Advancing surgery and improving patients’ lives

For over two decades, LifeCell™, an Allergan affiliate, has developed innovative products for use in a wide range of applications. Our success could not have been possible without the insight and guidance of healthcare professionals.

LifeCell™ timeline

1986 - LifeCell Corporation formed
1994 - AlloDerm™ RTM
1998 - Burn treatment head and neck reconstruction
2000 - Dental
2002 - Breast reconstruction challenging hernia repair
2004 - Strattice™ RTM EU
2006 - Breast plastic surgery with Strattice™ RTM
2008 - AlloDerm™ RTM for breast reconstruction available in bilateral pairs
2009 - 2012
2016 - ARTIA™ Reconstructive Tissue Matrix

LifeCell™ quality and processing

Tissue recovery
- Independent, FDA Registered 3rd Party Tissue Recovery Partners (TRP) obtain consent for procurement of the tissue
- Comprehensive medical and social history screening meets FDA and AATB criteria
- Donor blood sample is tested and must be found negative for infectious diseases including HIV and Hepatitis B & C
- Tissue samples are screened for microbial contaminants and must be free of pathogenic bacteria
- Allergan medical directors determine donor eligibility per AATB standards and FDA regulations

Final AlloDerm™ RTM product
- No cells detected
- Although donor tissues are screened for infectious diseases, the LifeCell™ patented acellular dermal matrix processing demonstrates >99.9% viral reduction
- No microbial pathogens detected
- Intact matrix and critical biochemical components

Patented acellular process

Non-damaging steps designed to:
- Remove cells on surface of skin
- Remove cells deep in the dermal tissue

Non-damaging freeze-drying:
- Process creates an amorphous ice that retains the structural integrity of the complex microarchitecture of the dermis
- Non-destructive drying and packaging for storage

During conventional freeze-drying, hexagonal ice crystals form, disrupting the normal architecture of this layer and rendering the damaged matrix susceptible to inflammation and rejection, because the hosts immune system regards the fragmented subunits as individual foreign bodies.

1 40x magnification. Verhoeff-van Geison (stain for elastin)

LifeCell™ patented freeze-drying did not alter the matrix

Conventional freeze-drying altered the matrix
AlloDerm™ Regenerative Tissue Matrix (RTM)
check the out of package histology

AlloDerm™ RTM
1) Intact basement membrane
2) Papillary dermis
3) Basket weave configuration
4) Reticular dermis

Human Dermis (100x, H&E stained)
1) Cells
2) Epidermis
3) Papillary dermis
4) Reticular dermis
5) Basement membrane

Puros® Dermis
1) Modified basement membrane, no undulation
2) Cellular remnants

Mucograft® (Non-human extracellular matrix)
1) No basement membrane
2) Modified collagen bundle

PerioDerm®
1) Separation between collagen bundles
2) Cellular remnants

Puros® Dermis is a registered trademark of Zimmer Dental, Inc. Mucograft® is a registered trademark of Ed. Geistlich Sohne Fur Chemische Industrie. PerioDerm® is a registered trademark of Denoply International Inc.