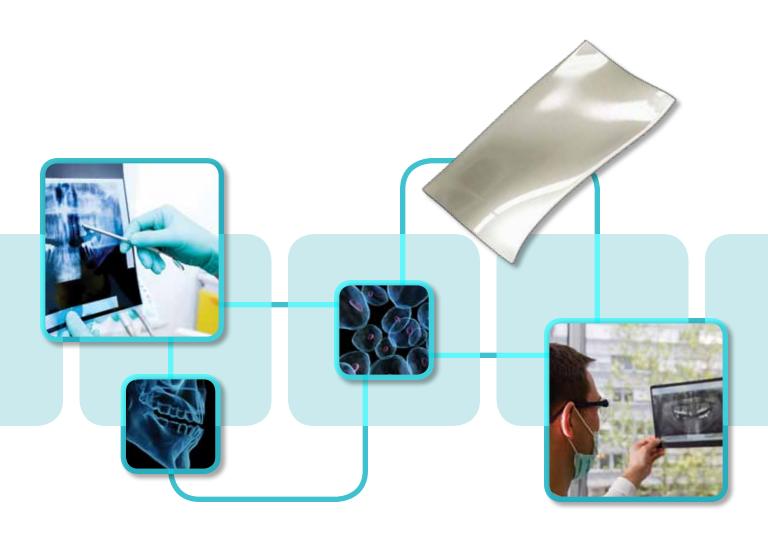
# Oracell

Decellularized Dermis for Maxillofacial Applications







#### Decellularized Dermis for Maxillofacial Applications

# High Performance Matrix

Oracell<sup>™</sup> is an acellular dermal matrix intended to be used in conjunction with guided tissue and bone regeneration, and oral soft tissue correction. MATRACELL<sup>™</sup>, a patented and validated technology by LifeNet Health, renders Oracell allograft dermis acellular without compromising biomechanical or biological properties. This decellularized matrix retains the native constituents needed for successful use.

Cells and > 97% DNA Removed	Low immunogenic potential
Intact Acellular Framework	Retains native growth factors, collagen and elastin*
Ambient Temperature Storage	Excellent handling. Minimal prep time (less than 60 sec)
Strength	Pull-out strength and load to failure are comparable to existing allograft products*
Sterile (10 <sup>-6</sup> SAL Sterility Assurance Level)	Increased safety for your patients

<sup>\*</sup> Data on file at LifeNet Health



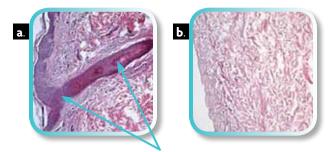


This patented and validated process renders allografts acellular, while retaining the desired physiological properties for its intended surgical application.

- Short processing time reduces the opportunity for watermediated lysis of the natural collagen and elastin scaffold
- Utilizes multiple disinfecting agents to provide for comprehensive tissue disinfection
- Does not utilize any animal-derived reagents
- Uses validated DNA assessment methods able to detect as little as one nanogram (ng/mL) of nucleic acid to ensure the tissue has been decellularized

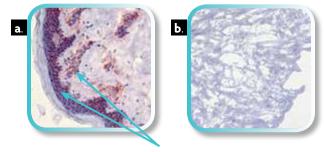
## Biocompatibility

MATRACELL™ removes cells and >97% DNA from the dermal matrix, decreasing the potential of immunogenic response.



**Figure 1:** Human skin pre (a.) and post (b.) decellularization (Hematoxylin and Eosin staining).

Note absence of cellular components in Oracell™.



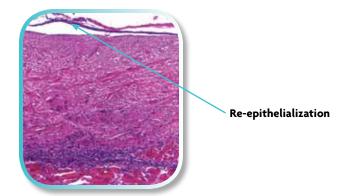
**Figure 2:** Human skin pre (a.) and post (b.) decellularization (Major Histocompatibility Complex 1 staining). Note absence of immunogenic material in Oracell™.

# Recipient Response

An intact acellular matrix of collagen, elastin and growth factors provides a clean scaffold needed for proper healing.

Figure 1: Oracell™ explanted after Day 16 in a mouse excisional skin model.

Note re-epithelialization.



## Case Study

A surgery performed for implant placement at the sites of congenitally missing lateral incisors. A combination of OraGraft® mineralized cortical particulate and Oracell™ decellularized dermis were required on the labial to correct for the thin bone support and to increase the soft tissue profile in these areas.



This surgical case was generously provided by Paul S. Rosen, DMD, MS. Dr. Rosen maintains a private practice limited to Periodontics and Implants in Yardley, PA.



#### Decellularized Dermis for Maxillofacial Applications



Ambient	Size	Thickness	Use		
OCELL100	1.5 x 2.0 cm	0.76 to 1.25 mm	GTR/GBR "membrane"		
OCELL101	2.0 x 4.0 cm	0.76 to 1.25 mm	GTR/GBR "membrane"		
OCELL200	1.5 x 2.0 cm	1.26 to 1.75 mm	Soft Tissue		
OCELL201	2.0 x 4.0 cm	1.26 to 1.75 mm	Soft Tissue	•	
	OCELL100 OCELL101 OCELL200	DCELL100 1.5 x 2.0 cm  DCELL101 2.0 x 4.0 cm  DCELL200 1.5 x 2.0 cm	DCELL100 1.5 x 2.0 cm 0.76 to 1.25 mm  DCELL101 2.0 x 4.0 cm 0.76 to 1.25 mm  DCELL200 1.5 x 2.0 cm 1.26 to 1.75 mm	DCELL100       1.5 x 2.0 cm       0.76 to 1.25 mm       GTR/GBR "membrane"         DCELL101       2.0 x 4.0 cm       0.76 to 1.25 mm       GTR/GBR "membrane"         DCELL200       1.5 x 2.0 cm       1.26 to 1.75 mm       Soft Tissue	DCELL100       1.5 x 2.0 cm       0.76 to 1.25 mm       GTR/GBR "membrane"         DCELL101       2.0 x 4.0 cm       0.76 to 1.25 mm       GTR/GBR "membrane"         DCELL200       1.5 x 2.0 cm       1.26 to 1.75 mm       Soft Tissue

LifeNet Health helps save lives and restore health for thousands of patients each year. We are the world's most trusted provider of transplant solutions, from organ procurement to new innovations in bio-implant technologies and cellular therapies—a leader in the field of regenerative medicine, while always honoring the donors and healthcare professionals that allow the healing process.

Please contact your LifeNet Health representative for more information about our comprehensive offering of allograft products and services.



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