



# TR Pro+

(0.1% Glucoprime®) For use following cosmetic procedures

tissuerepair.com.au | trproplus.com

## What Is Glucoprime®

- The active ingredient of TR Pro+ is Glucoprime® which is a  $\beta$ -glucan purified from yeast
- $\beta$ -glucans are commonly found in fungi, plants and bacteria where they are a key component of the cell wall
- β-glucans are almost totally made of sugar, with glucose being the sugar most commonly used
- There is enormous diversity in the way the millions of glucose units are locked together depending on how the molecules are joined and their spatial location relative to adjacent molecules
- The structure of the  $\beta\mbox{-glucan}$  determines its ability to interact with host cells
- Efforts to extract β-glucans have often been hampered by an inability to maintain the natural structure, thus compromising the positive immunomodulatory effects. Tissue Repair has successfully developed a process that leaves the native structure intact, thereby allowing Glucoprime® to exert a positive healing influence on damaged skin



### What Is TR Pro+

TR Pro+ is a hydrogel that contains Glucoprime® which has been formulated to assist skin healing.

TR Pro+ can be used in most wound situations, and is particularly effective on skin that has been irritated or damaged following cosmetic procedures.

#### Film-Forming, Flexible, Full Contact

TR Pro+ dries to form a thin, transparent and durable protective film that stays in constant contact with the skin

#### **Hydration And Water Loss**

TR Pro+ is absorbed into the skin to provide hydration while at the same time providing a barrier to reduce epidermal water loss<sup>1,2</sup>

#### Aesthetic Benefit

TR Pro+ has been shown in clinical trials to reduce skin wrinkling and increase elastosis<sup>3</sup>

#### **Wound Healing And Scar Formation**

TR Pro+ absorbs exudate leading to improved wound healing<sup>4</sup>. Increased hydration provides an environment favourable to normal scar formation<sup>5</sup>

#### Protection

TR Pro+ provides a barrier that protects against microbial infection while at the same time allowing the skin to breathe<sup>1</sup>

#### **Cooling Effect**

TR Pro+ provides a cooling effect to soothe damaged skin and helps relieve pain and itching. Heat generated from cosmetic procedures is able to dissipate freely<sup>1</sup>

#### **Reduces Oxidative Stress**

TR Pro+ has antioxidant capacity to protect skin against oxidative stress that may be caused by UV radiation<sup>6</sup>

#### **Stops Bleeding**

TR Pro+ acts as a haemostatic agent to stop bleeding<sup>7</sup>

#### **Cosmetically Elegant**

Upon being left to dry and absorb into the skin, TR Pro+ is not visible and can have makeup and sunscreen applied

#### Easy To Use And Non-Reactive

TR Pro+ can be applied once daily, is non-greasy, and can easily be removed from clothes. TR Pro+ is neutral pH, and does not contain any preservatives, fragrances, or parabens making it suitable for people with sensitive skin

## The Importance Of Hydration

The water content of the stratum corneum and skin surface is not only important in the appearance of the skin, but balanced hydration is also necessary for optimal healing.

TR Pro+ is able to increase hydration in the epidermis due to the water-holding capacity of the hydrogel, while at the same time reducing trans-epidermal water loss by providing a biofilm barrier<sup>5</sup>.

Moist wound healing provides a range of benefits which includes reduced scarring, lower infection rates and faster epithelialisation<sup>5</sup>.



### Anti-ageing

Wrinkle formation is a sign of ageing caused by the loss of structural protein in the skin. Pillai *et al*<sup>8</sup> tested the effects of  $\beta$ -glucan on facial fine lines and wrinkles in 27 patients. After twice daily use over 8 weeks, they demonstrated a reduction in all wrinkles (including deep wrinkles) as well as reductions in the average peak and roughness.

TR Pro+ also has potent antioxidant properties which combat oxidative stress brought on by the effects of sunlight and pollutants<sup>6</sup>.

## **Clinical Study**

Elastosis

Proportion of patients with an

Phase IIB: Study to Evaluate a Novel Hydrogel for Optimization of Healing and Skin Quality After CO<sub>2</sub> Laser Resurfacing of the Chest (TR987-2016-FullChest, USA, 2020).

- Randomised, double-blind, placebo-controlled study at a single study site with 42 patients
- Standardised fractionated CO2 laser procedure on the full chest area to mimic a standardised wound and treated with active or placebo gel for 5 consecutive days with skin quality assessed at 28 and 104 days
- Validated 3- and 9-point Fitzpatrick-Goldman Wrinkle and Elastosis Scale (respectively) used to evaluate efficacy

Wrinkling

Proportion of patients with an



# A typical example of a patient who has undergone fractionated laser treatment on the chest area





Clinical trial demonstrated that TR Pro+ is able to assist healing and enhance skin quality by improving skin elastosis and reducing wrinkling (114% and 70% improvements, respectively).

### **Directions For Use**

Immediately following the cosmetic procedure, apply a generous layer of the gel on the affected area similar to the application of a mask. Allow some time for the gel to absorb into the skin and form a biofilm on the skin surface.

There may be a brief stinging sensation before the cooling effect of the gel starts to work. Repeat this application daily for the next 4 days. After day 5 the gel can be applied every second day, or consistent with the advice of your healthcare professional.

The gel is best applied during the evening, but can also be applied in the morning depending on the treatment location. Do not shower within 8 hours of applying the gel. Prior to showering, cleanse with a gentle cleaner. Do not cover area with bandages. Sunscreen and other lotions can be applied after 7 days, and once the gel has absorbed into the skin.

Always read the label and use only as directed. For external use only. Keep out of reach of children. For further instructions, please refer to the Patient Information Leaflet which is available on **trproplus.com** 

### Ingredients

Beta-glucan, carbomer, titanium dioxide, water, triethanolamine

### References

- 1. Harrison, IP and Spada, F. Pharmaceutics 2018; 10;71 1-13
- 2. Cao, Y et al, J Cosmet Dermatol. 2021; 20:1756-176
- 3. Tissue Repair manuscript in preparation 2021
- 4. Madaghiele, M. et al, Burns and Trauma. 2014; 2(4): 153-161
- 5. Ousey, K. et al,. J Wound Care. 2016; (25(3): 122-130
- Bacha, U. et al, 2017. BioMed Res International https://doi.org/10.1155/2017/8972678
- 7. Fan, F. et al, Frontiers in Bioeng and Biotech. 2021; 9:1-24
- 8. Pillai, R. et al, IFSCC. 2005; 8(1): 1-6

### Manufactured By

Tissue Repair Ltd. 255 Pitt St, Sydney NSW 2000 Australia