GRAND BIOLOGICS

## Problem

Practitioners have been using the popular soft tissue grafts Alloderm (Bio Horizons) and Dermis (Zimmer) for years. Both of these products have significant drawbacks.

Foul odor: both brands give off a foul, necrotic tissue odor. This problem is the basis of most patient complaints regarding these products as it is so blatant
Discoloration: a yellow discoloration of the graft occurs in both products.
Brand-specific products are also detailed in usage reports. Zimmer's Dermis graft is easy to handle, hydrates quickly and heals easier than Alloderm. However, it is so thin that doctors have a difficult time depending on it for any block graft coverage. Bio Horizons' Alloderm handles well and is considerably thicker than Zimmer's Dermis. Unfortunately, the tissue gets puffy, smells foul and turns yellow. Doctors have reported patients calling in within the first two weeks post-operation complaining that the graft looked infected, when in reality, it was not.

## Solution

For years, the industry has gotten used to dealing with the shortcomings of using these products.
CK Dental's Grand Dermis has hit the market to respond to the drawbacks that using both of these products entails.
AC Dermis never takes on a yellow discoloration and will never take on a necrotic tissue odor.

Furthermore, the product does not need to be refrigerated and is sterilized. The conversion to stippled pink tissue is quick and predictable at six weeks. Soft tissue grafting procedures have now become quicker, simpler and offer much more predictable results.
Cases utilizing Grand Dermis show strong tissue integration by the six week mark and a natural, stippled pink color.

## Grand Dermis: Your Best Tissue Alternative

Soft tissue augmentation has been a procedure utilized by physicians and dentists for decades. Although many techniques have been developed utilizing various grafting materials, all results are compared to that of an autologous graft.
In situations where an autologous graft is not able to be used or simpler methods of allogenic grafts are preferred, the clinician has only a few choices of graft materials to choose from.

Grand Dermis is the superior allogenic grafting material of choice for the following reasons:

1. It is very stable in its pre-packaged form and does not need to be refrigerated in order to sustain its integrity.

2. The product will not show a significant color change or exhibit an unusual odor when used. The epidermal layer is removed while maintaining an intact basement membrane thus maintaining connective tissue components of the collagen matrix throughout sterilization procedures important in the formation of new tissue upon graft healing.

The product is harvested and sterilized in a manner which lends it to a more predictable result for practitioners.

## Instructions for Use

1. Open outer packaging carefully utilizing a "sterile O.R. approach".
2. Retrieve the inner sterile package.
3. Carefully, open the sterile inner package and using a sterile tissue plier, place the Grand Dermis tissue content in a sterile bowl of saline solution in order to rehydrate the graft tissue. (15-30 minutes recommended re-hydration time) (Fig. 1)
4. When completely re-hydrated, the tissue becomes easy to work with and more pliable.
5. Pick up tissue and with a second tissue forcep remove the outer layer protective covers. This is used during the drying processing. DO NOT LEAVE ON DURING PROCEDURE. (Fig.2)

Find a small slit on one of the corners. Position the slit towards the upper right hand corner. In this position, the surface facing you is the dermal side. (epithelial side). The direct opposite or underside will be the cellular connective tissue side. (Fig. 3)

* Which side to use is up to clinician. But, realize that the cellular side will absorb more fluid or blood quicker. The dermal side may not be as absorbent.

As a membrane, the dermal side should face towards the outside of soft tissue covering it. As guided tissue (GTR) procedure, place the cellular side towards the soft tissue for potentially faster soft tissue adherence and closure. (Fig.4)

** The tissue side seems to be more important in abdominal surgery; however, not so much in dental uses. It can successfully be used with either side.

*** A secondary soak or bath can be used by immersion of the Grand Dermis after the initial saline bath in cellular products like PRP or PRGF. These can potentially add growth factors into the dermis faster and accelerate the wound closure and healing. (Fig.5)


Fig. 1


Fig. 2


Fig. 3


Fig. 4


Fig. 5

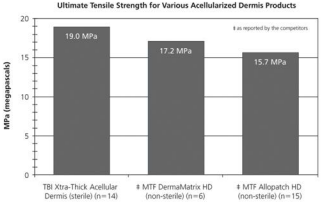
## Key Clinical Features:

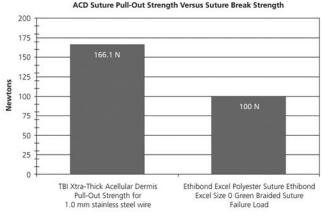
- Can be sutured without tearing
- The surgical site matures at about sixth week
- Either side can be placed towards defect with similar positive results
- No necrotic tissue odor
- Will not have a yellow color or look infected
- Does not tear easily like competitors
- Can be folded over onto itself for supplemental plumping procedures
- Easily cuts with scissors or tissue punch
- Can be screwed or tacked down for fixation
- Can be left exposed and secondary healing will occur (Fig. 6, below)

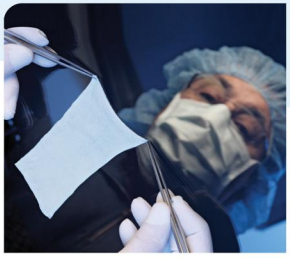
Fig. 6

## Post-operative Pictures


## Tensile and Pull-out Strength Charts

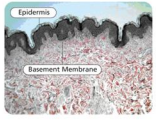


For the practitioner who demands the ultimate in safety, biomechanical strength and structural performance in a biological allograft scaffold.

## Histology

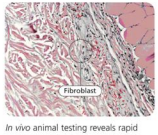



**Normal Skin**

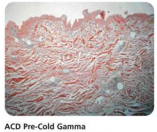
TranZgraft ACD removes the epidermal layer while maintaining an intact basement membrane. Note the similarity in the structural integrity of the collagen matrix pre- and post-cold gamma precision dose sterilization as well as the absence of immunogenic cellular elements.

Components including elastin, hyaluronan and vitronectin, all vital for promoting cell attachment and growth, remain present after processing and sterilization.

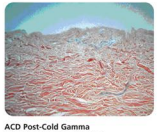
VVG Stain: Elastin appears as darkly stained strands.




*In vivo* animal testing reveals rapid host-cell incorporation. Note fibroblast infiltration from host into ACD at 4-day post implantation.



**ACD Pre-Cold Gamma Precision Dose Sterilization**



**ACD Post-Cold Gamma Precision Dose Sterilization**

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