com +44 (0) 1623 391578 info@creedmed.com
Unit 2, Hamilton Court, Oakham Business Park, Mansfield,
Nottinghamshire NG18 5FB, UK

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