

# **QUICK**GUIDE



**3M**

Pathway to support wound healing using the 3M™ Promogran™ Matrix Family<sup>1</sup>



# What is TIME?

Following a standard framework for assessment can ensure good practice, for example TIME: Tissue, Infection/Inflammation, Moisture balance, Edge advancement<sup>2</sup>. Within the TIME acronym, 'I' stands for infection or inflammation<sup>2</sup>; however, it is important to consider inflammation and its causes, and to differentiate this from infection, as signs can often overlap.



Tissue



Infection/Inflammation



Moisture balance



Edge advancement

# What is Wound Inflammation?

Inflammation is the second phase of wound healing, which begins once the injured blood vessels have leaked transudate (fluid pushed through the capillary as a result of high pressure). It can be recognised from the presence of heat, redness, pain and swelling.

## Local signs of inflammation and infection<sup>3</sup>

| Inflammation   | Infection   |
|--|---|
| Local swelling that decreases over time  | Persistent swelling   |
| Redness that decreases over time   | Redness around the wound that continues to expand or worsen   |
| Pain worsens with stimuli (e.g. touching or dressing change) and decreases over time; may increase and become continual in stalled/hard-to-heal wounds                               | Increasing or continual wound pain  |
| Increased skin temperature near the wound  | Increased skin temperature near the wound and possibly spreading from the wound   |
| Loss of function and movement in the wounded area  | Loss of function and movement in the wounded area   |
| Exudate more likely to be: <ul style="list-style-type: none"> <li>■ Thin, watery or slightly thicker than water</li> <li>■ Clear</li> <li>■ Amber, straw-coloured or pink</li> </ul> | Loss of function and movement in the wounded area<br>Exudate more likely to be: <ul style="list-style-type: none"> <li>■ Thick</li> <li>■ Cloudy, milky or opaque</li> <li>■ Green, yellow, tan, brown or red</li> <li>■ Malodourous</li> </ul> Friable granulation tissue that bleeds easily<br>Pocketing/bridging at the base of the wound<br>Wound breakdown/enlargement<br>Cellulitis/redness |

# Pathway for use of 3M™ Promogran™ Protease Modulating Matrix and 3M™ Promogran Prisma™ Wound Balancing Matrix in practice

(adapted from<sup>1</sup>)

Early adoption of Promogran Matrix and Promogran Prisma Matrix is recommended at 4 weeks

Deliver Best Practice Care for 4 weeks as per national guidelines\*, such as offloading, pressure redistribution/relief, compression

How is the wound progressing against best practice guidelines and the original objectives?

Progressing

Continue treatment

Not progressing

Was this to be expected

Yes

e.g. end-of-life patient  
Continue treatment

No

Have the first principles of care been adhered to?

- First principles of care**
- Assessment and referral
  - Good patient-clinician relationship
  - Dressing selection/ suitability
  - Framework for practice

Are there signs of inflammation?  
Consider referral

Review and apply first principles of care!  
Consider referral

Yes

What is the risk of infection?

High

Promogran Prisma Matrix

Low

Promogran Matrix

No

What is the risk of infection?

High

Promogran Prisma Matrix

Low

Re-assess the diagnosis, has anything changed?

Review after 4 weeks, is the wound progressing?

Yes

Continue treatment

No

Re-assess and review the diagnosis, has anything changed?

\*e.g. NICE (2014) Pressure ulcers: prevention and management; NICE (2015) Diabetic foot problems: prevention and management; NICE (2017) Clinical Knowledge Summaries: Leg Ulcer - Venous; SIGN (2010) Management of chronic venous leg ulcers.

## Stimulating the healing process

Wounds that do not progress beyond the inflammatory phase often demonstrate<sup>1</sup>:

- Increased activity of proteases such as MMPs and elastase
- Persistence of inflammatory cells
- Down regulation of TIMP activity.

It is well established that healing can only be achieved when the right amount of proteases are in the right place and for the right duration, in order to promote granulation tissue formation and stimulate wound healing.

Once holistic assessment and best practice have been carried out and infection has been excluded, it is important for clinicians to consider why the wound is still failing to progress to healing and whether excess host proteases, such as MMPs and elastase, are the underlying cause.

## 3M™ Promogran™ Protease Modulating Matrix and 3M™ Promogran Prisma™ Wound Balancing Matrix

Use of Promogran Matrix and Promogran Prisma Matrix is beneficial in managing the underlying biochemistry of chronic wounds. Educational support should be provided to healthcare professionals before the introduction of these dressings and for their use to be monitored in practice and outcomes of care measured.

Promogran Matrix and Promogran Prisma Matrix should be considered when no progression is seen after 4 weeks of delivering best practice care, in order to kick-start healing in chronic wounds.

The new proposed pathway for use in practice will help clinicians to identify a clear stop point of when these dressings should no longer be used, when to consider referral and when to re-assess and review the diagnosis, patient objectives and expectations.

## Properties of 3M™ Promogran™ Protease Modulating Matrix and 3M™ Promogran Prisma™ Wound Balancing Matrix

|                    | Promogran Matrix  | Promogran Prisma Matrix   |
|--------------------|---|---|
| <b>Composition</b> | A sterile, freeze-dried composite of 55% collagen and 45% oxidised regenerated cellulose (ORC), which transforms into a soft and conformable biodegradable gel on contact with fluid  | A sterile, freeze-dried composite of 55% collagen, 44% oxidised regenerated cellulose (ORC) and 1% silver-ORC.<br>It contains silver - a broad spectrum antimicrobial, shown to be effective against wound pathogens  |
| <b>Indications</b> | <ul style="list-style-type: none"> <li>■ Non-infected wounds</li> <li>■ Healing by secondary intent which are clear of necrotic tissue, including diabetic ulcers, venous ulcers, pressure ulcers, ulcers caused by mixed vascular aetiologies and traumatic and surgical wounds</li> </ul> | <ul style="list-style-type: none"> <li>■ All wounds</li> <li>■ Healing by secondary intent which are clear of necrotic tissue, including diabetic ulcers, venous ulcers, pressure ulcers, ulcers caused by mixed vascular aetiologies and traumatic and surgical wounds. Systemic antimicrobial therapy should be considered when wound infection is evident</li> </ul> |

- Fletcher J, Luxmi D, Chadwick P, Checkley C, Dowsett C, Acton C, Stang D. Use of oxidised regenerated cellulose (ORC) and collagen dressings (PROMOGRAN™ Protease Modulating Matrix and PROMOGRAN PRISMA™ Wound Balancing Matrix) to kick-start the treatment of chronic wounds. *Wounds UK* 2020 1(16)
- Schultz GS, Sibbald RG, Falanga V, Ayello EA, Dowsett C, Harding K, Romanelli M, Stacey M, Teat L, Vanscheidt W. Wound bed preparation: a systematic approach to wound management. *Wound Rep Regen* 2003 11(2): S1-28
- Fletcher J, Chadwick P. *Made Easy: Identifying and managing inflammation*. 2019. Wounds UK, London

NOTE: Specific indications, contraindications, warnings, precautions and safety information exist for these products and therapies. Please consult a clinician and product instructions for use prior to application. This material is intended for healthcare professionals.



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