

# Diabetic Foot Ulcer Opportunity for VitroGro® ECM

ASX Announcement 20 November 2012  
Tissue Therapies Limited ABN 45 101 955 088

## Announcement

A key presentation at the Wounds UK conference held at Harrogate on the 14 - 15<sup>th</sup> of November 2012 reinforces the opportunity for VitroGro® ECM in the UK market. The report presented by the National Health Service (NHS) Economist, Marrion Kerr is available from the NHS diabetes website (<http://www.diabetes.nhs.uk/document.php?o=3423>). This report updates the economic case for changing wound care practices in the UK to mitigate the escalating burden of chronic wounds. A brief synopsis of the key points in the presentation;

- **The scale of the problem is large and increasing:**
  - An estimated 61,000 people with diabetes in England have foot ulcers at any given time.
  - Only two thirds heal without surgery.
  - There are around 6,000 lower extremity amputations per year in diabetic patients and a person with diabetes is 23 times more likely to have a lower extremity amputation than a person without diabetes.
- **Estimates of the cost of foot care in diabetes for the UK are high:**
  - In 2010-11 the NHS spent between 639 and 662 million Great British Pounds (GBP) on diabetic foot care. This is equivalent to 1 in every 150 GBP of the total NHS expenditure in that year.
- **Conclusion:**
  - Unless there is a significant improvement in the quality and efficiency of care, the cost of diabetic foot ulcers will continue to escalate.

## What does this mean for Tissue Therapies

One of the indications for the use of VitroGro® ECM is for the treatment of diabetic ulcers.

In some important ways diabetic foot ulcers are similar to venous leg ulcers, particularly the presence of a dysfunctional or degraded extracellular matrix that disrupts the healing process because it lacks the essential attachment sites required by healthy skin cells for successful healing. Skin cell attachment has to occur before other cell functions critical to healing can proceed, such as cell migration and proliferation.

Community clinics and healthcare providers can incorporate VitroGro® ECM into their current wound care practice with minimal change.

Combined with improved healing responses of hard to heal wounds treated with VitroGro® ECM, this means that significant cost reductions can be realised and wound care teams can reduce amputation and mortality rates.

Closing wounds quickly avoids protracted nursing time, gets patients back to their normal lives and allows treating clinicians to focus on managing the underlying disease.

The NHS report reinforces Tissue Therapies UK health economic modelling data. (please see ASX: TIS AGM CEO Presentation, 12 November 2012) The NHS presentation at Harrogate also underpins the critical need for treatments like VitroGro® ECM, that can deliver real, practical health economic benefits.

Independent, expert health economic outcomes research has already demonstrated strong cost benefits from the treatment of hard to heal wounds with VitroGro® ECM, using UK health data.

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Expert health economics will be used by Tissue Therapies as key data to objectively demonstrate the cost reductions that can be achieved by using VitroGro® ECM, compared to the current standard of care, for the treatment of hard to heal wounds in the NHS, other key markets throughout the EU and globally.

The convenient, consistent, cost effective healing produced by VitroGro® ECM delivers a unique, powerful combination of clinical and health economic advantages.

The CEO of Tissue Therapies, Dr. Steven Mercer said “The snowballing cost of hard to heal wounds makes healthcare providers and administrators receptive to VitroGro® ECM. Healthcare systems around the world are looking for a cost effective solution to this problem.”

“The opportunity for Tissue Therapies to make a difference in wound care is significant. By demonstrating the real world value of VitroGro® ECM we can drive sales and deliver better outcomes for patients.”

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## What is VitroGro® ECM

- VitroGro® ECM is a topically applied, biomimetic scaffold, comprising a synthetic extracellular matrix (ECM) protein.
- **How it works:** VitroGro® ECM replaces the degraded matrix of a hard to heal wound. VitroGro® ECM binds to a prepared wound bed and provides a physical structure (a scaffold) for cell attachment, which is a primary requirement for subsequent cell functions critical for healing, such as cell proliferation and migration <sup>[1]</sup>.
- **An optimal scaffold:** One of the characteristics of hard to heal wounds is prolonged inflammation, which damages the native ECM that would normally guide the wound healing process <sup>[1,2,3,4]</sup>. Replacement of this damaged ECM is a beneficial strategy for treating hard to heal wounds <sup>[1]</sup>. VitroGro® ECM is ideal as an ECM replacement since its structural and functional elements mimic those present in the ECM at the early stages of normal wound healing.
- Expert health economics modelling indicates that VitroGro® ECM offers the opportunity for substantially more cost effective treatment of wounds compared to the current standard of care.

[1] Widgerow AD . Deconstructing the stalled wound. Wounds 2012

[2] Schultz GS. Extracellular Matrix: review of its roles in acute and chronic wounds. World Wide Wounds. 2005

[3] Moor AN. et al. Proteolytic activity in wound fluids and tissues derived from chronic venous leg ulcers. Wound Rep Reg. 2009

[4] International consensus, Acellular matrices for treatment of wounds. Wounds Int. 2010

## About Tissue Therapies Limited

Tissue Therapies Limited is a biomedical technology company that is developing significantly more effective treatments for acute and chronic wound healing applications, including chronic skin ulcers and burns. Tissue Therapies Limited is commercialising VitroGro® ECM, a technology created by cell biology, tissue engineering and protein engineering experts at the Institute of Health and Biomedical Innovation at the Queensland University of Technology. The company is also developing treatments for psoriasis, scar prevention and various cancers including those of the breast, colon and prostate. Tissue Therapies Limited's shares are traded on the Australian, Berlin and Frankfurt stock exchanges.

More information: [www.tissuetherapies.com](http://www.tissuetherapies.com)



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